



# South Coast Air Quality Management District

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

## A G E N D A

### MEETING, DECEMBER 6, 2019

A meeting of the South Coast Air Quality Management District Board will be held at 9:00 AM, in the Auditorium at South Coast AQMD 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 South Coast AQMD 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.

**A webcast of the meeting is available for viewing at:**

<http://www.aqmd.gov/home/news-events/webcast>

*Cleaning the air that we breathe...*

**CALL TO ORDER**

- Pledge of Allegiance
- Opening Comments: William A. Burke, Ed.D., Chair  
Other Board Members  
Wayne Nastri, Executive Officer
- Presentation of Retirement Award to Ana Ponce **Burke**
- Recognize Employees with Twenty, Thirty, Thirty-Five and Forty Years of Service **Burke**

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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 November 1, 2019 Board Meeting **Wayman/2500**
2. Set Public Hearings January 10, 2020 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations **Nastri/3131**
  - A. Determine That Proposed Amendments to Rule 102 – Definition of Terms, Are Exempt from CEQA and Amend Rule 102 **Nakamura/3105**

Rule 102 defines the terms used in South Coast Air Quality Management District rules and regulations. Rule 102 defines the “District” as the abbreviation for the South Coast Air Quality Management District. Staff is proposing to add the “South Coast AQMD” as another abbreviation for the South Coast Air Quality Management District to more distinctly describe the agency and the jurisdiction under our authority. The use of “South Coast AQMD” instead of “District” as an abbreviation of South Coast Air Quality Management District will be included in new and amended rules; therefore, the new definition must be included in Rule 102. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 102 - Definition of Terms, are exempt from the California Environmental Quality Act, and 2) Amending Rule 102 – Definition of Terms. (No Committee Review)

- B. Determine That Proposed Amendments to Rule 1100 – Implementation Schedule for NOx Facilities, Are Exempt from CEQA and Amend Rule 1100

**Nakamura/3105**

Proposed Amended Rule 1100 will modify the definition of “industry-specific category” to clarify the applicability as originally intended. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1100 – Implementation Schedule for NOx Facilities, are Exempt from the California Environmental Quality Act; and 2) Amending Rule 1100 – Implementation Schedule for NOx Facilities. (No Committee Review)

**Budget/Fiscal Impact**

3. Execute Contract to Demonstrate Fuel Cell Range-Extended Drayage Trucks

**Miyasato/3249**

In April 2017, the Board approved several projects for port handling equipment, including one with Vehicle Velocity Group, partnering with Efficient Drivetrains, Inc. (EDI), to develop and demonstrate one battery electric and three plug-in hybrid electric drayage trucks. Cummins Inc., which recently acquired EDI, proposes instead to develop and demonstrate four fuel cell range-extended drayage trucks. This action is to execute a contract with Cummins Inc. to develop and demonstrate four fuel cell range-extended drayage trucks in the amount of \$3,568,300 from the Clean Fuels Fund (31), comprised of \$2,985,995 in CEC pass-through revenue and \$582,305 for South Coast AQMD’s cost-share. Cummins Inc. will provide the additional funds to make up the increased costs of the revised project. (Reviewed: Technology Committee, November 15, 2019; Recommended for Approval)

4. Amend Contracts to Develop and Demonstrate Zero Emissions Drayage Trucks and Provide Project Implementation Assistance for Clean Fuels Projects and Execute Easement for Fleet Chargers

**Miyasato/3249**

In March 2016, the Board recognized revenue from CARB and other funding partners and awarded multiple contracts for a Zero Emissions Drayage Truck (ZEDT) Project. In October 2018, the Board amended those contracts to reallocate funds among the project partners; however, an additional reallocation of funds is needed at this time. These actions are to authorize the Executive Officer to amend the four project partner contracts and a project implementation assistance contract, as needed, for the ZEDT Project and to redistribute funds among these five contracts as needed to ensure project completion. This action is to also amend a contract for project implementation support of Clean Fuels related projects adding up to \$50,000 from the Clean Fuels Program Fund (31). In addition, in August 2018, staff applied for 30 fleet chargers through Southern California Edison’s Charge Ready Program, which requires the host to execute an easement. This action is to authorize the execution of the easement. (Reviewed: Technology Committee, November 15, 2019; Recommended for Approval)

5. Recognize and Transfer Funds, Execute and Amend Agreements for Installation and Maintenance of Air Filtration Systems, and Reimburse General Fund for Administrative Costs **Miyasato/3249**

The U.S. EPA and CARB are executing four Supplemental Environmental Projects (SEPs) and have asked South Coast AQMD to act as the SEP administrator to install and maintain air filtration systems at schools in environmental justice communities. South Coast AQMD will also be carrying out its own SEP. These actions are to recognize up to \$316,000 for SEPs from U.S. EPA and CARB and transfer up to \$45,000 from the General Fund for the South Coast AQMD SEP into the Air Filtration Fund (75). These actions are to also execute agreements to install and maintain air filtration systems in an amount not to exceed \$345,200, execute or amend access agreements with local school districts, amend contracts to purchase additional filters using unspent administrative funds, and reimburse the General Fund for administrative costs up to \$15,800 for SEP administration. (Reviewed: Technology Committee, November 15, 2019; Recommended for Approval)

6. Adopt Resolution, Execute Contracts, Amend Awards, Transfer Funds and Reimburse Administrative Costs for Carl Moyer and Other Programs **Berry/2363**

In June 2019, the Program Announcement for the Year 21 Carl Moyer Program closed. This year, in addition to the traditional sources of Carl Moyer SB 1107 and AB 923 funds, funding from the Community Air Protection Program, State Reserve and FARMER will also be available to fund Carl Moyer projects. In addition, updates to improve the Carl Moyer online application system are necessary. These actions are to: 1) adopt a Resolution recognizing up to \$86 million in Community Air Protection Program funds; 2) execute contracts for Year 21 Carl Moyer Program, SOON Provision, State Reserve, FARMER and Community Air Protection Programs; 3) amend a "Year 20" SOON Provision contract award; 4) authorize the Executive Officer to redistribute the source of funds for these contracts to ensure program liquidation targets are met; 5) amend a contract for the Carl Moyer online application system; 6) transfer \$3 million from the Carl Moyer Program AB 923 Fund (80) to the Voucher Incentive Program Fund (59) for truck replacements; and 7) reimburse administrative costs related to implementing these incentive funds. (Reviewed: Technology Committee, November 15, 2019; Recommended for Approval)

7. Issue Program Announcement for Combustion Freight and Marine Projects Eligible Under Volkswagen Environmental Mitigation Program and Waive Newspaper Publication Requirements **Berry/2363**

In November 2018, the Board recognized revenue up to \$150 million upon receipt to administer and implement two of the five project funding categories for the Volkswagen (VW) Environmental Mitigation Trust Program. This action is to issue the statewide Program Announcement for the first installment of program funds totaling \$30 million for the Combustion Freight and Marine Projects category and to authorize the Executive Officer to waive newspaper publication requirements for solicitations under the VW Environmental Mitigation Trust Program. A solicitation for Zero Emission Class 8 Freight and Port Drayage Trucks is planned for spring/summer 2020. (Reviewed: Technology Committee, November 15, 2019; Recommended for Approval)



8. **Transfer Funds for Enhanced Particulate Monitoring Program** **Low/2269**
- This action is to transfer up to \$300,000 between Major Objects in Science and Technology Advancement's FY 2019-20 Budget to realign expenditures for the FY 2019-20 Enhanced Particulate Monitoring Program. (Reviewed: Administrative Committee, November 8, 2019; Recommended for Approval)

9. **Approve Contract Award, Allocation of Funds, and Issue Solicitation as Approved by MSRC** **McCallon**
- As part of their FYs 2018-21 Work Program, the MSRC approved an award to provide special transit service to Dodger Stadium in 2020 and 2021. The MSRC also approved a funding allocation towards the Market Acceleration Program, with the funds to support the early deployment of near-zero emission natural gas trucks. Finally, the MSRC approved the release of a Program Opportunity Notice for Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities. At this time, the MSRC seeks Board approval of the contract award and allocation, and to release the solicitation as part of the FYs 2018-21 Work Program. (Reviewed: Mobile Source Air Pollution Reduction Review Committee, November 21, 2019; 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 October 2019 outreach activities of the Legislative, Public Affairs and Media Office, which includes: Major Events, Community Events/Public Meetings, Environmental Justice Update, Speakers Bureau/Visitor Services, Communications Center, Public Information Center, Business Assistance, Media Relations and Outreach to Business and Federal, State, and Local Government. (No Committee Review)
11. **Hearing Board Report** **Prussack/2500**
- This reports the actions taken by the Hearing Board during the period of October 1 through October 31, 2019. (No Committee Review)
12. **Civil Filings and Civil Penalties Report** **Gilchrist/3459**
- This reports the monthly penalties from October 1 through October 31, 2019, and legal actions filed by the General Counsel's Office from October 1 through October 31, 2019. An Index of South Coast AQMD Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, November 15, 2019)
13. **Lead Agency Projects and Environmental Documents Received** **Nakamura/3105**
- This report provides a listing of CEQA documents received by the South Coast AQMD between October 1, 2019 and October 31, 2019, and those projects for which the South Coast AQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, November 15, 2019)

14. Rule and Control Measure Forecast **Fine/2239**  
This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2020. (No Committee Review)
15. Annual Audited Financial Statements for FY Ended June 30, 2019 **Jain/2804**  
This item transmits the annual audited financial statements of the South Coast AQMD. The South Coast AQMD has received an unmodified opinion (the highest obtainable) on its financial statements. (Reviewed: Administrative Committee, November 8, 2019)
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 South Coast AQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects. (Reviewed: Administrative Committee, November 8, 2019)
17. Items Deferred from Consent Calendar

**BOARD CALENDAR**

18. Administrative Committee (Receive & File) **Chair: Burke Nastri/3131**
19. Investment Oversight Committee (Receive & File) **Chair: Cacciotti Jain/2804**
20. Legislative Committee **Chair: Mitchell Alatorre/3122**  
Receive and file; and take the following action as recommended:
- | <b>Agenda Item</b>                    | <b>Recommendation</b> |
|---------------------------------------|-----------------------|
| 2020 Legislative Goals and Objectives | Approve               |
21. Mobile Source Committee (Receive & File) **Chair: Burke Fine/2239**
22. Mobile Source Air Pollution Reduction Review Committee (Receive & File) **Board Liaison: Benoit Berry/2363**
23. Stationary Source Committee (Receive & File) **Chair: Benoit Dejbakhsh/2618**

24. Technology Committee (Receive & File) **Chair: Buscaino Miyasato/3249**
25. California Air Resources Board Monthly Report (Receive & File) **Board Rep: Mitchell Wayman/2500**

## **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**

Rule 1111 was amended in 2009 to require Ultra-Low NOx furnaces (14 ng/J) by 2014, and was subsequently amended to extend the compliance date to October 1, 2019 with a mitigation fee. The proposed amended rule would provide an exemption to manufacture, distribute, sell, and install Low-NOx furnaces (40 ng/J) in higher altitudes until October 1, 2020. 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, November 15, 2019)

27. Determine That Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, Is Exempt from CEQA and Adopt Proposed Rule 1480 **Nakamura/3105**

Proposed Rule 1480 establishes a process to require a facility to conduct ambient monitoring and sampling of metal toxic air contaminants if the facility meets specific criteria. A facility that is designated will be required to submit a Monitoring and Sampling Plan and conduct ambient monitoring and sampling. The proposed rule includes an alternative monitoring and sampling provision where the facility can elect to have the South Coast AQMD conduct ambient monitoring and sampling for a fee. The proposed rule also has monitoring, reporting, and recordkeeping requirements, and provisions to reduce and cease monitoring and sampling provided certain criteria are met. This action is to adopt the Resolution: 1) Determining that Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, is exempt from the California Environmental Quality Act; and 2) Adopting Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants. (Reviewed: Stationary Source Committee, October 18 and November 15, 2019)

28. Determine That the Contingency Measure Plan for the 1997 8-Hour Ozone Standard Is Within the Scope of the March 2017 Final Program Environmental Impact Report for the 2016 AQMP Such That Neither a New Environmental Document nor a Subsequent Environmental Document Is Required Under CEQA, and Approve Contingency Measure Plan for the 1997 8-Hour Ozone Standard Rees/2856

The South Coast Air Basin (SCAB) is classified as an Extreme nonattainment area for the 1997 8-hour ozone national ambient air quality standard (NAAQS), with an attainment date of June 15, 2024. The attainment strategy in the 2016 AQMP includes both defined measures as well as “further deployment of cleaner technologies” measures, as allowed under the federal Clean Air Act (CAA) section 182(e)(5). Under CAA requirements, development and adoption of contingency measures are required no later than three years before the attainment date. The Contingency Measure Plan represents a joint strategy by South Coast AQMD and CARB to address the contingency measure requirements of CAA section 182(e)(5) for the 1997 8-hour ozone NAAQS for the SCAB. This action is to adopt the Resolution: 1) Determining that the Contingency Measure Plan for the 1997 8-hour ozone standard is within the scope of the March 2017 Final Program Environmental Impact Report for the 2016 AQMP such that neither a new environmental document nor a subsequent environmental document is required under the California Environmental Quality Act; and 2) Approving the Contingency Measure Plan for the 1997 8-hour ozone standard. (Reviewed: Mobile Source Committee, October 18 and November 15, 2019)

29. Determine That Facility-Based Mobile Source Measure for Commercial Airports Is Exempt from CEQA and Approve Facility-Based Mobile Source Measure for Commercial Airports Rees/2856

In May 2018, the Board directed staff to pursue a voluntary Memorandum of Understanding (MOU) approach based on the airports’ development of Air Quality Improvement Plans (AQIPs) to implement the 2016 AQMP Facility-Based Mobile Source Measure (FBMSM) MOB-04 (Emission Reductions at Commercial Airports). All five commercial airports have developed their own AQIPs or Air Quality Improvement Measures (AQIMs) for non-aircraft airport emissions. The draft MOUs specify State Implementation Plan (SIP) creditable AQIP or AQIM measures, which the airports agree to implement. In addition, the airports will provide annual reports to South Coast AQMD. South Coast AQMD is making an enforceable commitment to U.S. EPA to achieve the emission reductions associated with implementation of these measures and seeks to obtain SIP credit. This action is to adopt the Resolution: 1) Determining that the Facility-Based Mobile Source Measure for Commercial Airports is exempt from the requirements of the California Environmental Quality Act; and 2) Approving the FBMSM for Commercial Airports which includes the MOUs and the South Coast AQMD’s enforceable commitment. (Reviewed: Mobile Source Committee, October 18 and November 15, 2019).

**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.

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

Gilchrist/3459

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 South Coast AQMD is a party. The actions are:

- In the Matter of SCAQMD v. Aircraft Heat Treating Co., Inc. and Anaplex Corp., South Coast AQMD 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, South Coast AQMD 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, Court of Appeals, Second Appellate District, Case No. B294732;
- 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); Delaware District Court, Case No.: 19-00891 (Appellate Case);
- In the Matter of SCAQMD v. Southern California Gas Company, Aliso Canyon Storage Facility, South Coast AQMD Hearing Board Case No. 137-76 (Order for Abatement); People of the State of California, ex rel SCAQMD v. Southern California Gas Company, Los Angeles Superior Court Case No. BC608322; Judicial Council Coordinated Proceeding No. 4861;
- In the Matter of SCAQMD v. Torrance Refining Company, LLC, South Coast AQMD Hearing Board Case No. 6060-5 (Order for Abatement);
- People of the State of California, ex rel South Coast Air Quality Management District v. The Sherwin-Williams Company, an Ohio Corporation, and Does 1 through 50, Inclusive, Los Angeles Superior Court Case No. PSCV 00136;
- SCAQMD v. City of Moreno Valley, et al., Riverside County Superior Court, Case Nos. RIC 1511213 and RIC 1601988 (World Logistics Center); Center for Community Action and Environmental Justice, et al. v. City of Moreno Valley, et al., California Court of Appeal, Fourth District, Div. 2, Case

No. E067200; Albert Paulek, et al v. City of Moreno Valley, et al, California Court of Appeal, Fourth District, Div. 2, Case No. E071184;

- CalPortland Company v. South Coast Air Quality Management District; Governing Board of the South Coast Air Quality Management District; and Wayne Nastri, Executive Officer, and Does 1-100, San Bernardino County Superior Court, Case No. CIV DS 19258941;
- Climate Industries, Inc. (d/b/a Howard Industries), a California Corporation v. South Coast Air Quality Management District; Hearing Board of South Coast Air Quality Management District, and Does 1-50, inclusive Los Angeles County Superior Court, Case No. 19STCP04167;
- Downwinders at Risk et al. v. EPA, United States Court of Appeals D.C. Circuit, Case No. 19-1024 (consolidated with Sierra Club, et al. v. EPA, No. 15-1465);
- SCAQMD, et al. v. Elaine L. Chao, et al., District Court for the District of Columbia, Case No. 1:19-cv-03436-KBJ; and
- SCAQMD, et al. v. EPA, United States Court of Appeals D.C. Circuit, Case No. 19-1241 (consolidated with Union of Concerned Scientists v. NHTSA, No. 19-1230).

#### 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 (three cases).

#### CONFERENCE WITH LEGAL COUNSEL – ANTICIPATED LITIGATION

Also, it is necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(d)(2) to confer with its counsel because there is a significant exposure to litigation against the South Coast AQMD (two cases).

Letter from Steven J. Olson, O'Melveny & Myers LLP, on behalf of ExxonMobil Corporation, dated August 22, 2018.

Email from Somerset Perry, California Deputy Attorney General, dated March 13, 2019, regarding Notice of Violation P61321.

#### CONFERENCE WITH LABOR NEGOTIATORS

It is also necessary to recess to closed session pursuant to Government Code Section 54957.6 to confer with labor negotiators:

Agency Designated Representative: A. John Olvera;

- Employee Organization(s): Teamsters Local 911, and South Coast AQMD Professional Employees Association; and
- Unrepresented Employees: Designated Deputies and Management and Confidential employees.

#### **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 South Coast AQMD 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 South Coast AQMD'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](mailto: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

AQIP = Air Quality Investment Program

AQMP = Air Quality Management Plan

AVR = Average Vehicle Ridership

BACT = Best Available Control Technology

BARCT = Best Available Retrofit Control Technology

Cal/EPA = California Environmental Protection Agency

CARB = California Air Resources Board

CEMS = Continuous Emissions Monitoring Systems

CEC = California Energy Commission

CEQA = California Environmental Quality Act

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

CNG = Compressed Natural Gas

CO = Carbon Monoxide

DOE = Department of Energy

EV = Electric Vehicle

FY = Fiscal Year

GHG = Greenhouse Gas

HRA = Health Risk Assessment

LEV = Low Emission Vehicle

LNG = Liquefied Natural Gas

MATES = Multiple Air Toxics Exposure Study

MOU = Memorandum of Understanding

MSERCs = Mobile Source Emission Reduction Credits

MSRC = Mobile Source (Air Pollution Reduction) Review Committee

NATTS =National Air Toxics Trends Station

NESHAPS = National Emission Standards for Hazardous Air Pollutants

NGV = Natural Gas Vehicle

NOx = Oxides of Nitrogen

NSPS = New Source Performance Standards

NSR = New Source Review

OEHHA = Office of Environmental Health Hazard Assessment

PAMS = Photochemical Assessment Monitoring Stations

PEV = Plug-In Electric Vehicle

PHEV = Plug-In Hybrid Electric Vehicle

PM10 = Particulate Matter  $\leq$  10 microns

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

RECLAIM=Regional Clean Air Incentives Market

RFP = Request for Proposals

RFQ = Request for Quotations

RFQQ=Request for Qualifications and Quotations

SCAG = Southern California Association of Governments

SIP = State Implementation Plan

SOx = Oxides of Sulfur

SOON = Surplus Off-Road Opt-In for NOx

SULEV = Super Ultra Low Emission Vehicle

TCM = Transportation Control Measure

ULEV = Ultra Low Emission Vehicle

U.S. EPA = United States Environmental Protection Agency

VOC = Volatile Organic Compound

ZEV = Zero Emission Vehicle

[↑ Back to Agenda](#)

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the November 1, 2019 meeting.

**RECOMMENDED ACTION:**

Approve Minutes of the November 1, 2019 Board Meeting.

Carole M. Wayman  
Senior Deputy Clerk

CMW

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**FRIDAY, NOVEMBER 1, 2019**

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

Council Member Ben Benoit, Vice Chairman  
Cities of Riverside County

Supervisor Lisa A. Bartlett (Arrived at 9:50 a.m.)  
County of Orange

Council Member Joe Buscaino  
City of Los Angeles

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

Supervisor Janice Hahn  
County of Los Angeles

Mayor Pro Tem Larry McCallon  
Cities of San Bernardino County

Mayor Judith Mitchell  
Cities of Los Angeles County – Western Region

Council Member Dwight Robinson  
Cities of Orange County

Supervisor Janice Rutherford  
County of San Bernardino

Members absent:

Senator Vanessa Delgado (Ret.)  
Senate Rules Committee Appointee

Supervisor V. Manuel Perez  
County of Riverside

Vacant: Governor's Appointee

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

- Pledge of Allegiance: Led by Council Member Cacciotti.
- Opening Comments

Supervisor Rutherford asked if Rule 1111 would be placed on the rule and control measure forecast schedule. Temperatures are dropping in high elevation communities and there is an urgent need to allow the installation of replacement furnaces. She commented that three manufacturers had recently obtained variances from the Hearing Board and expressed concern about the complex and expensive process. She read a letter from the County of San Bernardino Health Officer regarding public health concerns related to the lack of proper heating for the elderly and those with health conditions. She urged the Board to place the rule amendment on the December meeting agenda.

Mr. Nastri noted that Rule 1111 had been placed on the rulemaking calendar and will appear on the December rule and control measure forecast report. He added that the Hearing Board is aware of the gravity of the situation and has been working with manufacturers through the variance process. Staff will continue to work with manufacturers and stakeholders to address concerns and identify solutions. He explained the CEQA and noticing requirements for a rule amendment and noted that staff would discuss options that can be taken to expeditiously consider a rule amendment.

Chairman Burke and Mayor Pro Tem McCallon concurred with Supervisor Rutherford about the urgency in amending the rule. Chairman Burke inquired about emergency actions that can be taken when there is a public health risk.

Barbara Baird, Chief Deputy Counsel explained that there may not be enough time to meet newspaper publication deadlines and CEQA notifications for the December 6, 2019 Board meeting. However, staff could explore the potential to schedule a special Board meeting later in December.

Chairman Burke confirmed that a special meeting would be scheduled if necessary and recommended that a short-term committee be formed to address this issue.

Supervisor Rutherford noted that several individuals were present to speak on this issue and asked if their public testimony could be taken at the start of the meeting.

Chairman Burke responded that public testimony regarding furnaces would be taken after Dr. Black's presentation.

Mr. Nastri updated the Board on the recent wildfires and highlighted the efforts by staff, including working with news organizations, to ensure that the public receives information about air quality and actions they can take when smoke is present and fires are burning. He also invited those present to view a demonstration in the parking lot of an ultra-low NOx liquid propane-powered school bus and heavy-duty truck. He noted the importance of utilizing advanced technologies to meet air quality attainment goals.

Council Member Cacciotti expressed appreciation to staff for their efforts for the Clean Air Awards. He also mentioned a CARB study addressing heavy-duty truck emissions in the Port of Oakland and asked that the study be agendaized for a future meeting. He noted that 10 percent of the trucks in the study were contributing to 56 percent of diesel particulate emissions. He expressed concern about the small number of enforcement stops by CHP and individuals who are illegally bypassing emission testing. He inquired about heavy-duty truck enforcement measures and commented on the recent passage of SB 210.

Mr. Nastri responded that SB 210 addresses the issue of heavy-duty truck emissions at the registration level and includes enhanced enforcement measures. He added that within AB 617 and the CERPS, there was a commitment by South Coast AQMD and CARB to enhance enforcement of truck idling and utilize other measures such as automatic license plate readers to identify trucks that are polluting. He added that staff has contacted the San Diego Air Pollution Control District regarding their efforts to work with the CHP on enforcement measures.

Mayor Mitchell noted that CARB is understaffed with respect to enforcement of heavy-duty trucks. She reported on recent developments at the September CARB meeting regarding cap-and-trade funding. She noted that CARB approved HVIP funding for the low-NOx 12 liter heavy-duty truck with the condition that renewable natural gas produced in California be used. She asked how propane low-NOx trucks would be impacted.

Dr. Matt Miyasato, DEO/Science and Technology Advancement, noted that propane low-NOx trucks would not be impacted because their engines are smaller than 12 liters.

Council Member Robinson expressed appreciation to staff regarding the outreach to the public regarding the recent fires. He expressed concern about large power shutdowns and the impacts to air quality. He inquired about the permitting of generators and asked if there have been any noticeable changes in emissions during fire events due to the increased use of generators.

Mr. Nastri commented that staff recently met with CARB enforcement officials about the increased number of generators that are being brought into the state. He noted that generators must meet state requirements and CARB will be

working vigorously on enforcement. Staff will continue to meet with CARB and other agencies to monitor the potential air impacts and work to alleviate air pollution increases during public safety power shutoffs. He added that microgrid concepts are being considered, however, the time frame to perform the necessary upgrades is 5 to 10 years. He noted that San Diego made prior investments into switching grid redundancy and is better prepared for power shutoffs. Staff will continue public outreach and highlight options that can be used that will not adversely impact air quality.

Mayor Mitchell commented about the use of diesel back-up generators by water districts. She noted the importance of the back-up generators because many of the water districts are providing water for firefighting efforts.

- Presentation on Activation of Pro-Inflammatory Factors in the Brain after Chronic Brain Injury by Air Pollutants

Keith L. Black, M.D., Cedars-Sinai Medical Center, presented information regarding research focused on injuries to the brain after chronic exposure to air pollutants.

Chairman Burke thanked Dr. Black on behalf of the Board for his presentation and noted the importance of continued research into the health effects of air pollution.

(Supervisor Bartlett arrived at 9:50 a.m.)

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

Kory Griggs, Indoor Weather HVAC  
Mike Marcotte, M&M Mechanical  
Kirk Avarell, Cantrell's Heating and Air

Expressed concerns regarding the lack of compliant furnaces in high elevation communities and urged an amendment to Rule 1111. They noted concern about the time and resources required to obtain a variance and the amount of time necessary to test furnaces in high elevation communities to ensure safety and readiness for the market. There are safety and health concerns for residents in high elevation communities.

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- Election of Chair for Term January 2020 – January 2022

The nominations for Chair for the term January 2020 – January 2022 were opened. Mayor Pro Tem McCallon nominated Dr. Burke, Council Member Cacciotti seconded the nomination and the motion passed unanimously (Absent: Delgado and Perez).

- Election of Vice Chair for Term January 2020 – January 2022

The nominations for Vice Chair for the term January 2020 – January 2022 were opened. Mayor Pro Tem McCallon nominated Council Member Benoit, Council Member Cacciotti seconded the nomination and the motion passed unanimously (Absent: Delgado and Perez).

### **CONSENT CALENDAR**

1. Approve Minutes of October 4, 2019 Board Meeting
2. Set Public Hearings December 6, 2019 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations
  - A. Determine That Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, Is Exempt from CEQA and Adopt Proposed Rule 1480
  - B. Determine That No New Environmental Document Is Required Under CEQA for the Contingency Measure Plan for the 1997 8-Hour Ozone Standard, and Approve Contingency Measure Plan for the 1997 8-Hour Ozone Standard

### **Budget/Fiscal Impact**

3. Establish Special Revenue Fund, Recognize Revenue and Transfer Funds, and Execute Agreements to Develop and Demonstrate Water-in-Fuel Retrofit Technology for Ocean-Going Vessels
4. Recognize Revenue, Transfer Funds, Amend Contracts for Enhanced Fleet Modernization Program and Reimburse General Fund for Administrative Costs
5. Execute Agreements to Establish Endowments to Support Graduate Student Scholarship Fund

6. Approve Additional Funds for Replacement of Onboard CNG Fuel Tanks on School Buses and Authorize Execution of Grant Agreements
7. Recognize Revenue, Appropriate Funds, and Issue Solicitations and Purchase Orders for Air Monitoring Programs
8. Amend Contracts for Legislative Representation in Sacramento, California
9. Amend Contracts for Legislative Representation in Washington, D.C.
10. Approve Contract Modifications as Approved by MSRC

**Action Item/No Fiscal Impact**

11. Establish Board Meeting Schedule for Calendar Year 2020

**Items 12 through 19 – Information Only/Receive and File**

12. Legislative, Public Affairs and Media Report
13. Hearing Board Report
14. Civil Filings and Civil Penalties Report
15. Lead Agency Projects and Environmental Documents Received
16. Rule and Control Measure Forecast
17. Report of RFPs/RFQs Scheduled for Release in November
18. Status Report on Major Ongoing and Upcoming Projects for Information Management
19. Approve Annual Report on AB 2766 Funds from Motor Vehicle Registration Fees for FY 2017-18

**BOARD CALENDAR**

21. Administrative Committee
22. Legislative Committee
23. Mobile Source Committee
24. Mobile Source Air Pollution Reduction Review Committee
25. Stationary Source Committee
26. Technology Committee
27. California Air Resources Board Monthly Report

**CARB's meeting summary was not available, and therefore, Item 27 was pulled from consideration.**

Agenda Items 2A, 5, 11 and 19 were withheld for comment and discussion.

Mayor Mitchell noted that she is a CARB Board Member which is involved with Item No. 4.

MOVED BY BENOIT, SECONDED BY MITCHELL, AGENDA ITEMS 1, 2B, 3, 4, 6 THROUGH 10, 12 THROUGH 18 AND 20 THROUGH 26 APPROVED AS RECOMMENDED, RECEIVING AND FILING THE COMMITTEE AND MSRC REPORTS, BY THE FOLLOWING VOTE:

AYES: Bartlett, Benoit, Burke, Buscaino, Cacciotti, Hahn, McCallon, Mitchell and Robinson

NOES: None

ABSENT: Delgado, Perez and Rutherford

20. Items Deferred from Consent Calendar

2. Set Public Hearing December 6, 2019 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations:

A. Determine That Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, Is Exempt from CEQA and Adopt Proposed Rule 1480

Susan Nakamura, Assistant DEO/Planning, Rule Development and Area Sources, provided background information on Item No. 2A, which would require some facilities to pay for air monitoring if certain criteria are met.

Jerry Desmond, Wesley Turnbow and Brian Leiker, Metal Finishing Association of Southern California, noted that they are not opposed to the rule but have concerns regarding cost, especially for small businesses. They expressed the need for additional work on the rule to address the concerns raised by the business community.

Mr. Nastri noted that the item is a set hearing and staff will continue to work with stakeholders throughout the next month.

Mayor Mitchell asked if the item will return to Stationary Source Committee in November and asked staff to continue to work with stakeholders to address the cost impact to small businesses. She commented on the toxic nature of hexavalent chromium and the need to protect the community from harmful emissions.

Dr. Philip Fine, DEO/Planning, Rule Development and Area Sources responded that the item will return to Stationary Source Committee for an update in November prior to being considered by the full Board at the December 6, 2019 meeting.

Council Member Cacciotti inquired if both large and small businesses would be covered by the rule and asked where these facilities are primarily located.

Ms. Nakamura responded that the rule applies to all facilities that have metal toxic air contaminant emissions and added that there are a variety of different sized facilities. Only certain facilities would be required to do air monitoring and staff is working on a proposal to help small facilities. Dr. Fine added that these facilities tend to cluster in five to ten areas in the South Coast District.



Supervisor Hahn commented on the hexavalent chromium facilities in Paramount that were emitting high levels of toxic emissions and expressed the need to monitor emissions and protect public health.

MOVED BY BENOIT, SECONDED BY CACCIOTTI, AGENDA ITEM NO. 2A APPROVED, SETTING THE HEARING AS RECOMMENDED, BY THE FOLLOWING VOTE:

AYES: Bartlett, Benoit, Burke, Buscaino, Cacciotti, Hahn, McCallon, Mitchell, Robinson and Rutherford

NOES: None

ABSENT: Delgado and Perez

5. Execute Agreements to Establish Endowments to Support Graduate Student Scholarship Fund

Council Member Cacciotti inquired about how the award amounts were determined and whether an equal split could be considered. He noted CSULA's commitment to underserved students in the local community.

Mr. Nastri explained that the two universities have different areas of focus and discussions about each of the proposals took place at the October Technology Committee meeting.

Chairman Burke spoke supported equally dividing the award.

Council Member Robinson spoke in support of the staff recommendation and noted that it was former Board member Dr. Lyou who had pulled the item last December to solicit proposals from other universities. He highlighted the research at UC Irvine in fuel cell technology and commented on the importance of supporting students who may seek employment in the air quality sector after graduation.

Jose Gomez, CSULA, expressed appreciation to the Board for the support of students at CSULA and highlighted the goals and accomplishments of the university in supporting students in disadvantaged communities. He commented on the research that is being done at the university on emerging issues in air quality and climate change and added that the endowment will allow students to continue this important work.

Council Member Cacciotti commented on the General Motors EcoCAR program at CSULA and the training that students are receiving in the program.

Council Member Robinson commented on the research being conducted at the National Fuel Cell Research Center at UC Irvine and the importance of supporting future developments in alternative fuel sources to achieve clean air attainment goals.

Mayor Mitchell commented that the item could return to the Administrative Committee for further review and discussion about the research at each university.

Mayor Pro Tem McCallon asked if additional funds could be made available.

Mr. Nastri responded that there are additional funds available in the BP Arco Settlement Projects fund and the Board has the discretion to add to the award amount if that is the consensus.

MOVED BY CACCIOTTI, SECONDED BY MITCHELL, AGENDA ITEM NO. 5 APPROVED, AMENDING THE ACTIONS TO AWARD \$625,000 EACH TO THE UNIVERSITY OF CALIFORNIA IRVINE AND CALIFORNIA STATE UNIVERSITY LOS ANGELES, BY THE FOLLOWING VOTE:

AYES: Bartlett, Benoit, Burke, Buscaino, Cacciotti, Hahn, McCallon, Mitchell, Robinson and Rutherford

NOES: None

ABSENT: Delgado and Perez

11. Establish Board Meeting Schedule for Calendar Year 2020

Mayor Pro Tem McCallon commented on the adjustments that have been made to summer vacation schedules by most local schools and suggested that it may be prudent to amend the Board's calendar to go dark in July rather than August.

Chairman Burke and Council Member Benoit concurred with the change in date and noted that changing the date was discussed at the Administrative Committee meeting.

Mr. Nastri noted that an August 7, 2020 meeting date would be added to the calendar.

MOVED BY MCCALLON, SECONDED BY BENOIT, AGENDA ITEM NO. 11 APPROVED WITH REVISIONS TO THE 2020 MEETING SCHEDULE TO REFLECT THE MONTH OF JULY 2020 AS DARK AND ADDING AN AUGUST 7, 2020 MEETING DATE, AND ADOPTING RESOLUTION 19-21 SETTING THE TIME AND PLACE OF REGULAR MEETINGS, BY THE FOLLOWING VOTE:

AYES: Bartlett, Benoit, Burke, Buscaino, Cacciotti, Hahn, McCallon, Mitchell, Robinson and Rutherford

NOES: None

ABSENT: Delgado and Perez

19. Approve Annual Report on AB 2766 Funds from Motor Vehicle Registration Fees for FY 2017-18

Supervisor Bartlett noted her opposition to the item due to concerns about cities and counties misusing funds and the lack of repercussions for misuse of funds. She commented on the guidelines developed per AB 2766 and suggested working with CARB to narrow program guidelines. She added that the South Coast AQMD has the responsibility to ensure that cities and counties are utilizing funds in a manner that has the best cost effectiveness in reducing mobile source emissions.

Mr. Nastri responded that authority to direct funding requires revisions to the legislation.

Chairman Burke recommended sending the item to the Legislative Committee for further discussion and review.

Mayor Mitchell concurred with the recommendation to send the item to the Legislative Committee for closer examination and commented that many cities have used the funds wisely.

Mr. Nastri responded that it may be a statutory requirement to send the report to CARB and a cover letter could be drafted highlighting the concerns about use of funds.

Chairman Burke asked staff to look into the reporting requirement.

Bayron Gilchrist, General Counsel, noted that previously there was a statute requiring a report to CARB but the statute no longer exists. He added that the report is made available on the South Coast AQMD website and recommended that the item be sent to the Legislative Committee to address the concerns about use of funds and discuss solutions.

Council Member Robinson commented that CARB and the Legislature should be investigating the misuse of funds and recommended that a letter be sent to them outlining the concerns.

Mayor Mitchell asked staff to explain what happens when there is non-compliance or program funds are misused.

Carol Gomez, Planning and Rules Manager, explained that there are two options when funds are misused 1) the amount of money must be paid back, or 2) funds are withheld from future allocations until the amount is made up.

Chairman Burke asked staff to send a letter to CARB and the Legislature expressing the concerns about misuse of funds and directed item 19 be sent to the Legislative Committee for further discussion.

## **PUBLIC HEARING**

28. Certify Final Subsequent Environmental Assessment and Amend Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines, and Rule 1100 – Implementation Schedule for NOx Facilities

Michael Morris, Planning and Rules Manager, gave the staff presentation on Item No. 28.

Mayor Pro Tem McCallon inquired about exempting equipment at ski resorts because they only operate during the winter months.

Mr. Morris responded that there are low use provisions in the rule for ski resorts.

Council Member Benoit thanked staff for their work with stakeholders over the last year on the rule.

The public hearing was opened, and the following individuals addressed the Board on Item 28.

Adam Simpson, EtaGens, expressed support for the amendments and appreciation to staff and the Board for their work on the rule and added that they look forward to deploying clean power technology in the South Coast AQMD next

year.

Council Member Cacciotti asked the speaker to explain the new generator technology. Mr. Simpson responded that the linear generator can convert any fuel, including renewables, into electricity at high efficiency with ultra-low emissions. The technology is fully dispatchable and can help with grid outages but is primarily designed to provide power for commercial buildings.

Council Member Benoit noted that this technology has the potential to replace diesel generators.

Christopher Chavez, Coalition for Clean Air, commented on facility modernization plans and suggested that each of the plans have firm deadlines to achieve emission reductions as quickly as possible. He commented on AB 617 and the requirement that BARCT be implemented as soon as feasible and expressed concern that the rule compliance deadline of December 31, 2023 is too long. He noted the importance of implementing all critical emission reductions as quickly as possible to clean the air.

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

MOVED BY CACCIOTTI, SECONDED BY BENOIT, AGENDA ITEM NO. 28 APPROVED AS RECOMMENDED, ADOPTING RESOLUTION NO. 19-22 CERTIFYING THE FINAL SUBSEQUENT ENVIRONMENTAL ASSESSMENT FOR PROPOSED AMENDED RULE 1110.2 –EMISSIONS FROM GASEOUS- AND LIQUID –FUELED ENGINES, AND PROPOSED AMENDED RULE 1100— IMPLEMENTATION SCHEDULE FOR NOx FACILITIES, AND AMENDING RULE 1110.2 – EMISSIONS FROM GASEOUS- AND LIQUID FUELED ENGINES, AND RULE 1100 – IMPLEMENTATION SCHEDULE FOR NOx FACILITIES, BY THE FOLLOWING VOTE:

AYES: Bartlett, Benoit, Burke, Buscaino, Cacciotti, Delgado, Hahn, McCallon, Mitchell, Robinson and Rutherford

NOES: None

ABSENT: Delgado and Perez

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

Todd Campbell, Clean Energy, expressed appreciation to Mayor Mitchell and Mr. Nastri for their advocacy at the October 24, 2019 CARB meeting to include the 11.9 liter low-NOx engine for funding eligibility under HVIP. He commented on the effectiveness of the HVIP program and noted that the 2019-20 funds have been exhausted. He requested continued support at CARB for expediting the Carl Moyer program process and additional programs and rules in support of clean trucks.

Council Member Cacciotti inquired about the lengthy 18-month funding process under the Carl Moyer program.

Dr. Miyasato explained that staff is following CARB guidelines and CARB has agreed to streamline the process.

**CLOSED SESSION**

The Board did not meet in closed session.

**ADJOURNMENT**

There being no further business, the meeting was adjourned by Chairman Burke at 11:20 a.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on November 1, 2019.

Respectfully Submitted,

Carole Wayman  
Senior Deputy Clerk

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

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

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## **ACRONYMS**

CARB = California Air Resources Board

CERP = Community Emission Reduction Plan

CEQA = California Environmental Quality Act

CHP = California Highway Patrol

CNG = Compressed Natural Gas

CSULA = California State University Los Angeles

FY = Fiscal Year

HVIP = Hybrid and Zero-Emission Truck and Bus Voucher Incentive Projects

MSRC = Mobile Source (Air Pollution Reduction) Review Committee

NO<sub>x</sub> = Oxides of Nitrogen

PM = Particulate Matter

RFP = Request for Proposals

RFQQ = Request for Qualifications and Quotations

UC Irvine = University of California Irvine

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 2

PROPOSAL: Set Public Hearings January 10, 2020 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations:

- (A) Determine That Proposed Amendments to Rule 102 – Definition of Terms, Are Exempt from CEQA and Amend Rule 102  
Rule 102 defines the terms used in South Coast Air Quality Management District rules and regulations. Rule 102 defines the “District” as the abbreviation for the South Coast Air Quality Management District. Staff is proposing to add the “South Coast AQMD” as another abbreviation for the South Coast Air Quality Management District to more distinctly describe the agency and the jurisdiction under our authority. The use of “South Coast AQMD” instead of “District” as an abbreviation of South Coast Air Quality Management District will be included in new and amended rules; therefore, the new definition must be included in Rule 102. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 102 - Definition of Terms, are exempt from the California Environmental Quality Act, and 2) Amending Rule 102 – Definition of Terms. (No Committee Review)
- (B) Determine That Proposed Amendments to Rule 1100 – Implementation Schedule for NOx Facilities, Are Exempt from CEQA and Amend Rule 1100  
Proposed Amended Rule 1100 will modify the definition of “industry-specific category” to clarify the applicability as originally intended. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1100 – Implementation Schedule for NOx Facilities, are Exempt from the California Environmental Quality Act; and 2) Amending Rule 1100 – Implementation Schedule for NOx Facilities. (No Committee Review)



The complete text of the proposed amendments, staff report and other supporting documents will be available from the South Coast AQMD's Public Information Center, (909) 396-2001 and on the Internet ([www.aqmd.gov](http://www.aqmd.gov)) as of December 11, 2019.

**RECOMMENDED ACTION:**

Set Public Hearings January 10, 2020 to Amend Rules 102 and 1100.

Wayne Natri  
Executive Officer

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BOARD MEETING DATE: December 6, 2019

AGENDA NO. 3

**PROPOSAL:** Execute Contract to Demonstrate Fuel Cell Range-Extended Drayage Trucks

**SYNOPSIS:** In April 2017, the Board approved several projects for port handling equipment, including one with Vehicle Velocity Group (VVG), partnering with Efficient Drivetrains, Inc. (EDI), to develop and demonstrate one battery electric and three plug-in hybrid electric drayage trucks. Cummins Inc., which recently acquired EDI, proposes instead to develop and demonstrate four fuel cell range-extended drayage trucks. This action is to execute a contract with Cummins Inc. to develop and demonstrate four fuel cell range-extended drayage trucks in the amount of \$3,568,300 from the Clean Fuels Fund (31), comprised of \$2,985,995 in CEC pass-through revenue and \$582,305 for South Coast AQMD's cost-share. Cummins Inc. will provide the additional funds to make up the increased costs of the revised project.

**COMMITTEE:** Technology, November 15, 2019; Recommended for Approval

**RECOMMENDED ACTION:**

Authorize the Executive Officer to execute a contract with Cummins Inc. in an amount not to exceed \$3,568,300 from the Clean Fuels Fund (31), comprised of \$2,985,995 in CEC pass-through revenue and \$582,305 for South Coast AQMD's cost-share, to develop and demonstrate four fuel cell range-extended drayage trucks.

Wayne Natri  
Executive Officer

MMM:NB:JI:SH

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**Background**

In April 2017, the Board recognized CEC's AB118 Alternative and Renewable Fuel and Vehicle Technology Program revenue and approved contracts to demonstrate Zero and Near-Zero Emissions Drayage Trucks and Cargo Handling Equipment. A \$3,568,300 contract with Velocity Vehicle Group (VVG), partnering with Efficient Drivetrains, Inc. (EDI), was executed to develop and demonstrate one battery electric and three plug-in

hybrid electric drayage trucks. Cummins, Inc., which acquired EDI as well as Hydrogenics Corporation earlier this year, proposes to modify the scope of work, changing the powertrain technology from one battery electric and three CNG hybrid Class 8 drayage trucks to four fuel cell range-extended Class 8 drayage trucks. The CEC has approved the change of contractor to Cummins Inc. and the change of the powertrain technology from battery electric and CNG hybrid to a fuel cell propulsion system. The contract with VVG, which incurred no costs, will be terminated.

### **Proposal**

Cummins Inc. proposes to develop and demonstrate four fuel cell electric powertrain Class 8 drayage trucks by utilizing the technology and expertise of its recent acquisitions, EDI and Hydrogenics. EDI is an electric powertrain manufacturer and has been developing powertrains since 2007. Hydrogenics Corporation is a fuel cell manufacturer and will be providing the fuel cells for the demonstration trucks. The Cummins fuel cell electric powertrain is expected to provide full performance comparable to diesel and natural gas powertrains and is zero emissions like battery electric powertrains but without the range limitations of battery electric vehicles. The Cummins powertrain will be designed for short, regional haul operations of less than 200 miles. Cummins will also develop a Technology Commercialization Plan to bring the class 8 zero emissions fuel cell electric power system technology to market. The vehicles will be delivered in 2021 with a 12-month demonstration.

### **Sole Source Justification**

Section VIII.B.2 of the Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. Specifically, this request for sole source award is made under the provisions B.2.c.(2): The project involves the use of proprietary technology; and B.2.d.(1): Project involving cost-sharing by multiple sponsors. Cummins Inc.'s fuel cell electric powertrain will be used to design the fuel cell range-extended drayage trucks used in this demonstration. CEC and Cummins Inc. will provide cost-sharing for this project.

### **Benefits to South Coast AQMD**

Projects to support development and demonstration of zero emissions drayage truck technologies are included in the *Technology Advancement Office Clean Fuels Program 2019 Plan Update* under the categories of "Hydrogen and Fuel Cell Technologies and Infrastructure". This project is to develop and demonstrate zero emissions fuel cell drayage truck technologies for goods movement operations. Successful demonstration of such projects will contribute to the attainment of clean air standards in the South Coast Air Basin by eliminating PM and NOx emissions from replaced diesel drayage trucks.

**Resource Impacts**

No costs were incurred on the VVG contract that will be terminated. The original costs for the project were \$4,198,000; the revised scope increased project costs to \$4,985,665. Cummins will provide the additional funds to make up the increased cost. The contract with Cummins Inc. will not exceed \$3,568,300, comprised of \$2,985,995 in CEC pass-through revenue and \$582,305 for South Coast AQMD’s cost-share, from the Clean Fuels Program Fund (31). Further details are in the table below:

<b>Funding Source</b>	<b>Original Costs</b>	<b>Proposed Costs</b>
CEC	\$2,985,995	\$2,985,995
Proponents	629,700	1,417,365
South Coast AQMD	582,305	582,305
<b>Total</b>	<b>\$4,198,000</b>	<b>\$4,985,665</b>

Sufficient funds are available in the Clean Fuels Program Fund (31) for this proposed project. The Clean Fuels Program Fund (31) is established as a special revenue fund resulting from the state-mandated Clean Fuels Program. The Clean Fuels Program, under Health and Safety Code Sections 40448.5 and 40512 and Vehicle Code Section 9250.11, establishes mechanisms to collect revenues from mobile sources to support projects to increase the utilization of clean fuels, including the development of the necessary advanced enabling technologies. Funds collected from motor vehicles are restricted, by statute, to be used for projects and program activities related to mobile sources that support the objectives of the Clean Fuels Program.

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 4

**PROPOSAL:** Amend Contracts to Develop and Demonstrate Zero Emissions Drayage Trucks and Provide Project Implementation Assistance for Clean Fuels Projects and Execute Easement for Fleet Chargers

**SYNOPSIS:** In March 2016, the Board recognized revenue from CARB and other funding partners and awarded multiple contracts for a Zero Emissions Drayage Truck (ZEDT) Project. In October 2018, the Board amended those contracts to reallocate funds among the project partners; however, an additional reallocation of funds is needed at this time. These actions are to authorize the Executive Officer to amend the four project partner contracts and a project implementation assistance contract, as needed, for the ZEDT Project and to redistribute funds among these five contracts as needed to ensure project completion. This action is to also amend a contract for project implementation support of Clean Fuels related projects adding up to \$50,000 from the Clean Fuels Program Fund (31). In addition, in August 2018, staff applied for 30 fleet chargers through Southern California Edison's Charge Ready Program, which requires the host to execute an easement. This action is to authorize the execution of the easement.

**COMMITTEE:** Technology, November 15, 2019; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Authorize the Executive Officer to amend the following contracts to develop and demonstrate zero emissions drayage trucks using project and/or administrative funds from CARB in the GHG Reduction Projects Special Revenue Fund (67), contingent upon execution of an amended agreement with CARB, as follows:
  - a. Reduce \$3,251,501 from Kenworth Truck Company which had been allocated for two Phase 2 CNG plug-in hybrid electric trucks;
  - b. Add \$1,000,000 to Peterbilt Motors for the development and demonstration of two additional Class 8 battery electric drayage trucks and installation of DC fast charging infrastructure to support participating fleets;
  - c. Add \$400,000 to BYD Motors for the installation of DC fast charging infrastructure to support participating fleets deploying battery electric trucks;

- d. Add \$353,000 to Volvo Technology of America, LLC, towards an extended demonstration plan to quantify emission reductions and fuel savings benefits on its Eco-Drive and aftertreatment technologies; and
  - e. Add \$161,800 to Clean Fuel Connection, Inc., (CFCI) towards project implementation assistance.
2. Authorize the Executive Officer to redistribute funds among the four participating original equipment manufacturers above and CFCI on an as-needed basis to meet project goals, contingent upon CARB approval if necessary, for the Greenhouse Gas Reduction Fund Zero Emissions Drayage Truck Project.
  3. Authorize the Chairman to amend CFCI's contract providing project implementation assistance on Clean Fuels related projects adding up to \$50,000 from the Clean Fuels Program Fund (31).
  4. Authorize the Executive Officer to execute an easement with Southern California Edison for the installation of 30 fleet chargers.

Wayne Natri  
Executive Officer

MMM:NB:JI:PSK/DAH

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## **Background**

### *Zero Emissions Drayage Trucks*

In March 2016, the Board recognized revenue from CARB and other funding partners and awarded multiple contracts to develop and demonstrate zero emissions drayage trucks. These funds were awarded based on a proposal submitted by staff in response to CARB's solicitation under the Low Carbon Transportation Greenhouse Gas Reduction Fund (GGRF) Investments.

The Zero Emissions Drayage Truck (ZEDT) project, a collaboration between South Coast and Bay Area AQMDs, San Joaquin Valley and San Diego APCDs and San Diego Gas & Electric, is to develop a portfolio of commercially promising zero and near-zero emissions drayage truck technologies for statewide demonstrations across a variety of drayage applications in and around the Ports of Long Beach, Los Angeles, Oakland, Stockton and San Diego. Each partnering air district committed staffing and/or cost-share for this ground-breaking initiative to support rapid commercialization of zero emissions cargo transport technologies. The project is being implemented in conjunction with four original equipment manufacturers (OEMs) including BYD Motors, Kenworth Truck Company, Peterbilt Motors and Volvo Technology of America, LLC. In October 2018, the Board amended those four OEM contracts to reallocate funds among the project partners; however, an additional reallocation of funds is needed at this time.

In September 2019, CARB agreed to extend the GGRF ZEDT project to December 31, 2020, to allow additional time for data collection and to reallocate funds among the project partners. Phase 1 and the majority of Phase 2 trucks have been deployed. Data collection on baseline vehicles and portable emissions measurement system (PEMS) testing have commenced with fleets deploying these trucks in drayage service. Some fleet locations required electrical infrastructure upgrades resulting in higher costs for EV infrastructure. Challenges remain in deploying some of the trucks into revenue service and installing the supporting infrastructure, as well as deploying the required number of trucks in the jurisdiction of each of the air district partners.

#### *Project Implementation Assistance for Clean Fuels Projects*

In addition, through a competitive bid process, Clean Fuel Connection, Inc., (CFCI) has been providing technical expertise and project implementation assistance on various Clean Fuels projects based on their expertise with alternative fuels, electric vehicles, and charging and fueling infrastructure. Additional funds are needed to continue this support.

#### *Easement for EV Chargers at Headquarters*

In August 2018, staff applied for 30 fleet chargers for South Coast AQMD headquarters through Southern California Edison's (SCE) Charge Ready Program. In December 2018, as part of the application process, South Coast AQMD executed a site host agreement with SCE. In June 2019, SCE notified South Coast AQMD that it would also need to execute an easement to qualify for the Charge Ready funding.

### **Proposal**

#### *Zero Emissions Drayage Trucks*

Kenworth's contract called for the deployment of two Phase 1 and two Phase 2 CNG plug-in hybrid electric trucks plus assistance in securing CNG fueling infrastructure contracts. Unfortunately, Kenworth experienced significant delays in the release of its two Phase 1 trucks resulting from prolonged supplier issues for hybrid and other components as well as challenges on integrating those components onto the truck platform. In September 2019, Kenworth's two Phase 1 trucks were finally deployed at Total Transportation Services, Inc. However, because Kenworth's two Phase 2 trucks will not be deployed by the December timeline required of the project, their funding will be reduced and allocated to other areas of the overall project. Additionally, in order for Kenworth to meet the project timeline required to deploy two trucks within San Joaquin Valley APCD's jurisdiction, they will have to be deployed at a fleet with existing CNG infrastructure.

As a result of the delay in truck development and lack of CNG fueling infrastructure, staff's proposal is for Peterbilt to build two additional battery electric trucks for deployment at another fleet in San Joaquin Valley APCD's jurisdiction. The two additional Peterbilt trucks will leverage the improved Phase 2 design and be modified as

needed to maximize battery electric range. Charging infrastructure will also be installed at this fleet location to support the two trucks.

Some fleets at the Ports of Oakland, Los Angeles and Long Beach do not have sufficient electrical infrastructure capacity to install DC fast chargers required to support these trucks so funding will be reallocated for this purpose between Peterbilt and BYD.

Volvo will further develop its Eco-Drive technology to quantify emission reductions from Eco-Drive based on engine dynamometer tests. Volvo will conduct validation and testing and then deploy an aftertreatment technology on its Phase 2 truck. The extended demonstration plan will enable Volvo to fully validate and quantify emissions reduction and fuel economy benefits from its Eco-Drive and aftertreatment technologies. This extended demonstration plan will be completed by December 2020.

Since 2018, CFCI has been performing project implementation assistance for the ZEDT Project, but additional funding is required for the compilation of quarterly reports, invoices, mileage tracking, vehicle certifications and/or registrations, technical deliverables and auditing recordkeeping. In May 2019, as part of a prior contract amendment, CARB approved reallocating \$76,800 of South Coast AQMD's administrative funds towards CFCI for this purpose. However, because this project requires significant administration and recordkeeping, the extension will require additional project implementation assistance estimated at \$85,000, for a total allocation to CFCI of \$161,800.

This action is to authorize the Executive Officer to amend contracts, contingent upon execution of an amended agreement with CARB, as follows: 1) reduce \$3,251,501 from Kenworth Truck Company; 2) add \$1,000,000 to Peterbilt Motors; 3) add \$400,000 to BYD Motors; 4) add \$353,000 to Volvo Technology of America, LLC; and 5) add \$161,800 to CFCI. This action is to also authorize the Executive Officer to redistribute funds among the four participating OEMs and CFCI on an as-needed basis to meet project goals, contingent upon CARB approval if necessary.

*Project Implementation Assistance for Clean Fuels Projects*

This action is to add up to \$50,000 from the Clean Fuels Fund (31) to CFCI's contract for project implementation assistance on various Clean Fuels related projects.

*Easement for EV Chargers at Headquarters*

This action is to authorize the Executive Officer to execute an easement with SCE for the installation of 30 fleet chargers at South Coast AQMD headquarters. Installation of the chargers is anticipated in early 2020.



**Benefits to South Coast AQMD**

*Zero Emissions Drayage Trucks*

The ZEDT project is to develop and demonstrate zero emissions drayage truck technologies for goods movement operations. The scope of this project is identified as a technical priority in the *Technology Advancement Office Clean Fuels Program 2019 Plan Update* under “Electric/Hybrid Technologies & Infrastructure.” Successful demonstration of such projects will contribute to the attainment of clean air standards in the South Coast Air Basin by eliminating PM and NOx emissions from replaced diesel drayage trucks.

*Project Implementation Assistance for Clean Fuels Projects*

Outside project implementation assistance will provide an effective means of completing timely and sometimes rigorous requirements in support of TAO’s research, development, demonstration and deployment programs.

*Easement for EV Chargers at Headquarters*

This EV infrastructure project at South Coast AQMD Headquarters will advance the state of PEV readiness in California by creating a viable charging network that will be accessible, convenient, reliable and affordable for fleet vehicles.

**Resource Impacts**

*Zero Emissions Drayage Trucks*

The reallocation of funds will not exceed the project and/or administrative funds allocated for the GGRF ZEDT Project in the GHG Reduction Projects Special Revenue Fund (67).

The reallocation of GGRF and Clean Fuels funding is as follows:

Project Partner	Original (Oct 2018 Board)		Proposed Revision	
	CARB	SCAQMD	CARB	SCAQMD
Kenworth	5,714,264	3,423,475	3,647,132	2,239,106
BYD	5,765,564	2,294,436	6,165,564	2,294,436
Peterbilt	5,733,564	2,342,436	6,733,564	2,342,436
Volvo	5,657,564	2,341,184	6,010,564	2,341,184
CFCI*	0	0	161,800	0
Admin	787,544	0	939,876	0
<b>TOTAL</b>	<b>23,658,500</b>	<b>10,401,531</b>	<b>23,658,500</b>	<b>9,217,162</b>

*Project Implementation Assistance for Clean Fuels Projects*

The contract amendment with CFCI will not exceed \$50,000 from the Clean Fuels Fund (31).

*Easement for EV Chargers at Headquarters*

The easement has no fiscal impact.

Sufficient funds are available from the GGRF Reduction Projects Special Revenue Fund (67) and the Clean Fuels Fund (31), the latter of which 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.

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 5

**PROPOSAL:** Recognize and Transfer Funds, Execute and Amend Agreements for Installation and Maintenance of Air Filtration Systems, and Reimburse General Fund for Administrative Costs

**SYNOPSIS:** The U.S. EPA and CARB are executing four Supplemental Environmental Projects (SEPs) and have asked South Coast AQMD to act as the SEP administrator to install and maintain air filtration systems at schools in environmental justice communities. South Coast AQMD will also be carrying out its own SEP. These actions are to recognize up to \$316,000 for SEPs from U.S. EPA and CARB and transfer up to \$45,000 from the General Fund for the South Coast AQMD SEP into the Air Filtration Fund (75). These actions are to also execute agreements to install and maintain air filtration systems in an amount not to exceed \$345,200, execute or amend access agreements with local school districts, amend contracts to purchase additional filters using unspent administrative funds, and reimburse the General Fund for administrative costs up to \$15,800 for SEP administration.

**COMMITTEE:** Technology, November 15, 2019; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Recognize funds into the Air Filtration Fund (75) as follows:
  - a. Up to \$190,000 for two SEPs being administered on behalf of U.S. EPA; and
  - b. Up to \$126,000 for two SEPs being administered on behalf of CARB.
2. Transfer up to \$45,000 from the General Fund (Undesignated/Unassigned Fund Balance) into the Air Filtration Fund (75) as part of a settlement with the State of California Attorney General to implement a South Coast AQMD SEP.
3. Authorize the Executive Officer to execute agreements with Pacific Resource Recovery Services, Dean Foods Company and CARB for South Coast AQMD to implement SEPs for installation and maintenance of air filtration systems and to execute or amend agreements with local school districts for the purpose of implementing SEPs.
4. Authorize the Chairman to execute contracts with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$345,200 from the Air Filtration Fund (75).

5. Authorize the Chairman to amend, as needed, contracts with IQAir North America to purchase additional filters using unspent administrative funds.
6. Reimburse the General Fund from the Air Filtration Fund (75) for administrative costs up to \$15,800, as needed, to implement SEPs.

Wayne Natri  
Executive Officer

MMM:NB:JI:PSK

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### **Background**

U.S. EPA executed consent decrees with Pacific Resource Recovery Services and Dean Foods Company that include a Supplemental Environmental Project (SEP) for \$100,000 and \$90,000, respectively, and has asked South Coast AQMD to act as the SEP administrator to install and maintain air filtration systems at schools in environmental justice (EJ) communities.

CARB has executed consent decrees with Tesoro Refining & Marketing Company for two SEPs for \$66,500 and \$59,500 and has asked South Coast AQMD to act as the SEP administrator to install and maintain air filtration systems at schools in EJ communities. CARB has revised their SEP procedure and will execute SEP oversight agreements with South Coast AQMD, rather than have South Coast AQMD execute agreements with the individual companies paying for the SEPs.

South Coast AQMD will implement a SEP for \$45,000 to install and maintain air filtration systems at schools in an EJ community per a consent decree with the California Attorney General for an air quality violation.

To date, South Coast AQMD has installed air filtration systems at 90 schools and community centers in the South Coast Air Basin.

IQAir North America (IQAir) was selected through two competitive bid processes in 2011 and 2013 for air filtration projects, and staff performed a technology status check to ensure no new technologies had come on the market. IQAir is also the only qualified manufacturer of high-performance panel filters and stand-alone units meeting the performance standards in South Coast AQMD's 2009 air filtration pilot study as well as through a 2010 national testing opportunity by the University of California Riverside College of Engineering/Center for Environmental Research and Technology. These performance standards include an average removal efficiency of greater than 85 percent for ultrafine PM, black carbon and PM<sub>2.5</sub> and a noise level below 45 decibels for stand-alone units.

**Proposal**

The U.S. EPA, along with Pacific Resources Recovery Services, Dean Foods Company and Los Angeles Unified School District (LAUSD), will identify schools to receive air filtration systems for these two SEPs. The schools will be in EJ communities in close proximity to the Pacific Resource Recovery Services and Dean Foods Company facilities in Boyle Heights and Vernon, respectively.

CARB, along with Tesoro Refining & Marketing Company LLC, LAUSD and other local school districts, will identify schools to receive air filtration systems for these two SEPs, which will be in EJ communities near the Ports.

The EPA and CARB SEPs allow five percent of the SEP amount to be designated towards reimbursement of administrative costs.

South Coast AQMD, along with the California Attorney General’s office, will identify a school in an EJ community within 10 miles of South Coast AQMD headquarters to fulfill the requirements of the South Coast AQMD SEP.

Completion of the SEPs will occur no later than December 2020 or within 12 months of contract execution. The proposed schedule for the SEPs is as follows:

<b>Date</b>	<b>Event</b>
December 2019	Board Approval
February 2020	Anticipated Execution of Contracts
June 2020	School Selection, Site Assessments
December 2020	Installation
December 2020–December 2025	Maintenance (varies by school)
February 2021	Final Report (annual updates thereafter for five years)

These actions are to recognize up to \$316,000 from the four SEP agreements and transfer \$45,000 from the General Fund (Undesignated/Unassigned Fund Balance) into the Air Filtration Fund (75); authorize the Executive Officer to execute agreements with Pacific Resource Recovery Services, Dean Foods Company and CARB and execute or amend agreements with local school districts to implement SEPs for installation and maintenance of air filtration systems; execute contracts with IQAir North America for installation and maintenance of air filtration systems at schools in an amount not to exceed \$345,200; amend, as needed, contracts with IQAir North America to purchase additional filters using unspent administrative funds; and reimburse the General Fund from the Air Filtration Fund (75) for administrative costs up to \$15,800.

**Sole Source Justification**

Section VIII. B. 2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for a sole source award is made under provision B.2.c (1): The desired services are available from only the sole-source based upon the unique experience and capabilities of the proposed contractor or contractor team. IQAir remains the only manufacturer of high-performance panel filters and stand-alone units identified by South Coast AQMD and CARB staff that meet the performance standards required to complete the work.

**Benefits to South Coast AQMD**

This project will reduce children's exposure to criteria and toxic pollutants and ultrafine PM. Health studies have determined that fine and ultrafine PM, including diesel PM, present the greatest air pollution health risk to sensitive receptors in EJ communities identified in the SEP agreements.

**Resource Impacts**

The new contract with IQAir will not exceed \$345,200, and any contract amendment with IQAir to purchase additional filters will not exceed the amount of any unspent administrative fees. Reimbursement of administrative costs will not exceed \$15,800.

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 6

**PROPOSAL:** Adopt Resolution, Execute Contracts, Amend Awards, Transfer Funds and Reimburse Administrative Costs for Carl Moyer and Other Programs

**SYNOPSIS:** In June 2019, the Program Announcement for the Year 21 Carl Moyer Program closed. This year, in addition to the traditional sources of Carl Moyer SB 1107 and AB 923 funds, funding from the Community Air Protection Program, State Reserve and FARMER will also be available to fund Carl Moyer projects. In addition, updates to improve the Carl Moyer online application system are necessary. These actions are to: 1) adopt a Resolution recognizing up to \$86 million in Community Air Protection Program funds; 2) execute contracts for Year 21 Carl Moyer Program, SOON Provision, State Reserve, FARMER and Community Air Protection Programs; 3) amend a “Year 20” SOON Provision contract award; 4) authorize the Executive Officer to redistribute the source of funds for these contracts to ensure program liquidation targets are met; 5) amend a contract for the Carl Moyer online application system; 6) transfer \$3 million from the Carl Moyer Program AB 923 Fund (80) to the Voucher Incentive Program Fund (59) for truck replacements; and 7) reimburse administrative costs related to implementing these incentive funds.

**COMMITTEE:** Technology, November 15, 2019; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Adopt the attached Resolution recognizing, upon receipt, up to \$86 million in FY 2018-19 Community Air Protection Program (CAPP) incentive funds from CARB into the Community Air Protection AB 134 Fund (77), and authorize the Executive Officer to accept the terms and conditions of the grant agreement;
2. Authorize the Chairman to execute contracts for the Year 21 Carl Moyer and SOON Provision Programs as listed in Tables 2A and 2B, respectively, in an amount not to exceed \$33,903,879, comprised of \$28,565,594 from the Carl Moyer Program Fund (32) - SB 1107, \$1,453,364 from interest funds accrued in the Carl Moyer Program Fund (32) - SB 1107, and \$3,884,921 from the Carl Moyer Program AB 923 Fund (80);

3. Authorize the Chairman to execute off-road equipment contracts as listed in Table 3, in an amount not to exceed \$3,460,715, from the Carl Moyer Program Fund (32) comprised of \$3,264,274 from the Year 21 Carl Moyer Program - State Reserve funds, \$14,991 from interest accrued from State Reserve funds, \$137,042 from interest accrued from Multi-District funds and \$44,408 in returned funds from Year 20 Carl Moyer Program - State Reserve funds;
4. Authorize the Chairman to execute off-road agricultural contracts for the FARMER Program as listed in Table 4, in an amount not to exceed \$1,841,774, comprised of \$1,701,104 from the FY 2018-19 Carl Moyer Program Fund (32) - FARMER grant, and \$140,670 in returned funds from FY 2017-18 FARMER grant;
5. Authorize the Executive Officer to redistribute the source of funds within or between the Carl Moyer Program Fund (32), including SB1107, SOON, State Reserve, FARMER and associated interest funds, Carl Moyer AB 923 Fund (80) match funds and the Community Air Protection AB 134 Fund (77), as needed, in order to expeditiously meet program liquidation requirements to the extent that such actions are not in conflict with any applicable guidance, requirement or direction from CARB;
6. Authorize the Chairman to execute contracts for mobile source projects for the AB 617 Community Air Protection Program (Year 2) as listed in Tables 5A-5D, in an amount not to exceed \$68,672,963 from the Community Air Protection AB 134 Fund (77);
7. Authorize the Chairman to execute contracts from the backup projects as listed in Table 6, should any returned funds become available from any of the funding sources approved for projects in this Board letter, or should any additional funds become available under the Carl Moyer, State Reserve, FARMER or Community Air Protection Programs;
8. Authorize the Chairman to amend a SOON Provision award with Peed Equipment Company for the repower and replacement of 19 instead of 21 off-road engines at no cost change (approved by the Board in November 2018);
9. Authorize the Chairman to amend a contract with Trinity Technology Group to update and enhance the existing online application database for the Carl Moyer/SOON Provision Programs in an amount not to exceed \$90,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80);
10. Approve the transfer of \$3 million from the Carl Moyer Program AB 923 Fund (80) to the Voucher Incentive Program (VIP) Fund (59) to fund eligible truck replacement projects with small fleets on a first-come, first-served basis under the Carl Moyer VIP; and



11. Reimburse the General Fund from the Carl Moyer Program Fund (32) for administrative costs related to the State Reserve and FARMER programs and the Community Air Protection Program Fund (77) in amounts not to exceed \$217,618, \$113,407 and \$5,348,125, respectively.

Wayne Nastri  
Executive Officer

MMM:NB:VAW

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### **Background**

In May 2019, the South Coast AQMD executed a grant agreement with CARB to receive Year 2 Community Air Protection Program (CAPP) incentive funds totaling \$85,570,000, including 6.25% in administrative funds. To receive the Year 2 CAPP incentive funds, a Board Resolution is required by CARB prior to disbursement of the funds. Mobile source projects that are eligible for Year 2 CAPP incentives include those implemented through applications received under the Carl Moyer Program.

For this year's Carl Moyer Program, South Coast AQMD received a CARB grant for \$30,469,967, including 6.25% in administrative funds. The required match from the South Coast AQMD is \$4,570,495, of which 15% of these funds will be used for the in-kind contribution as allowed by the Carl Moyer Program. This year, in addition to the Carl Moyer Program funds, other sources of funds are available that can be used to fund projects under the Carl Moyer Program. These include the AB 617 CAPP, State Reserve and FARMER funds. Except for the CAPP incentive funds, all of the funding sources identified in this Board letter have been recognized by the Board in earlier actions. The total amount of available funds are \$119,428,243, as summarized in Table 1.

In March 2019, the South Coast AQMD released a Program Announcement (PA) to solicit projects for the Carl Moyer Program. The PA was heavily oversubscribed with funding requests far exceeding the amount of available funds. Since mobile source projects eligible under the Carl Moyer Program may be considered for funding through the CAPP, State Reserve and FARMER, the projects submitted in response to the PA were also evaluated with respect to the terms and conditions of these other funding sources.

In November 2018, the Board approved a SOON Provision award to Peed Equipment Company for the repower and replacement of 21 off-road engines. An amendment to this award is needed to reduce the number of engines from 21 to 19 with no cost change.

In November 2015, the Board approved a contract with Trinity Technology Group to develop an online application database to receive and process applications for the Carl

Moyer Program. The Carl Moyer Online Application Program was successfully launched in April 2017 and continues to facilitate the application submittal process for a majority of applicants under the Carl Moyer and SOON Provision Programs. Updates and enhancements to this system are needed to improve applicant/user experience and build efficiencies to assist in processing a high number of applications.

Since 2009, the South Coast AQMD has been implementing a Carl Moyer On-Road Heavy-Duty Vehicle Voucher Incentive Program (VIP) for small fleets of 10 trucks or less. To date, using about \$40.8 million in incentive funds, 1,180 diesel trucks have been replaced with cleaner trucks. At this time, additional funds are needed to continue VIP for truck replacements for small fleets.

### **Outreach**

In accordance with South Coast AQMD's Procurement Policy and Procedure, a public notice advertising the PA and inviting bids was published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County's Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin.

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

In addition to the regular outreach conducted for the Carl Moyer Program in the four counties, staff conducted targeted outreach activities for the AB 617 Year 1 communities, including but not limited to: 1) dissemination of program brochures and staff support at the AB 617 community steering committee meetings; 2) coordination with the Ports of Los Angeles and Long Beach to disseminate Carl Moyer Program funding information to all drayage truck owners/operators listed in the Drayage Truck Registry as well as the terminal operators of cargo handling equipment; 3) emails to over 16,000 subscribers to the Carl Moyer Program listserv; 4) emails to warehouse facilities located throughout the South Coast Air Basin; and 5) enhanced outreach to agricultural communities in the Coachella Valley region.

### **Proposal**

For the Carl Moyer, SOON Provision, State Reserve and FARMER Programs, staff is recommending projects based on cost-effectiveness in accordance with the Carl Moyer Program Guidelines, with priority given to the most cost-effective projects. Projects were selected with a cost-effectiveness up to \$25,263 per weighted ton of NOx, PM and ROG emissions reduced. The remaining projects were placed on a back-up list for future consideration in the event any returned or unexpended funds become available.

These actions are to: 1) adopt the attached Resolution recognizing up to \$86 million in CAPP funds from CARB into the Community Air Protection AB 134 Program Fund (77) and authorize the Executive Officer to accept the terms and conditions of the FY 2018-19 (Year 2) CAPP incentives grant agreement; 2) authorize the Chairman to execute contracts for the Year 21 Carl Moyer Program and SOON Provision as listed in Tables 2A and 2B, in an amount not to exceed \$33,903,879, comprised of \$28,565,594 from the Carl Moyer Program Fund (32) - SB 1107, \$1,453,364 from interest funds accrued in the Carl Moyer Program Fund (32) - SB 1107 and \$3,884,921 from the Carl Moyer Program AB 923 Fund (80); 3) authorize the Chairman to execute contracts listed in Table 3 from the Carl Moyer Program Fund (32) in an amount not to exceed \$3,460,715, comprised of \$3,264,274 from the Year 21 Carl Moyer Program - State Reserve funds, \$14,991 from interest accrued from State Reserve funds, \$137,042 from interest accrued from Multi-District funds, and \$44,408 in returned funds from the Year 20 Carl Moyer Program - State Reserve funds; and 4) authorize the Chairman to execute contracts listed in Table 4 for the FARMER Program, in an amount not to exceed \$1,841,774, comprised of \$1,701,104 from the FY 2018-19 Carl Moyer Program Fund (32) - FARMER grant, and \$140,670 in returned funds from FY 2017-18 FARMER grant.

In order to effectively meet the liquidation deadlines specified in the grants, this action is to also authorize the Executive Officer to redistribute the source of funds within or between the Carl Moyer Program Fund (32), including SB 1107, SOON, State Reserve, FARMER and associated interest funds, Carl Moyer AB 923 Fund (80) match funds, and the Community Air Protection AB 134 Fund (77), as needed, to the extent the redistribution would not be in conflict with any applicable guidance, requirement or direction from CARB.

All applications received under this year's Carl Moyer Program have been evaluated for completeness and eligibility according to CARB's Carl Moyer Program Guidelines approved in April 2017. Due to the oversubscription of the program this year and given the funding sources that are available, only those projects that are domiciled in or operate a majority of time in a disadvantaged and/or low-income community were selected for funding consideration. The following selection criteria were used by staff for the final recommendation of awards. First, projects located within one of the AB 617 communities (either approved or under consideration for approval) were selected for funding. These projects are located either in approved AB 617 communities, including Wilmington/West Long Beach/Carson, East Los Angeles/Boyle Heights/West Commerce, and San Bernardino/Muscoy, or in AB 617 communities under consideration for approval, including Eastern Coachella Valley and South Gate/Huntington Park/Cudahy/Bell Gardens. At the AB 617 Community Steering Committee meetings held in October 2019, staff presented an update on the CAPP incentive projects, including projects awarded in past Board actions and the proposed recommended project awards identified in this Board letter. Staff will continue to work

closely with the committees to identify targeted outreach opportunities and additional incentive funding opportunities through the CAPP. The proposed recommended projects will result in direct emissions reduction benefits to the AB 617 communities and contribute to the emissions reduction goals identified in the Board-approved Community Emission Reduction Plans. Next, all zero emission projects were prioritized and selected for funding. For those projects where zero emission technology is not commercially available or technologically feasible at this time, staff recommended funding projects that will deploy and support near-zero emission technologies. Staff recommended funding additional projects in disadvantaged and/or low-income communities that are located within a five-mile radius of an AB 617 community. These projects, given their close proximity, may also operate and reduce emissions in the nearby AB 617 community and will also contribute to meeting the statewide CAPP incentive targets for benefits to priority communities since these projects are located in disadvantaged and/or low-income communities. This action is to execute contracts for mobile source projects for the AB 617 CAPP (Year 2) as listed in Tables 5A-5D in an amount not to exceed \$68,672,963. A total of \$11,548,912 in CAPP incentive funds will be remaining and available for other eligible projects, including but not limited to: actions identified in approved Community Emissions Reduction Plans, clean truck projects meeting the criteria of the Proposition 1B-Goods Movement Program, and/or projects or programs identified in the Community Air Protection Incentives 2019 Guidelines.

In the event some projects are not implemented or there are returned funds from any of the funding sources identified in this Board letter, staff recommends execution of contracts from the backup list in Table 6, with priority for the most cost-effective projects.

Lastly, these actions are to: 1) authorize the Chairman to amend a SOON Provision contract award with Peed Equipment Company for the repower and replacement of 19 instead of 21 off-road engines at no cost change; 2) authorize the Chairman to amend a contract with Trinity Technology Group to update and enhance the existing online application database for the Carl Moyer/SOON Provision Programs in an amount not to exceed \$90,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80); 3) approve the transfer of \$3 million from the Carl Moyer Program AB 923 Fund (80) to the Voucher Incentive Program (VIP) Fund (59) to continue funding truck replacement projects for small fleets on a first-come, first-served basis; and 4) reimburse the General Fund from the Carl Moyer Program Fund (32) for administrative costs related to the State Reserve and FARMER programs and the Community Air Protection Program Fund (77) in amounts not to exceed \$217,618, \$113,407 and \$5,348,125, respectively..

### **Disadvantaged and Low-Income Communities**

Consistent with the requirements of AB 1390, the South Coast AQMD will ensure that not less than 50 percent of the funds appropriated for purposes of the following programs are expended in a manner that directly reduces air contaminants and/or associated public health risks in disadvantaged and low-income communities: Carl Moyer Program, Lower-Emission School Bus Program and other diesel mitigation programs. The CAPP incentives grant award specifies a much higher target for benefits to priority communities, including at least 70 percent of the CAPP incentive funds for projects located in SB 535 disadvantaged communities and at least 80 percent of the funds for projects benefiting AB 1550 communities. The qualification of the projects are determined by using CalEnviroScreen version 3.0 and the requirements of SB 535 for disadvantaged communities, and AB 1550 for low-income communities and those within half a mile of disadvantaged communities.

Due to the high number of applications received under the Carl Moyer Program this year, staff prioritized those projects that qualified in disadvantaged and low-income communities only. Consequently, 100 percent of the projects recommended for funding under the Carl Moyer, State Reserve, FARMER and CAPP, as well as all the recommended projects listed as backup, are expected to provide benefits to disadvantaged and low-income communities. This greatly surpasses the requirements of the programs.

### **Funding Distribution**

The funding distribution is based on the priorities specified in the grant agreements for the various funding sources identified in this Board letter. For example, the CAPP incentives grant specifies at least 70 percent of the funds for projects located in SB 535 disadvantaged communities and at least 80 percent of the funds for projects benefiting AB 1550 communities. This grant also specifies a priority for zero emission projects, whenever feasible, including charging/fueling infrastructure for zero emission vehicles/equipment.

For the Carl Moyer Program, staff considered the priorities in the “Carl Moyer Program Guideline under SB 1107 & AB 923” adopted by the Board on July 8, 2005. These priorities are:

- Goods movement (no less than 40%);
- Disadvantaged and low-income communities (no less than 50%);
- Cost-effectiveness;
- Low-emission engine/vehicle preference;
- Early commercialization of advanced technologies/fuels;
- Fleet rules; and
- School buses.

**Benefits to South Coast AQMD**

The successful implementation of the projects selected for funding through the Carl Moyer (including SOON Provision), State Reserve, FARMER and CAPP will reduce emissions of NOx, PM and ROG. The recommended projects will exceed the targets for benefits to disadvantaged and low-income communities that are identified in the Carl Moyer and CAPP incentives grants. Below are the estimated emissions reduction benefits from the recommended awards:

Program	Estimated Emission Reductions (tons/year)	
	NOx	PM
Carl Moyer/SOON Provision	337	2.6
State Reserve	27	1.8
FARMER	31	1.9
CAPP Incentives	204	6
<b>Total</b>	<b>599</b>	<b>12.3</b>

The Carl Moyer Program is an important and successful program that provides incentive funding to owners of heavy-duty vehicles and equipment to reduce emissions beyond regulatory requirements by replacing, repowering or retrofitting their older engines. The projects identified in this Board letter will result in emission reductions that are surplus to existing regulations and will occur throughout the life of the projects resulting in long-term emission reduction and public health benefits.

The modifications and enhancements of the existing online application database will further facilitate the online application submittal process for participants as well as streamline the project evaluation process. VIP has also historically resulted in significant NOx and PM reductions, which is expected to continue with the additional funding.

**Resource Impacts**

Total funding for projects under the Year 21 Carl Moyer Program, SOON Provision, State Reserve, FARMER and FY 2018-19 CAPP will not exceed \$107,879,331, comprised of the following funding sources:

Program	Total Funds Awarded
Carl Moyer SB 1107 (Fund 32)	\$28,565,594
Carl Moyer/State Reserve Interest Funds (Fund 32)	\$1,605,397
Carl Moyer AB 923 Match Funds (Fund 80)	\$3,884,921
State Reserve Funds (Fund 32)	\$3,308,682
FARMER (Fund 32)	\$1,841,774
CAPP Incentives (Fund 77)	\$68,672,963
<b>Total</b>	<b>\$107,879,331</b>

The transfer from the Carl Moyer Program AB 923 Fund (80) to the VIP Fund (59) will not exceed \$3 million.

**Attachments**

Resolution

Table 1: Total Amount of Available Funds

Table 2A: Carl Moyer Program Awards

Table 2B: SOON Provision Awards

Table 3: Carl Moyer State Reserve Awards

Table 4: FARMER Program Awards

Table 5A: CAPP Incentive Awards in AB 617 Communities

Table 5B: Other Zero Emission Projects

Table 5C: Other Near-Zero Emission Projects

Table 5D: Projects Located Within Five Miles of an AB 617 Community

Table 6: Recommended List of Backup Projects

**RESOLUTION NO. 19-\_\_\_\_\_**

**A Resolution of the South Coast Air Quality Management District Governing Board  
Recognizing Funds and Accepting the Terms and Conditions of  
AB 617 Community Air Protection Program Incentives Grant (FY 2018-19)**

WHEREAS, under Health & Safety Code §40400 et seq., the South Coast Air Quality Management District (South Coast AQMD) is the local agency with the primary responsibility for the development, implementation, monitoring and enforcement of air pollution control strategies, clean fuels programs and motor vehicle use reduction measures; and

WHEREAS, the South Coast AQMD is authorized by Health & Safety Code §§40402, 40440, and 40448.5 as well as the Carl Moyer Memorial Air Quality Standards Attainment Program (§§44275 et seq.) to implement programs to reduce transportation emissions, including programs to encourage the use of alternative fuels, zero and low emission vehicles, to develop and implement other strategies and measures to reduce air contaminants, and achieve the state and federal air quality standards; and

WHEREAS, the Governing Board has adopted several programs to reduce emissions from on-road and off-road vehicles, as well as emissions from other equipment, including the Carl Moyer Program and the Proposition 1B-Goods Movement Program; and

WHEREAS, the Governing Board will prioritize funding of zero emission on- and off-road vehicles and equipment whenever feasible, including charging/fueling infrastructure for medium- and heavy-duty vehicles, in disadvantaged and low-income communities; and

WHEREAS, the South Coast AQMD is designated as an extreme non-attainment area for ozone and as such is required to utilize all feasible means to meet national ambient air quality standards.

THEREFORE, BE IT RESOLVED that the Governing Board of the South Coast AQMD, State of California, in regular session assembled on December 6, 2019, does hereby accept the terms and conditions of the FY 2018-19 AB CAPP Incentives grant award and recognize up to \$86 million in CAPP Year 2 incentive funds.

BE IT FURTHER RESOLVED that the Executive Officer is authorized and directed to take all steps necessary to carry out this Resolution.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Clerk of the Boards



**Table 1 – Total Amount of Available Funds**

<b>Funding Source</b>	<b>Funds Required to be Encumbered</b>	<b>Grant Number</b>	<b>Comment</b>
SB 1107	\$28,565,594	G18-MO29	From \$30,469,967 Year 21 funds allocated by CARB: <ul style="list-style-type: none"> <li>• Less \$1,904,373 in administrative funds</li> </ul>
Carl Moyer/State Reserve Interest Funds*	\$1,605,397	n/a	Total unobligated interest funds in Fund 32 as of 5/31/19, including interest from both Carl Moyer and State Reserve program funds
AB 923 Match Funds	\$3,884,921	n/a	The amount of \$4,570,495 is the required match amount for Year 21, less 15% as South Coast AQMD's in-kind contribution allowed by the Program
State Reserve	\$3,308,682	G18-MO44	From \$3,481,892 allocated by CARB: <ul style="list-style-type: none"> <li>• Less \$217,618 in administrative funds</li> <li>• Plus \$44,408 from a project that was not implemented</li> </ul>
FARMER	\$1,841,774	G18-AGIP-17	From \$1,814,511 allocated by CARB: <ul style="list-style-type: none"> <li>• Less \$113,407 in administrative funds</li> <li>• Plus \$140,670 from a project that was not implemented</li> </ul>
Community Air Protection Program Incentives	\$80,221,875**	G18-MCAP-06	From \$85,570,000 allocated by CARB: <ul style="list-style-type: none"> <li>• Less \$5,348,125 in administrative funds</li> </ul>
<b>Total</b>	\$119,428,243		

\*These interest funds are comprised of \$1,453,364 SB 1107, \$137,042 Multi-District, and \$14,991 State Reserve interest funds.

\*\*This figure represents the total incentive funds allocated under G18-MCAP-06 for projects eligible under Carl Moyer Program, CAPP Funds Guidelines Supplement, truck projects under Proposition 1B, CAPP Incentives guidelines, and projects/programs included in an approved Community Emission Reduction Program.

**Table 2A: Carl Moyer Program Awards**

<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
Cottonwood Dairy LLC	Off-Road Ag	4	\$736,227
Emerald Acres LLC	Off-Road Ag	1	\$1,220,000
Fuentes Bros Trucking	Off-Road Ag	1	\$13,723 <sup>1</sup>
GH Dairy	Off-Road Ag	4	\$384,634
Greg Anderson	Off-Road Ag	1	\$58,535
JC Farming Inc.	Off-Road Ag	1	\$690,000
Jorge Fuentes Trucking	Off-Road Ag	3	\$277,279 <sup>2</sup>
Marvo Holsteins Dairy	Off-Road Ag	1	\$92,594
McMillan Farm Management	Off-Road Ag	1	\$64,841
Daryl Lee Koops dba Northview Dairy	Off-Road Ag	3	\$385,987
Organic Depot LLC	Off-Road Ag	2	\$1,925,000 <sup>3</sup>
Pro-Organic Farms LLC	Off-Road Ag	3	\$961,662 <sup>4</sup>
Quality Turf, Inc.	Off-Road Ag	2	\$108,022
Ramona Dairy	Off-Road Ag	6	\$2,046,460
RJ's Demolition & Disposal dba RJ's Construction Industrial Tools and Supplies	Off-Road Ag	2	\$186,543
Coburn Equipment Rentals Inc.	Off-Road – SOON	10	\$3,431,706
Peed Equipment Company	Off-Road – SOON	24	\$5,498,080 <sup>5</sup>
Rentrac, Inc.	Off-Road – SOON	2	\$438,490
TGI Equipment Corporation	Off-Road – SOON	42	\$9,411,255
USA Waste of California, Inc.	Off-Road – SOON	1	\$194,955
Daniel A. Mello	Marine	1	\$216,334
Kenton Ephan	Marine	2	\$342,120
<b>Subtotal (Carl Moyer Awards)</b>		<b>117</b>	<b>\$28,684,447</b>

<sup>1</sup>This project will be funded with \$137,042 in Multi-District interest (as shown in Table 3) and \$13,723 in SB 1107 funds (as shown in this table) for a total amount not to exceed \$150,765.

<sup>2</sup>One of the projects will be funded with \$30,703 in State Reserve funds and \$14,991 in State Reserve interest (as shown in Table 3) and \$64,061 in SB 1107 interest funds for a total amount not to exceed \$109,755. The other projects will be funded using SB 1107 funds.

<sup>3</sup>Both projects will be funded with \$1,274,008 in SB 1107 interest and \$513,950 in SB 1107 funds for a total amount not to exceed \$1,925,000.

<sup>4</sup>One of the projects will be funded with \$230,705 in FARMER funds (as shown in Table 4) and \$115,295 in SB 1107 interest in an amount not to exceed \$346,000. The remaining projects will be funded using SB 1107 funds.

<sup>5</sup>These projects will be funded with \$3,884,921 with Carl Moyer AB 923 Match Funds and \$1,613,159 in SB 1107 funds for a total amount not to exceed \$5,498,080.

<b>Table 2B: SOON Provision Awards</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
Canyon Pacific Equipment LLC dba Jagur Tractor	Off-Road – SOON	2	\$801,620
Coburn Equipment Rentals Inc.	Off-Road – SOON	12	\$3,969,657
TGI Equipment Corporation	Off-Road – SOON	2	\$448,155
<b>Subtotal (SOON Provision Awards)</b>		<b>16</b>	<b>\$5,219,432</b>
<b>Total Awards (Carl Moyer/SOON Provision)</b>		<b>133</b>	<b>\$33,903,879*</b>
*This total includes the Carl Moyer funds plus additional funds from Carl Moyer interest and AB 923 match funds.			

<b>Table 3: Carl Moyer State Reserve Awards</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
Lucky Farms, LLC	Off-Road Ag	1	\$93,713
RJ's Demolition & Disposal dba RJ's Construction Industrial Tools and Supplies	Off-Road Ag	1	\$171,990
Sage Green LLC	Off-Road Ag	2	\$2,800,000
Cottonwood Dairy LLC	Off-Road Ag	1	\$138,935
Ramona Dairy	Off-Road Ag	1	\$73,341
Jorge Fuentes Trucking	Off-Road Ag	1	\$45,694*
Fuentes Bros Trucking	Off-Road Ag	1	\$137,042**
<b>Total</b>		<b>8</b>	<b>\$3,460,715***</b>
*This project will be funded with \$30,703 in State Reserve funds and \$14,991 in State Reserve interest (as shown in this table) and \$64,061 in SB 1107 interest for a total amount not to exceed \$109,755.			
**This project will be funded with \$137,042 in Multi-District interest (as shown in this table) and \$13,723 in SB 1107 funds for a total amount not to exceed \$150,765.			
***This total includes the State Reserve funds of \$3,308,682, plus an additional \$137,042 from Multi-District interest and \$14,991 in State Reserve interest.			

<b>Table 4: FARMER Program Awards</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
Prado Recreation Inc.	Off-Road Ag	1	\$8,865
Lucky Farms, LLC	Off-Road Ag	6	\$440,869
Ramona Dairy	Off-Road Ag	7	\$697,147
Dale W. Sexton	Off-Road Ag	1	\$42,459
RJ's Demolition & Disposal dba RJ's Construction Industrial Tools and Supplies	Off-Road Ag	3	\$60,219
Cottonwood Dairy LLC	Off-Road Ag	1	\$299,910
Michael De Hoog Dairy, LP	Off-Road Ag	1	\$61,600
Pro-Organic Farms LLC	Off-Road Ag	1	\$230,705*
<b>Total</b>		<b>21</b>	<b>\$1,841,774</b>
*This project will be funded with \$230,705 in FARMER funds and \$115,295 in SB 1107 interest (as shown in Table 2A) for a total amount not to exceed \$346,000.			

**Table 5A: CAPP Incentive Awards in AB 617 Communities**

<b>AB 617 Community</b>	<b>Applicant</b>	<b>Category</b>	<b>Number of Engines / Vehicles</b>	<b>Recommended Award</b>	<b>Total</b>
<b>Wilmington/ West Long Beach/ Carson</b>	Ralphs Grocery Company	On-Road (ZE)	5	\$490,305	<b>\$36,066,258</b>
	Cal Cartage Warehouse & Transloading LLC	Cargo Handling Equipment (ZE)	24	\$349,845*	
	SSA Terminals, LLC dba SSA Marine	Infrastructure	8 Chargers	\$756,969	
	Ralphs Grocery Company	Infrastructure	261 plugs for ZE/hybrid TRUs	\$2,647,050*	
	Clean Energy dba Clean Energy Fuels	Infrastructure	RNG Filling Station	\$1,148,606	
	Metropolitan Stevedore Company dba Metro Ports	Locomotive	1	\$1,243,280**	
	Air Fayre CA Inc.	On-Road	3	\$27,260*	
	Alvaro Hernandez	On-Road	1	\$82,098*	
	Choi, Victor Ki	On-Road	1	\$100,000	
	CoachWest Transportation Inc	On-Road	17	\$1,135,821*	
	Countrylane Leasing, Inc.	On-Road	6	\$483,012	
	Dimax Express, Inc.	On-Road	2	\$143,882	
	Hwan Wong Kim	On-Road	1	\$57,375	
	In Seup Kim	On-Road	1	\$77,532	
	Jairo Medina	On-Road	1	\$79,050	
	Jorge Guevara	On-Road	1	\$56,773*	
	Kim, Jin Re	On-Road	1	\$78,800	
	Kyung S S Chung	On-Road	1	\$100,000	
	<del>Li, Yanxiu</del>	<del>On Road</del>	<del>1</del>	<del>\$100,000</del>	
	Manuel Gomez	On-Road	1	\$71,277	
Moises Larios	On-Road	1	\$64,495		
<p>*This project is pending CARB approval and/or South Coast AQMD qualification check.  **This project will be funded with \$1,243,280 in AB 617 funds and \$719,800 in additional funding from U.S. EPA Diesel Emissions Reduction Act.</p>					

Quick Container Drayage, Inc.	On-Road	1	\$100,000
Seung Jo Kwak	On-Road	1	\$100,000
Sky P Carrier LLC	On-Road	1	\$47,933
Supra National Express, Inc.	On-Road	3	\$300,000
Vicente Corona	On-Road	1	\$64,727
Nery Alvarez Trucking	On-Road	1	\$100,000
Jose Paes de Jesus	On-Road	1	\$56,713
Plain Leasing, Inc. dba KTrans Inc.	On-Road	1	\$67,371
Price Transfer, Inc.	On-Road	1	\$73,027
Victor A. Sanchez	On-Road	1	\$60,165
City of Long Beach	On-Road (Emergency)	3	\$109,530
Fenix Marine Services LTD	Cargo Handling Equipment (Hybrid)	5	\$1,296,372*
Total Terminals International, LLC	Cargo Handling Equipment	10	\$7,513,756*
SA Recycling LLC	Cargo Handling Equipment	1	\$309,049
Ecology Recycling Services, LLC	Off-Road – SOON	3	\$113,355
Pick-Your-Part Auto Wrecking	Off-Road – SOON	3	\$264,797
USA Waste of California, Inc.	Off-Road – SOON	1	\$19,125
American Marine Corporation	Marine	2 vessels (7 engines)	\$1,477,600
Bryan Cruz	Marine	1 vessel (2 engines)	\$234,460
Catalina Classic Cruises	Marine	1 vessel (2 engines)	\$528,000
Curtin Maritime	Marine	3 vessels (9 engines)	\$2,581,146*
Darryl Sato	Marine	1 vessel (1 engine)	\$107,200
Douglas E. Woolley	Marine	1 vessel (2 engines)	\$236,000
Eugene J Komrosky	Marine	1 vessel (2 engines)	\$189,600
Fukuto/Redlew Charters, Inc.	Marine	1 vessel (2 engines)	\$364,000
Gail Force Management, Inc.	Marine	1 vessel (2 engines)	\$179,200
Gioi Tran	Marine	1 vessel (1 engine)	\$124,284
*This project is pending CARB approval and/or South Coast AQMD qualification check.			

	Harbor Breeze Corp.	Marine	4 vessels (8 engines)	\$1,407,200	
	Jack Edward Buttler	Marine	1 vessel (1 engine)	\$89,577	
	Joel Raymond Harrison	Marine	1 vessel (1 engine)	\$127,200	
	Kamryn Dawson Charters, Inc.	Marine	1 vessel (2 engines)	\$265,600	
	Los Angeles Maritime Institute	Marine	2 vessels (2 engines)	\$404,800	
	Mountain and Sea Educational Adventures	Marine	1 vessel (4 engines)	\$718,400	
	Options Sportfishing, LLC	Marine	1 vessel (2 engines)	\$163,591	
	Pacific Maritime Freight, Inc. dba Pacific Tugboat Services	Marine	4 vessels (8 engines)	\$3,848,452	
	Richard Kroener	Marine	1 vessel (1 engine)	\$130,400	
	San Pedro Pride	Marine	1 vessel (2 engines)	\$360,000	
	Scott Honaker	Marine	1 vessel (1 engine)	\$124,800	
	The Althaus Family Trust	Marine	1 vessel (2 engines)	\$480,000	
	The Jankovich Company	Marine	2 vessels (4 engines)	\$1,176,000	
	US Water Taxi Inc.	Marine	3 vessels (6 engines)	\$688,758	
	Wyatt Staehling dba Kickin' Back Charters	Marine	1 vessel (2 engines)	\$136,000	
	Zachary Twardowski	Marine	1 vessel (1 engine)	\$134,640	
<b>East Los Angeles, Boyle Heights, West Commerce</b>	Albertsons LLC	Infrastructure	50 plugs for ZE/hybrid TRUs	\$288,550*	<b>\$1,085,666</b>
	Kargo Transportation, Inc.	On-Road	4	\$286,629	
	Cesar Rosas	On-Road	1	\$100,000	
	Miguel Hernandez	On-Road	1	\$87,521	
	USA Waste of California, Inc.	On-Road	3	\$177,000	
	USA Waste of California, Inc.	Off-Road – SOON	2	\$145,966	
<b>San Bernardino/Muscoy</b>	Jacob Aaron Bell	Off-Road	3	\$523,702	<b>\$523,702</b>
<b>Eastern Coachella Valley</b>	AAA Farm, Inc.	Off-Road Ag	5	\$229,445	<b>\$6,584,538</b>
	Alejandro Galindo dba Osuna Farm	Off-Road Ag	1	\$139,415	
	Anthony Vineyards, Inc.	Off-Road Ag	9	\$504,297	
	BB&L Inc.	Off-Road	4	\$387,868	
	*This project is pending CARB approval and/or South Coast AQMD qualification check.				

	Belk Farms LLC	Off-Road Ag	1	\$311,467	
	Desert Crew Produce	Off-Road Ag	1	\$160,706	
	Desert Mist Farms LLC	Off-Road Ag	2	\$290,834	
	Gless Ranch, Inc.	Off-Road Ag	12	\$360,450	
	Hadley Date Gardens, Inc.	Off-Road Ag	9	\$707,314	
	Junior Enterprises LLC	Off-Road Ag	2	\$463,291	
	La Quinta Date Growers, L.P.	Off-Road Ag	1	\$119,190	
	Latin Lady	Off-Road Ag	1	\$104,477	
	Sun & Sands Enterprises, LLC dba. Prime Time International	Off-Road Ag	4	\$644,468	
	Trillium USA Company, LLC dba Trillium	Infrastructure	RNG Filling Station	\$1,666,035	
	Van Drunen Farms/Golden State Herbs, Inc.	Off-Road Ag	3	\$366,627	
	West Coast Turf	Off-Road Ag	2	\$128,654	
<b>South Gate, Huntington Park, Cudahy, Bell Gardens</b>	Ecology Recycling Services, LLC	Off-Road – SOON	3	\$58,917	<b>\$78,990</b>
	RJ's Demolition & Disposal dba RJ's Construction Industrial Tools and Supplies	Off-Road Ag	1	\$20,073	
<b>Subtotal Number of Engines/Vehicles</b>					<b>263</b>
<b>Subtotal</b>					<b>\$44,339,154</b>

<b>Table 5B: Other Zero Emission Projects</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
Universal City Studios LLC	Off-Road	8	\$1,980,754*
Ardent Mills, LLC	Off-Road	1	\$246,079
Anaheim Transportation Network	On-Road	40	\$741,656
McLane Company, Inc. dba Transco Inc.	On-Road	31	\$1,411,528*
Albertsons LLC	Infrastructure	296 plugs for ZE/hybrid TRUs	\$1,541,950*
A-Z Bus Sales	Infrastructure	6 chargers	\$75,864
McLane Company, Inc. dba Transco Inc.	Infrastructure	98 plugs for ZE/hybrid TRUs	\$442,898*
Rowland Unified School District	Infrastructure	10 chargers	\$259,394
Trillium USA Company, LLC dba Trillium	Infrastructure	2 chargers	\$192,172
Universal Studios LLC	Battery Charging	4 inductive charging pads	\$1,513,745
<b>Subtotal</b>		<b>86</b>	<b>\$8,406,040</b>

\*This project is pending CARB case-by-case approval and/or South Coast AQMD qualification check.

<b>Table 5C: Other Near-Zero Emission Projects</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
AJR Trucking, Inc.	On-Road	35	\$2,347,053
Carlos Baltodano	On-Road	1	\$100,000
Ciprian Garcia	On-Road	1	\$65,575
Sanitation Districts of Los Angeles County	Infrastructure	2 RNG Filling Stations	\$392,877
CR&R Incorporated	Infrastructure	2 RNG Filling Stations	\$1,417,037
Edi Gumerindo Orozco	On-Road	1	\$87,097
Javier Libardo Leguizamon	On-Road	1	\$100,000
Jeonghun Lee	On-Road	1	\$34,999
Jose Martinez	On-Road	1	\$67,272
Jose Velazquez	On-Road	1	\$100,000
Luc Than	On-Road	1	\$100,000
Luis Gomez Trucking	On-Road	1	\$100,000
Luis Nunez	On-Road	1	\$100,000
Marvin G. Sabaya dba Sabaya Trucking	On-Road	1	\$100,000
MJ Trucking Leasing, LLC	On-Road	6	\$247,164
National Ready Mixed Concrete Company	Infrastructure	6 RNG Filling Stations	\$4,389,763
Oscar Salguero	On-Road	1	\$68,521
Quan Ren	On-Road	1	\$100,000
Trillium USA Company, LLC dba Trillium	Infrastructure	2 RNG Filling Stations	\$1,572,647
USA Waste of California, Inc.	On-Road	10	\$515,984
Waste Management Collection & Recycling, Inc.	On-Road	8	\$401,763
Xin Li	On-Road	1	\$100,000
Yeong Lak Yun	On-Road	1	\$100,000
<b>Subtotal</b>		<b>78</b>	<b>\$12,607,752</b>

<b>Table 5D: Projects Within Five Miles of an AB 617 Community</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
City of Long Beach	On-Road (Emergency)	16	\$1,077,948
Gregory Kuglis	Marine	3	\$217,600
Alexes Sports Fishing LLC	Marine	2	\$206,400
David Harvey	Marine	2	\$226,400
Mark Podoll	Marine	1	\$105,600



Hondo Framing, Inc.	Off-Road	1	\$59,970
Blackmore Co., LLC	Off-Road - SOON	1	\$218,725
Ecology Recycling Services, LLC	Off-Road - SOON	8	\$616,277
SA Recycling LLC	Off-Road - SOON	3	\$346,133
Lucky Farms, LLC	Off-Road Ag	1	\$244,964
<b>Subtotal</b>		<b>38</b>	<b>\$3,320,017</b>
<b>Total CAPP Incentive Awards</b>		<b>465</b>	<b>\$68,672,963</b>

<b>Table 6: Recommended List of Backup Projects</b>			
<b>Applicant</b>	<b>Category</b>	<b>Number of Engines/Vehicles</b>	<b>Recommended Award</b>
Rentrac, Inc.	Off-Road - SOON	2	\$1,088,326
Rentrac, Inc.	Off-Road - SOON	2	\$1,526,816
Peed Equipment Company	Off-Road - SOON	2	\$374,224
Peed Equipment Company	Off-Road - SOON	2	\$374,224
Peed Equipment Company	Off-Road - SOON	2	\$374,224
TGI Equipment Corporation	Off-Road - SOON	2	\$448,155
Peed Equipment Company	Off-Road - SOON	1	\$205,000
GH Dairy	Off-Road Ag	1	\$303,153
TGI Equipment Corporation	Off-Road - SOON	1	\$267,169
GH Dairy	Off-Road Ag	1	\$182,267
Regents of the University of California, Riverside	Off-Road Ag	1	\$81,108
Regents of the University of California, Riverside	Off-Road Ag	1	\$41,104
SA Recycling LLC	Off-Road - SOON	1	\$341,815
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$103,933
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$230,545
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$269,690
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$185,039
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$191,352
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$63,379
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$124,549
Island Water Charters, Inc.	Marine	1	\$84,064
Peed Equipment Company	Off-Road - SOON	2	\$363,932
Peed Equipment Company	Off-Road - SOON	2	\$364,153
Peed Equipment Company	Off-Road - SOON	2	\$316,238
Kramar's Iron & Metal, Inc.	Off-Road	1	\$283,063
Beckco, Inc.	Off-Road - SOON	1	\$368,346
USA Waste of California, Inc.	Off-Road - SOON	1	\$275,176

Beckco, Inc.	Off-Road - SOON	1	\$139,337
Marvo Holsteins Dairy	Off-Road Ag	1	\$223,593
Beckco, Inc.	Off-Road - SOON	1	\$222,311
Beckco, Inc.	Off-Road - SOON	1	\$221,835
Beckco, Inc.	Off-Road - SOON	1	\$218,625
Marvo Holsteins Dairy	Off-Road Ag	1	\$215,067
Beckco, Inc.	Off-Road - SOON	1	\$213,658
Ecology Recycling Services, LLC	Off-Road - SOON	1	\$116,597
Ecology Recycling Services, LLC	Off-Road - SOON	1	\$103,077
Beckco, Inc.	Off-Road - SOON	1	\$169,059
FasTrack Rentals, Inc.	Off-Road - SOON	1	\$166,149
Beckco, Inc.	Off-Road - SOON	1	\$155,807
Marvo Holsteins Dairy	Off-Road Ag	1	\$156,965
GH Dairy	Off-Road Ag	1	\$187,553
SA Recycling LLC	Off-Road - SOON	1	\$155,976
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$153,032
Coburn Equipment Rentals Inc.	Off-Road - SOON	1	\$207,387
GCI Construction, Inc.	Off-Road	1	\$134,738
GH Dairy	Off-Road Ag	1	\$155,669
Ecology Recycling Services, LLC	Off-Road - SOON	1	\$124,326
Beckco, Inc.	Off-Road - SOON	1	\$65,337
C.A. Rasmussen, Inc.	Off-Road - SOON	1	\$140,277
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$100,645
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$100,645
Beckco, Inc.	Off-Road - SOON	1	\$59,740
TGI Equipment Corporation	Off-Road - SOON	1	\$130,874
TGI Equipment Corporation	Off-Road - SOON	1	\$119,563
KEC Engineering	Off-Road - SOON	1	\$80,187
Southern California Landscape Supply LLC	Off-Road	1	\$78,937
Quality Turf, Inc.	Off-Road Ag	1	\$137,161
Azusa Land Reclamation, Inc.	Off-Road - SOON	1	\$71,585
WM Recycle and Disposal Services of CA, Inc.	Off-Road - SOON	1	\$63,825
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$60,805
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$60,805
Quality Turf, Inc.	Off-Road Ag	1	\$119,074
American Recycling International, Inc.	Off-Road - SOON	1	\$49,871
American Recycling International, Inc.	Off-Road - SOON	1	\$49,871
American Recycling International, Inc.	Off-Road - SOON	1	\$48,771

Ecology Recycling Services, LLC	Off-Road - SOON	1	\$27,795
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$34,933
Azusa Land Reclamation, Inc.	Off-Road - SOON	1	\$24,869
Pick-Your-Part Auto Wrecking	Off-Road - SOON	1	\$18,768
Ecology Recycling Services, LLC	Off-Road - SOON	1	\$2,585
<b>Total</b>		<b>79</b>	<b>\$13,918,728</b>

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 7

**PROPOSAL:** Issue Program Announcement for Combustion Freight and Marine Projects Eligible Under Volkswagen Environmental Mitigation Program and Waive Newspaper Publication Requirements

**SYNOPSIS:** In November 2018, the Board recognized revenue up to \$150 million upon receipt to administer and implement two of the five project funding categories for the Volkswagen (VW) Environmental Mitigation Trust Program. This action is to issue the statewide Program Announcement for the first installment of program funds totaling \$30 million for the Combustion Freight and Marine Projects category and to authorize the Executive Officer to waive newspaper publication requirements for solicitations under the VW Environmental Mitigation Trust Program. A solicitation for Zero Emission Class 8 Freight and Port Drayage Trucks is planned for spring/summer 2020.

**COMMITTEE:** Technology, November 15, 2019; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Issue Program Announcement #PA2020-02 to solicit projects for the first installment of program funds totaling \$30 million for the Combustion Freight and Marine Projects category eligible under the statewide VW Environmental Mitigation Trust Program; and
2. Authorize the Executive Officer to waive newspaper publication requirements for solicitations under the VW Environmental Mitigation Trust Program.

Wayne Natri  
Executive Officer

## **Background**

On November 2, 2018, the Board recognized revenue up to \$150 million upon receipt to administer and implement two of the five project funding categories for the VW Environmental Mitigation Trust Program. The two funding categories that South Coast AQMD will administer include Combustion Freight and Marine Projects and Zero Emission Class 8 Freight and Port Drayage Trucks. The other three funding categories will be administered and implemented by two other air districts, San Joaquin Valley APCD and Bay Area AQMD. San Joaquin Valley APCD will administer Zero Emission Transit, School and Shuttle Buses. Bay Area AQMD will administer Zero Emission Freight and Marine Projects and Light Duty Zero Emission Vehicle Infrastructure. Over the past 18 months, staff has been working in collaboration with CARB, San Joaquin Valley APCD and Bay Area AQMD to develop an administrative budget, project agreements and framework for the VW Program, including program specific webpages. Staff has also been developing a grant management system for South Coast AQMD's two funding categories that includes a public user interface for application submittal and related communications. In April and May 2019, six stakeholder workgroup meetings were held throughout California to gather public input on the implementation of VW Mitigation funds. Public input was carefully considered in the development process, including fund transparency, ease of application, timely payments and consideration for disproportionately impacted communities.

Several statewide solicitations will be released to implement the VW Environmental Mitigation Trust Program. On October 21, 2019, San Joaquin Valley APCD released its first solicitation for Zero Emission Transit, School, and Shuttle Buses, with a total funding level of \$65 million. Bay Area AQMD will issue solicitations for its two funding categories in early 2020.

## **Proposal**

This action is to issue Program Announcement (PA) #PA2020-02 for the Combustion Freight and Marine Projects category of the VW Environmental Mitigation Trust Program. The amount of funding available for eligible projects in this first of two installments is \$30 million. This action is to also authorize the Executive Officer to waive newspaper publication requirements for solicitations under the VW Environmental Mitigation Trust Program due to other statewide outreach efforts that will be conducted for this program. This action has been added since this Board Letter was reviewed by the Technology Committee.

The PA will solicit applications from equipment owners for the repower or replacement of older, in-use on-road Class 7 and 8 vehicles, including freight trucks, waste haulers, dump trucks and concrete mixers, repower or replacement of older switcher locomotives, and the repower of ferries, tugboats and towboats, with the cleanest commercially available technologies. This program requires the scrapping of the older engine/vehicle/equipment that is being replaced or repowered.

Applicants will be required to submit applications for the Combustion Freight and Marine Projects category through an online application portal. Proposals for eligible projects in this category will be due by 1:00 pm on Wednesday, March 4, 2020. It is expected that multiple awards will be granted under this PA, subject to the approval of a review team consisting of five members with one from each of the following: South Coast AQMD, Bay Area AQMD, San Joaquin Valley APCD, CARB and one member from the California Air Pollution Control Officers Association (CAPCOA) or another air district to verify the project selection criteria were followed. Staff will then bring the approved rank list to the South Coast AQMD's Board for approval to enter into agreements with the applicants on the list. Another PA to solicit applications for the second installment of the funds in this category will be brought to the Board in late 2021/early 2022.

Staff anticipates issuing a solicitation for the Zero Emission Class 8 Freight and Port Drayage Trucks, subject to Board approval, in spring/summer 2020.

### **Outreach**

The PA will be provided to San Joaquin Valley APCD, Bay Area AQMD, CARB and CAPCOA to assist with statewide outreach. The PA will also be posted on each of the VW websites administered by the South Coast AQMD, San Joaquin Valley APCD, Bay Area AQMD and CARB. Furthermore, South Coast AQMD will issue a press release notifying the opening of the PA for the Combustion Freight and Marine Projects category.

### **Funding Distribution**

The VW Trust is a component of partial settlements with VW and is enumerated in Appendix D of the Consent Decree ordered by the U.S. District Court for the Northern District of California. In May 2018, as required by the Consent Decree, CARB approved the Beneficiary Mitigation Plan, which includes a goal that at least 50 percent of program funds be expended on projects that will reduce NOx emissions in disproportionately impacted and low-income communities. The Plan provides the ability for each of the three air districts to track this on a cumulative basis. Staff will utilize the latest version of CalEnviroScreen for identification of disadvantaged and low-income communities.

### **Benefits to South Coast AQMD**

The NOx emission reductions that will be achieved from replacing older, high-polluting vehicles and equipment with cleaner technologies within the South Coast AQMD and statewide are intended to fully mitigate the diesel NOx emissions caused by VW's illegal actions. CARB estimates that 10,000 tons of NOx emission reductions will be achieved over the ten-year life of the VW Mitigation Trust Program. The projects funded through this program will also reduce emissions of other criteria air pollutants,

toxic air contaminants and greenhouse gases. This program will also accelerate the deployment of new commercially available zero emission trucks and near-zero emissions heavy-duty natural gas trucks, which is a key strategy in the 2016 AQMP for reducing NOx emissions.

**Resource Impacts**

Revenue up to \$150 million upon receipt has been recognized into the VW Mitigation Special Revenue Fund (79) to administer and implement the two project funding categories being administered by the South Coast AQMD. Reimbursement of administrative costs will not exceed ten percent of revenue received.

**Attachment**

Volkswagen Environmental Mitigation Trust Combustion Freight and Marine Projects Program Announcement #PA2020-02

**2019**  
**VOLKSWAGEN ENVIRONMENTAL MITIGATION TRUST**  
**COMBUSTION FREIGHT AND MARINE PROJECTS**

**SOUTH COAST AQMD PROGRAM ANNOUNCEMENT (PA)**  
**#PA2020-02**

The South Coast Air Quality Management District (South Coast AQMD) is pleased to announce the availability of funds from the Volkswagen Environmental Mitigation Trust – Combustion Freight and Marine Projects category (hereafter “VW Mitigation – Combustion Category”). This program will incentivize vehicle/equipment owners operating in the State of California to replace or repower Class 7 and 8 freight trucks, drayage trucks, waste haulers, dump trucks, and concrete mixers as well as freight switcher locomotives, or repower ferries/tugboats/towboats with the cleanest commercially available internal combustion or hybrid technologies that are certified by the California Air Resources Board (CARB).

In the preparation of this PA, the words “Applicant,” “Contractor,” and “Consultant” are used interchangeably.

**SECTION I – OVERVIEW**

**PURPOSE**

The purpose of this Program Announcement (PA) is to solicit project applications for the first installment of funds for the VW Mitigation – Combustion Category. **The budget for this PA will be approximately \$30 million from the Volkswagen Environmental Mitigation Trust (VW Trust) and is available to fleets operating throughout the State of California.**

**INTRODUCTION**

The VW Trust was established as part of a settlement with Volkswagen (VW) for their role in utilizing illegal defeat devices in certain 2.0 and 3.0-liter vehicles that resulted in excess NOx emissions. The VW Mitigation program is intended to fully mitigate the excess NOx emissions caused by these VW vehicles.

CARB is the designated lead agency acting on the State’s behalf as beneficiary to implement California’s allocation of the mitigation funds. On May 25, 2018, CARB approved the Beneficiary Mitigation Plan (BMP) for California which contains the eligible mitigation actions (EMA) or project funding categories that will be eligible for funding from the states \$423 million allocation of the VW Trust. The BMP designated five project categories for funding that will be administered and implemented as a statewide program by three local air districts, for which the South Coast AQMD is the project administrator for two of the five project categories including: Combustion Freight and Marine Projects, and Zero Emission Class 8 Freight and Port Drayage Trucks.



This PA is for the first installment (or solicitation) of the VW Mitigation funds available for the Combustion Category which includes a total of \$30 million. All applications will be evaluated competitively based on the criteria set forth in this PA, the applicable Consent Decree, the BMP, Frequently Asked Questions (FAQs), and any subsequent updates and modifications/advisories to the BMP. This PA was prepared based on the latest version of the BMP which is available online at: <https://ww2.arb.ca.gov/resources/documents/californias-beneficiary-mitigation-plan>. The FAQs can be found at: <http://www.aqmd.gov/vw>.

This PA will identify the equipment categories, project options and key eligibility criteria to qualify for this solicitation of projects for the VW Mitigation – Combustion Category. The detailed requirements for projects can be found in the BMP.

Applicants are encouraged to review the BMP to confirm eligibility and understand the funding “caps” that may apply to certain types of projects.

The requirements and project eligibility set forth in the BMP may be more stringent than those within the Consent Decree. As such, the more stringent requirements and project eligibility will prevail.

## **GENERAL PROGRAM INFORMATION**

- All applications must be submitted through the web-based application portal. No paper applications will be accepted.
- The applicant must be the legal owner of the vehicle/equipment or an engine manufacturer applying on behalf of the legal owner of the vehicle/equipment. The applicant may use a third party to assist in completing the online application; however, no contracts will be executed with a third party.
- Applications may contain funding requests for multiple vehicles/equipment; however, fleets will be limited to no more than five percent of the available program funds for this solicitation (i.e., up to \$1.5 million) per Entity (Applicant), as determined by Tax ID. If insufficient applications are received to expend the VW Mitigation funds, the South Coast AQMD reserves the right to issue additional contracts beyond the stated limit.
- Funding through this program will be limited to entities that have been legally operating the subject vehicles/equipment for at least 90 percent of the time within the State of California for at least the previous two years.
- Out-of-state International Registration Plan (IRP) registration may be allowed if the registration documentation shows that the vehicle was operated for at least 90% of the time within California.
- Solicitation is competitive and the South Coast AQMD will receive, evaluate and rank applications in order of cost-effectiveness, and any other necessary criteria.
- It is expected that multiple awards will be granted under this PA, subject to the approval of a review team consisting of five members with one from each of the following: South Coast AQMD, Bay Area AQMD, San Joaquin Valley APCD, CARB and one member from CAPCOA or another air district to verify the project selection criteria were followed. The approved rank list will then be presented to the

South Coast AQMD's Governing Board for approval to enter into agreements with the applicants on the list.

- All proposals will be evaluated based on criteria set forth in this PA. Data verification during the evaluation and contracting process may cause initial cost-effectiveness rankings, and associated awards, to change. Furthermore, the South Coast AQMD reserves the right to make adjustments to awards based on the subsequent verification of information as well as changes in cost-effectiveness.
- At least 50 percent of funds are expected to benefit disadvantaged or low-income communities.

## **FUNDING CATEGORIES & ELIGIBILITY**

Below are the specific project categories identified for funding under this PA:

- Class 7 and 8 freight trucks (this vehicle category includes drayage trucks, waste haulers, dump trucks and concrete mixers)
- Freight switcher locomotives
- Ferries/Tugboats/Towboats

### General Eligibility Requirements

- Projects must implement the cleanest commercially available technologies that are certified or verified by CARB or U.S. EPA, as specified in this PA and CARB's BMP.
- Applicants must demonstrate that they are in full compliance with all applicable CARB regulations.
- The vehicle/equipment/engine being replaced must be scrapped.
- The new vehicle/equipment/engine funded through this program must be operated in California for a minimum of three years.

### Class 7 and 8 Freight Trucks

Below are the key eligibility requirements for on-road vehicle projects:

- Vehicle Type:
  - Class 7 and 8: freight trucks, drayage trucks, waste haulers, dump trucks and concrete mixers
- Project Type:
  - Replacement
  - Repower
- Old Vehicle/Engine:
  - Non-Drayage Truck Engine Model Years: 2005 to 2012
  - Drayage Truck Engine Model Years: 2007 to 2012
- New Vehicle/Engine:
  - Low NOx standard of 0.02 g/bhp-hr or lower

### Freight Switcher Locomotives

Below are the key eligibility requirements for freight switcher projects:

- Equipment Type:
  - Freight Switcher Locomotive
- Project Type:
  - Replacement

- Repower
- Old Equipment/Engine:
  - Engine: Pre-Tier 1
  - Horsepower: 1,006 to 2,300
  - Operation: 1,000 hours per year or more
- New Equipment/Engine:
  - Engine: Tier 4
  - Horsepower: 1,006 to 2,300

#### Ferries/Tugboats/Towboats

Below are the key eligibility requirements for ferry, tugboat, and towboat projects:

- Vessel Type:
  - Ferry, Tugboat, and Towboat
- Project Type:
  - Repower only
- Old Vessel/Engine:
  - Engine: Pre-Tier 3 (in compliance with Commercial Harbor Craft Regulation)
- New Vessel/Engine:
  - Engine: Tier 4 or Hybrid with Tier 4 equivalent NOx emissions
- Vessel must serve a dedicated purpose

#### **IMPORTANT PROGRAM INFORMATION**

- Applicants must ensure that the vehicle/equipment to be purchased or installed is in compliance with all applicable federal, state and local air quality rules and regulations and that it will maintain compliance for the full contract term.
- Any associated tax obligation from receiving grant funds from the South Coast AQMD is the responsibility of the applicant.
- Pre- and post-inspection of vehicles/engines/equipment approved for funding will be conducted by South Coast AQMD staff or their designee.
- Applicants may not receive funds exceeding actual project costs.
- The maximum funding expenditures per Entity (Applicant), as determined by Tax ID, is five percent of the available program funds (i.e., up to \$1.5 million) for that solicitation, per solicitation. If insufficient applications are received to expend VW Mitigation funds, the South Coast AQMD reserves the right to issue additional contracts beyond the stated limit.
- Applicants shall not apply for funding for the same vehicle/equipment/engine with any other funding source which claims the same emission reductions.
- All projects must be operational by date specified in the contract or December 31, 2021, whichever is earlier.

#### **REGULATORY COMPLIANCE**

All applicants must be fully compliant with applicable rules and regulations in order to be eligible for consideration for VW Mitigation – Combustion Category funding. Reference is made to CARB’s fleet rule and commercial harbor craft webpages that provide detailed information on compliance with these regulations. Please see Section VI: Staff Contacts and Additional

Resources below for links to these webpages.

### **PROJECT REQUIREMENTS**

The following application/supplemental documentation items will be needed to determine project eligibility:

#### Class 7 and 8 Freight Trucks:

- Applicant must provide their TRUCRS Fleet Compliance Certificate for all non-drayage truck project applications
- Applicant must provide their Drayage Truck Registry Compliance Certificate for all drayage truck project applications
- Applicants must provide the CARB Executive Order for the old and new vehicle
- Applicant must provide a copy of the vehicle's title (must be a clean title with no active lienholders)
- Applicant must provide a vendor price quote for the new vehicle dated within 90 days of application submittal
- Applicant must provide twenty-four months of ownership documentation
- Applicant must provide twenty-four consecutive months of usage records (e.g. mileage records, maintenance reports or other documentation)
- Applicants must provide photos of:
  - Entire front and side of vehicle
  - Vehicle license plate number and unit number/identifier (if any)
  - Vehicle Identification Number (VIN)
  - Gross Vehicle Weight Rating (GVWR) label
  - Engine tag (with engine model year, serial number, engine family name, and horsepower rating clearly identified)

#### Freight Switcher Locomotives:

- Applicants must provide the CARB/U.S. EPA Executive Order for the old and new engine
- Applicant must provide a vendor price quote for the new equipment dated within 90 days of application submittal
- Applicants must provide twenty-four months of ownership documentation
- Applicants must provide twenty-four consecutive months of usage records (e.g., hour meter logs or fuel logs)
- Applicants must provide photos of:
  - Entire front and side of switcher
  - Switcher unit number and/or any other identifier
  - Engine tag (with engine model year, serial number, engine family name, and power rating clearly identified)

#### Ferries/Tugboats/Towboats:

- Applicants must provide a U.S. EPA Certificate of Conformity for the old and new engine
- Applicant must provide a vendor price quote for the new engine dated within

90 days of application submittal

- Applicants must provide twenty-four months of ownership documentation
- Applicants must provide twenty-four consecutive months of usage records (e.g., hour meter logs)
- Applicants must provide photos of:
  - Entire front and side of marine vessel
  - Vessel name
  - Engine tag (with engine model year, serial number, engine family name, and power rating clearly identified)

**MAXIMUM ELIGIBLE FUNDING**

The maximum eligible funding caps are summarized below.

**Table 1: Funding Limitations**

Baseline Equipment Category	Baseline Technology	Replacement Technology	Project Type	Ownership Category	Maximum Percentage (%) of Funding (of cost)	Maximum Funding Up To
Class 7 & 8 Freight Trucks (including drayage trucks, waste haulers, dump trucks, concrete mixers)*	Non-Drayage: Engine Model Years 2005-2012	Low NOx (certified 0.02 g/bhp-hr)	Replacement	Non-Government	25% (or 50% for Class 8 Port Drayage)	\$85,000
				Government	100%	
	Drayage: Engine Model Years 2007-2012		Repower	Non-Government	40%	\$35,000
				Government	100%	\$50,000
Freight Switcher Locomotives	Pre-Tier 1	Tier 4	Replacement	Non-Government	25%	\$1,350,000
				Government	100%	
			Repower	Non-Government	40%	
				Government	100%	
Ferry, tugboats, & towboats	Pre-Tier 3	Tier 4, or Hybrid w/ Tier 4 equivalent NOx emissions	Repower	Non-Government	40%	\$1,000,000
				Government	100%	

\*Class 7 – Gross Vehicle Weight Rating (GVWR) between 26,001-33,000 lbs.

Class 8 – GVWR of 33,001 lbs. and greater

## **COST-EFFECTIVENESS EVALUATION**

The VW Mitigation – Combustion Category will utilize the cost effectiveness calculation methodology of the Carl Moyer Program (CMP) Guidelines to determine the cost effectiveness of each project relative to the NOx emission reductions that will be achieved by the project. The cost effectiveness calculation methodology for the CMP can be found in Appendix C of the CMP Guidelines:

<https://ww3.arb.ca.gov/msprog/moyer/guidelines/current.htm>

## **REPORTING AND MONITORING**

All participants in the VW Mitigation – Combustion Category will be required to keep appropriate records during the full contract period, which will include a minimum of three years during the contract term, plus three years after the contract term. All equipment must operate in the state of California at least 90 percent of the time for the full contract term. The records will contain the following, at a minimum, as applicable:

- DMV Registration Records (for on-road vehicles)
- U.S. Coast Guard Certificate of Documentation (for vessels)
- Insurance Certificate(s)
- Records of Annual Usage – including Odometer Readings or Hour Meter Readings or Fuel Usage Records
- Operational and maintenance issues encountered and how they were resolved
- Self-certification of where the vehicle/equipment was operated
- Self-certification of compliance with labor laws

Contractors will be required to submit annual reports containing the above information to the South Coast AQMD for the three-year term of the contract. Records must be retained and updated throughout the contract term plus three years and made available for South Coast AQMD, CARB or their designee for review upon request.

## **PROGRAM ADMINISTRATION**

The VW Mitigation – Combustion Category will be administered by the South Coast AQMD through the Science & Technology Advancement Office.

## **PROJECT EVALUATION/AWARDS**

South Coast AQMD staff will evaluate all submitted project applications for completeness and eligibility, and then rank all eligible projects based on their cost-effectiveness level relative to the NOx emissions that will be reduced by the project. The cost-effectiveness determination is completed on an equipment-by-equipment basis. Projects will also be evaluated to determine if the project qualifies as benefiting a disadvantaged or low-income community. Once the rank list of projects is established by the South Coast AQMD, the rank list will be reviewed by a team consisting of five members with one from each of the following: South Coast AQMD, Bay Area AQMD, San Joaquin Valley APCD, CARB, and one member from CAPCOA or another air district to verify the project selection criteria were followed. The approved rank list will then be presented to the South Coast AQMD's Governing Board for approval to enter into agreements with the applicants on the list.



## DEFINITIONS

1. Alternative Fuel  
Alternative fuels include compressed natural gas (CNG), liquefied natural gas (LNG), methanol, ethanol, and propane (LPG).
2. Beneficiary Mitigation Plan (BMP)  
Document that contains the eligible mitigation actions (projects) for California that the California Air Resources Board (CARB or Board) will fund from the State's \$423 million allocation of the Environmental Mitigation Trust.
3. CARB Certified  
Vehicle or engine that has been certified and issued an Executive Order by CARB.
4. Class 4-7 Local Freight Trucks (Medium Trucks)  
Trucks, including drayage trucks, and commercial trucks, used to deliver cargo and freight (e.g., courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, concrete mixers) with a Gross Vehicle Weight Rating (GVWR) between 14,001 and 33,000 lbs.
5. Class 8 Local Freight, and Port Drayage Trucks (Eligible Large Trucks)  
Trucks with a Gross Vehicle Weight Rating (GVWR) greater than 33,000 lbs. used for port drayage and/or freight/cargo delivery (including waste haulers, dump trucks, concrete mixers).
6. Concrete Mixer (or cement mixer)  
On-road vehicle used for transporting and mixing concrete.
7. Consent Decree  
The First Partial Consent Decree in 'IN RE: Volkswagen "Clean Diesel" Marketing, Sales Practices, and Products Liability Litigation', MDL No. 2672 CRB (JSC) (Dkt. No. 2103-1), and the Second Partial Consent Decree in that case (Dkt. No. 3228-1).
8. Contract Term  
Contract term is the duration for which the contract is valid. It encompasses both the project completion and project implementation periods.
  - (i) Project completion period is the first part of the Contract term starting from the date of Contract execution by both parties to the date the project post-inspection confirms that the project has become operational, and the destruction inspection confirms the old vehicle/engine has been destroyed.
  - (ii) Project implementation period is the second part of the Contract term and equals the project life.
9. Cost-Effectiveness Limit  
The cost-effectiveness limit determines the maximum funding that can be provided to an individual vehicle repower, or replacement project for each ton of emissions reduced.

10. Drayage Trucks

Trucks hauling cargo to and from ports and intermodal rail yards.

11. Dump Truck

On-road vehicle used for the transportation of bulk material and that has a body which tilts to dump its contents.

12. Eligible Mitigation Action

Any of the actions listed in Appendix D-2 of the Environmental Mitigation Trust.

13. Environmental Mitigation Trust

The Trust funded with Mitigation Trust Payments according to the terms of the First Partial Consent Decree and the Second Partial Consent Decree (jointly, the “Consent Decree”).

14. Ferry

Any self-propelled vessel or boat owned, controlled, operated, or managed for public use in transportation of carrying passengers, property or vehicles on scheduled services. A ferry is not an excursion or research vessel.

15. Freight Switcher

A locomotive that moves rail cars around a rail yard as compared to a line-haul engine that moves freight long distances.

16. Freight Truck

Trucks, including commercial trucks, used to deliver cargo and freight (e.g., courier services, delivery trucks, box trucks moving freight, waste haulers, dump trucks, concrete mixers).

17. Garbage-packer vehicle

A vehicle specially designed to collect and compact residential or commercial solid waste on the vehicle for purposes of transportation and disposal. These include but are not limited to vehicles commonly referred to as front loader, rear loader, and automated and semi-automated side loaders.

18. Generator Set

A switcher locomotive equipped with multiple engines that can turn off one or more engines to reduce emissions and save fuel depending on the load it is moving.

19. Government

State or local government agency (including a school district, municipality, city, county, special district, transit district, joint powers authority, or port authority, owning fleets purchased with government funds), and a tribal government or native village. The term “State” means the several States, the District of Columbia, and the Commonwealth of Puerto Rico.



20. Gross Vehicle Weight Rating (GVWR)

The maximum weight of the vehicle, as specified by the manufacturer. GVWR includes total vehicle weight plus fluids, passengers, and cargo.

Class 1: < 6,000 lb.

Class 2: 6,001-10,000 lb.

Class 3: 10,001-14,000 lb.

Class 4: 14,001-16,000 lb.

Class 5: 16,001-19,500 lb.

Class 6: 19,501-26,000 lb.

Class 7: 26,001-33,000 lb.

Class 8: > 33,001 lb.

21. Hybrid

A vehicle that combines an internal combustion engine with a battery and electric motor.

22. Incremental Cost

Incremental cost is the percent of actual cost that is eligible for funding.

23. Intermodal Rail Yard

A rail facility in which cargo is transferred from drayage truck to train or vice-versa.

24. Mitigation Action

Eligible Project and is any of the actions listed in Appendix D-2 of the Environmental Mitigation Trust.

25. New Vehicle

A vehicle constructed entirely from new parts that has never been the subject of a retail sale, or registered with the department, or registered with the appropriate agency or authority of any other state, District of Columbia, territory or possession of the United States, or foreign state, province, or country.

26. Project Life

Project life is the period of the contract term, during which the repowered or replacement vehicle/equipment/engine is operated, and the contractor must report annual usage. It is used to calculate the cost effectiveness and funding amount for a particular project.

27. Replacement Project

Replacement project is the purchase of a new vehicle/equipment/engine to replace an existing vehicle/equipment/engine.

28. Repower Project

Repower project is the replacement of an old engine of an existing vehicle/equipment with a newer engine certified to lower emission standards by the U.S. Environmental Protection Agency (EPA) and, if applicable, CARB.

29. Residential or commercial solid waste

All putrescible and nonputrescible solid, and semisolid wastes, including garbage, trash, refuse, rubbish, ashes, yard waste, recyclable materials, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semisolid wastes, and other discarded solid and semisolid wastes originating from single-family or multiple family dwellings, stores, offices, and other commercial sources, and construction and demolition projects in residential and commercial zones, not including hazardous, radioactive, or medical waste.

30. Scrapped

To render inoperable and available for recycle, and, at a minimum, to specifically cut a three-inch hole in the engine block for all engines. If any eligible vehicle will be replaced as part of an eligible project, scrapped also includes the disabling of the chassis by cutting the vehicle's frame rails completely in half.

31. Tier 0, 1, 2, 3, and 4

Refers to corresponding U.S. EPA engine emission classifications for nonroad, locomotive, and marine engines.

32. Towboat

Any self-propelled vessel engaged in or intending to engage in the service of pulling, pushing, or hauling alongside barges or other vessels, or any combination of pulling, pushing, or hauling alongside barges or other vessels.

33. Tugs

Dedicated vessels that push or pull other vessels in ports, harbors, and inland waterways (e.g., tugboats and towboats).

34. Waste Hauler

An on-road vehicle that is a "garbage-packer vehicle" or a "garbage-roll off vehicle".

**ALL APPLICATIONS MUST BE RECEIVED ELECTRONICALLY THROUGH THE  
ONLINE WEB-BASED APPLICATION PORTAL NO LATER THAN 1:00 P.M. ON  
WEDNESDAY, MARCH 4, 2020**

Only electronic submissions are allowed using South Coast AQMD's new Grant Management System (GMS) available upon solicitation opening at: [www.aqmd.gov/vw](http://www.aqmd.gov/vw).

Paper, faxed or emailed proposals will not be accepted. Any correction or resubmission done by the applicant will not extend the submittal due date.

South Coast AQMD may issue subsequent solicitations if insufficient applications are received in the initial solicitation.

### **STATEMENT OF COMPLIANCE**

Government Code Section 12990 and California Administrative Code, Title II, Division 4, Chapter 5, require employers to agree not to unlawfully discriminate against any employee or applicant because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, sex, or age. A statement of compliance with this clause is included in all South Coast AQMD contracts.

### **COMPLIANCE WITH LABOR LAWS**

If an application is deemed eligible, the applicant will be required to provide any labor violations that have occurred within the last three years to be further considered for an award. If awarded, the contractor will be required to notify the South Coast AQMD in writing if they have been found by a court or federal or state agency to have violated labor laws. The contractor will complete a yearly certification in which they will either state that they have not been found by a court or federal or state agency to have violated labor laws or, if such violations have been found, the contractor will give South Coast AQMD details about those violations in the certification. If the contractor has previously provided that information to the South Coast AQMD, they will be required to reattach that previous notification to the certification and provide any additional details about those violations that have not previously been provided. The contractor's yearly certification will be due at the same time as the annual progress reports. South Coast AQMD reserves the right to terminate the contract with a contractor that has been found to have violated labor laws, and the contractor may be required to return any and all contract funds, as determined by the South Coast AQMD. The contractor will also ensure that these requirements are included in all subcontracts.

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

All applicants that are selected for funding awards must complete the Work Statement and Schedule of Deliverables described below as part of the contracting process. Development of these materials for the initial application is NOT required; however, applicants must digitally sign the application indicating their understanding of the requirements for submittal of additional project information to finalize a contract and that all vehicles, equipment or engines must be in operation no later than December 31, 2021.

## **WORK STATEMENT**

The scope of work involves a series of tasks and deliverables that demonstrate compliance with the requirements of the VW Mitigation – Combustion Category as administered by CARB and the South Coast AQMD.

At a minimum, any proposed project must meet the following criteria:

- Emission reductions must be surplus to any existing regulatory requirements.
- The old and new vehicle/equipment/engine must meet all eligibility requirements.
- Cost-effectiveness of the project must meet the minimum requirements in this PA.
- Project engines or equipment must operate in-service for the full contract term.
- All vehicles/engines/equipment must be in operation by the in-serve date specified in the contract.
- Appropriate annual usage records must be kept and reported to South Coast AQMD during the contract term of three years (e.g., annual odometer/hour readings or fuel usage records) and must be retained for three additional years after the term of the contract.
- All applicants must be fully compliant with applicable rules and regulations in order to be eligible for consideration for VW Mitigation – Combustion Category funding.
- If requested, a contractor must provide a financial statement and bank reference, or other evidence of financial ability to fulfill contract requirements.

## **DELIVERABLES**

The contract will describe how the project will be monitored and what type of information will be included in the annual reports. At a minimum, the South Coast AQMD expects to receive an annual report throughout the contract term, which provides:

- DMV Registration (for on-road vehicles);
- U.S. Coast Guard Certificate of Documentation (for vessels);
- Insurance Certificate(s);
- Records of Annual Usage – including Odometer Readings or Hour Meter Readings or Fuel Usage Records;
- Operational and maintenance issues encountered and how they were resolved;
- Self-certification of where the vehicle/equipment was operated; and
- Self-certification of compliance with labor laws.

South Coast AQMD reserves the right to verify the information provided.

## **SECTION III: PROPOSAL SUBMITTAL REQUIREMENTS**

Applicants must complete the appropriate application forms committing that the information requested in Section II, Work Statement/Schedule of Deliverables, will be submitted if the Applicant's project is selected for funding.

In addition, Conflict of Interest and Project Cost information, as described below, must also be submitted with the application. It is the responsibility of the applicant to ensure that all information submitted is accurate and complete.

### **CONFLICT OF INTEREST**

Applicant must address any potential conflicts of interest with other clients affected by actions performed by the firm on behalf of the South Coast AQMD. Although the applicant will not be automatically disqualified by reason of work performed for such firms, the South Coast AQMD reserves the right to consider the nature and extent of such work in evaluating the proposal. Conflicts of interest will be screened on a case-by-case basis by the South Coast AQMD General Counsel's Office. Conflict of interest provisions of the state law, including the Political Reform Act, may apply to work performed pursuant to this contract. Please discuss potential conflicts of interest on the application form entitled "Campaign Contributions Disclosure".

### **PROJECT COST**

Applicants must provide cost information that specifies the amount of funding requested and the basis for that request by providing a vendor price quote as part of the application. Applicants need to inform the vendor of the time frame of the award process so that they can accurately quote costs based on the anticipated order/purchase date. Quotes must be dated within 90 days of the application submittal date. **Note that no work can be performed for any project awarded under this PA until after the contract has been fully executed.** Any orders placed or payments made in advance of an executed contract with the South Coast AQMD are done at the risk of the applicant. The South Coast AQMD has no obligation to fund the project until a contract is fully executed by both parties.

All project costs must be clearly indicated in the application. In addition, applicants must identify any sources of co-funding and the amount of co-funding from each source in the application. Funding from the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) may not be used as co-funding with VW Mitigation funds. In addition, co-funding may not be from funding sources where any portion of NOx reductions could be double-counted, including but not limited to the Carl Moyer Program, AB 923 or AB 617.

### **PROPOSAL SUBMISSION**

All proposals must be submitted according to specifications set forth herein.

#### Application Forms

All applications must be submitted through the web-based application portal. Applicants may submit multiple units per single application. An application checklist is provided as an attachment (Attachment A) to this PA to assist applicants in completing their applications. The online application must be completed and submitted with other required documents [i.e., Certifications and Representations (Attachment B) and vendor price quotations] discussed in the application and this PA. Some of the required documents (such as equipment usage records) will need to be uploaded as part of the application prior to submittal. Paper, faxed or emailed proposals will not be accepted.

### Certifications and Representations (Attachment B)

The online application will contain seven business forms which must also be completed and submitted with the application online.

- Business Information Request
- Disadvantaged Business Certification
- W-9 Request for Taxpayer Identification Number and Certification
- Form 590 Withholding Exemption Certificate
- Certification of Debarment, Suspension, and Other Responsibility Matters
- Campaign Contribution Disclosure
- Direct Deposit Form

### Methods of Delivery

The applicant must submit their application using the web-based application portal, available at: [www.aqmd.gov/vw](http://www.aqmd.gov/vw). This online system allows applicants to submit their application electronically to the South Coast AQMD prior to the date and time specified below. All required documents and forms must be uploaded to the online system. First-time users must register as a new user.

### Grounds for Rejection

An application may be immediately rejected if:

- It is not prepared in the format described.
- It is not signed by the vehicle/equipment owner, or the engine manufacturer applying on behalf of the vehicle/equipment owner.
- Does not include documents and other forms required in the application or this PA.

### Disposition of Applications

The South Coast AQMD reserves the right to reject any or all applications based on the above criteria. All responses become the property of the South Coast AQMD.

### Modification or Withdrawal

Once submitted, applications cannot be altered without the prior written consent of South Coast AQMD.

### Schedule

Open Solicitation:	Friday, December 6, 2019
All Applications Due by 1:00 pm	<b>Wednesday, March 4, 2020</b>
Evaluation Period:	March - June 2020
Governing Board Approval to Enter into Contracts:	September - October 2020
Contract Execution:	November 2020 - March 2021

#### **SECTION IV: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA**

South Coast AQMD staff will evaluate all submitted project applications for completeness and eligibility and establish a rank list of all eligible projects based on their cost-effectiveness level relative to the NO<sub>x</sub> emissions that will be reduced by the project. The cost-effectiveness determination is completed on an equipment-by-equipment basis. Projects will also be evaluated to determine if the project qualifies as benefiting a disadvantaged or low-income community. Once the rank list of projects is established by the South Coast AQMD, the rank list will be reviewed by a team consisting of five members with one from each of the following: South Coast AQMD, Bay Area AQMD, San Joaquin Valley APCD, CARB, and one member from CAPCOA or another air district to verify the project selection criteria were followed. The approved rank list will then be presented to the South Coast AQMD's Governing Board for approval to enter into agreements with the applicants on the list.

Funding will be awarded based on the cost-effectiveness of each piece of equipment. In addition, at least 50 percent of the VW Mitigation – Combustion Category funds are targeted to be allocated to projects that will reduce emissions in disadvantaged and low-income communities. South Coast AQMD uses the following method to meet these requirements.

1. All projects will be evaluated for cost-effectiveness for NO<sub>x</sub> emission reductions using the calculation methodology of the Carl Moyer Program Guidelines.
2. The Office of Environmental Health Hazard Assessment (OEHHA) in the California Environmental Protection Agency (CalEPA) has developed the California Communities Environmental Health Screening Tool: CalEnviroScreen Version 3.0 (CalEnviroScreen 3.0). The CalEnviroScreen 3.0 tool will be used by South Coast AQMD to determine if a project qualifies as benefiting a disadvantaged or low-income community. All applications will be assessed with the CalEnviroScreen tool to identify and verify if the project will benefit a disadvantaged or low-income community. This tool is available at: <https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30>
3. All the applications not awarded under the 50 percent allocation for disadvantaged and low-income communities will then be ranked according to cost-effectiveness for the NO<sub>x</sub> emissions reduced, with the most cost-effective project funded first and then in descending order for each funding category until the remainder of the VW Mitigation – Combustion Category funds are exhausted.

#### **SECTION V: PAYMENT TERMS**

For all projects, payment will be made upon the submittal of a complete and valid invoice for the reimbursement of costs paid by the Contractor for the new vehicle/equipment/engine, and verification that the vehicle/equipment/engine meets the program requirements and was placed into regular operating service. Proof of destruction of the old vehicle/equipment/engine is also required prior to South Coast AQMD payment of VW Mitigation funds. South Coast AQMD will pay a percentage of the invoice as described in this PA or the contract maximum amount, whichever is less.



**SECTION VI: STAFF CONTACTS AND ADDITIONAL RESOURCES**

For additional information, South Coast AQMD has posted responses to Frequently Asked Questions (FAQs), which can be found at the South Coast AQMD’s VW website at: <http://www.aqmd.gov/vw/>.

If you have any additional questions regarding the content or intent of this PA, procedural matters, application support, etc., please contact the South Coast AQMD team members assigned to the VW Mitigation – Combustion Category below:

**Table 2: VW Mitigation - Combustion Category Staff Contacts**

Contact Name	Phone number	Email
Adan Velasco	(909) 396-3246	<a href="mailto:avelasco@aqmd.gov">avelasco@aqmd.gov</a>
Alicia Martinez	(909) 396-3165	<a href="mailto:amartinez@aqmd.gov">amartinez@aqmd.gov</a>
Ping Gui	(909) 396-3187	<a href="mailto:pgui@aqmd.gov">pgui@aqmd.gov</a>

**WEBSITE LINKS**

On-Road Private (truck and bus) @ <http://www.arb.ca.gov/msprog/onrdiesel/onrdiesel.htm>

Drayage Truck Regulatory @ <https://www.arb.ca.gov/msprog/onroad/porttruck/porttruck.htm>

Public/Utility Fleets @ <http://www.arb.ca.gov/msprog/publicfleets/publicfleets.htm>

In-Use Off-Road @ <http://www.arb.ca.gov/msprog/ordiesel/ordiesel.htm>

Harbor Craft @ <http://www.arb.ca.gov/ports/marinevess/harborcraft.htm>



## ATTACHMENT A

### VW Mitigation Program – Combustion Freight and Marine Projects Class 7 and 8 Freight Trucks – Application Checklist

1	Vehicle Identifier (the name used by applicant to identify the unit)	
2	Vehicle Class (7 or 8) and vocation (Concrete Mixer, Drayage Truck, Dump Truck, Freight Truck, or Waste Hauler)	
3	Vehicle domiciled address (physical location address of the vehicle)	
4	Vehicle ownership information	
5	Vehicle Activity Information: <ul style="list-style-type: none"> <li>• 24 months of usage records (odometer readings with date of readings required)</li> </ul>	
6	Existing Vehicle Information: <ul style="list-style-type: none"> <li>• Vehicle Identification Number (VIN)</li> <li>• License Plate Number</li> <li>• Gross Vehicle Weight Rating (GVWR)</li> <li>• Vehicle Model Year</li> </ul>	
7	Existing Engine Information: <ul style="list-style-type: none"> <li>• Fuel type</li> <li>• Engine Family Name (EFN)</li> <li>• Engine Executive Order Number (EO)</li> <li>• Engine Model Year</li> <li>• Engine Make, Model, Serial, HP</li> </ul>	
8	Replacement (New) Vehicle Information (Not applicable for Repower): <ul style="list-style-type: none"> <li>• Vehicle Identification Number (VIN)</li> <li>• License Plate Number</li> <li>• Gross Vehicle Weight Rating (GVWR)</li> <li>• Vehicle Make, Model, Model Year</li> </ul>	
9	Replacement (New) Engine Information: <ul style="list-style-type: none"> <li>• Fuel type</li> <li>• Engine Family Name (EFN)</li> <li>• Engine Executive Order Number (EO)</li> <li>• Engine Model Year</li> <li>• Engine Make, Model, Serial, HP</li> </ul>	
10	Total Cost: <ul style="list-style-type: none"> <li>• If Replacement: cost of vehicle and associated taxes</li> <li>• If Repower: cost of engine, parts and materials, associated taxes, and labor</li> </ul>	

## VW Mitigation Program – Combustion Freight and Marine Projects Class 7 and 8 Freight Trucks – Supplemental Documentation Checklist

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1	<p>Photos for Existing Vehicle:</p> <ul style="list-style-type: none"> <li>• Front of vehicle</li> <li>• Full side view of vehicle</li> <li>• Vehicle License Plate Number</li> <li>• VIN and GVWR tag(s)</li> <li>• Engine tag (with Make, Model, Year, Serial Number, HP, and Family Name)</li> </ul>	
2	<p>Copy of compliance documentation (in its entirety) indicating that the existing vehicle is in compliance with the Truck and Bus or the Drayage Truck Regulation including:</p> <ul style="list-style-type: none"> <li>• Compliance Certificate</li> <li>• Compliance Status printout</li> <li>• Vehicle Information printout</li> <li>• Company Information printout</li> </ul>	
3	Copy of vehicle’s clean title	
4	<p>Copy of Executive Order for:</p> <ul style="list-style-type: none"> <li>• Existing engine</li> <li>• Replacement (new) engine</li> </ul>	
5	24 consecutive months of usage records (odometer readings with date of readings required)	
6	<p>Vendor Quote (dated within 90 days of application) and must include:</p> <ul style="list-style-type: none"> <li>• Quoted Date</li> <li>• Total (including taxes and state fees)</li> <li>• Repower only: cost of parts and materials, and labor</li> <li>• Warranty information</li> </ul>	

## VW Mitigation Program – Combustion Freight and Marine Projects Freight Switcher Locomotives – Application Checklist

1	Equipment Identifier (the name used by applicant to identify the unit)	
2	Switcher Locomotive domiciled address (physical location address of the unit)	
3	Existing Switcher Locomotive Information: <ul style="list-style-type: none"> <li>• Make, Model, Model Year, and Serial Number</li> <li>• Total number of main engines</li> <li>• Total number of auxiliary engines</li> </ul>	
4	Existing Engine Information: <ul style="list-style-type: none"> <li>• Fuel type</li> <li>• Engine Family Name (EFN)</li> <li>• Engine Executive Order Number (EO) or US EPA Certificate of Conformity Number</li> <li>• Engine Model Year</li> <li>• Engine Make, Model, Serial, HP</li> </ul>	
5	Switcher Locomotive Activity Information: <ul style="list-style-type: none"> <li>• 24 months of fuel usage records, and an estimate of the annual hours of operation for the previous two years</li> </ul>	
6	Replacement Switcher Locomotive Information (Not applicable for Repower): <ul style="list-style-type: none"> <li>• Make, Model, Model Year, and Serial Number</li> <li>• Total number of main engines</li> <li>• Total number of auxiliary engines</li> </ul>	
7	Replacement (New) Engine Information: <ul style="list-style-type: none"> <li>• Fuel type</li> <li>• Engine Family Name (EFN)</li> <li>• Engine Executive Order Number (EO) or US EPA Certificate of Conformity Number</li> <li>• Engine Model Year</li> <li>• Engine Make, Model, Serial, HP</li> </ul>	
8	Total Cost: <ul style="list-style-type: none"> <li>• If Replacement: cost of switcher locomotive and associated taxes</li> <li>• If Repower: cost of engine, parts and materials, associated taxes, and labor</li> </ul>	

## VW Mitigation Program – Combustion Freight and Marine Projects Freight Switcher Locomotives – Supplemental Documentation Checklist

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1	<p>Photos for Existing Switcher Locomotive:</p> <ul style="list-style-type: none"> <li>• Front of switcher</li> <li>• Full side view of switcher</li> <li>• Engine tag, correctly labeled for every applicable engine (with Make, Model, Year, Serial Number, HP, and Family Name)</li> </ul>	
2	<p>Copy of Executive Order or US EPA Certificate of Conformity for:</p> <ul style="list-style-type: none"> <li>• Existing engine</li> <li>• Replacement (new) engine</li> </ul>	
3	24 consecutive months of fuel usage records	
4	<p>Vendor Quote (dated within 90 days of application) and must include:</p> <ul style="list-style-type: none"> <li>• Quoted Date</li> <li>• Total (including taxes and state fees)</li> <li>• Repower only: cost of parts and materials, and labor</li> <li>• Warranty information</li> </ul>	

## VW Mitigation Program – Combustion Freight and Marine Projects Marine Projects – Application Checklist

1	Equipment Identifier (the name used by applicant to identify the unit)	
2	Marine vessel domiciled address (physical location address of the unit) <ul style="list-style-type: none"> <li>• Including port and berth/slip information</li> </ul>	
3	Marine Vessel Information: <ul style="list-style-type: none"> <li>• Make, Model, Model Year, and Serial Number</li> <li>• Total number of main engines</li> <li>• Total number of auxiliary engines</li> <li>• US Coast Guard Number</li> </ul>	
4	Existing Engine Information: <ul style="list-style-type: none"> <li>• Fuel type</li> <li>• Engine Family Name (EFN)</li> <li>• Engine Executive Order Number (EO) or US EPA Certificate of Conformity Number</li> <li>• Engine Model Year</li> <li>• Engine Make, Model, Serial, HP, Tier, Number of Cylinders, Displacement</li> </ul>	
5	Marine Vessel Activity Information: <ul style="list-style-type: none"> <li>• 24 months of usage records with hour meter readings</li> </ul>	
6	Replacement (New) Engine Information: <ul style="list-style-type: none"> <li>• Fuel type</li> <li>• Engine Family Name (EFN)</li> <li>• Engine Executive Order Number (EO) or US EPA Certificate of Conformity Number</li> <li>• Engine Model Year</li> <li>• Engine Make, Model, Serial, HP, Tier, Number of Cylinders, Displacement</li> </ul>	
7	Total Cost: <ul style="list-style-type: none"> <li>• Cost of engine, parts and materials, associated taxes, and labor</li> </ul>	

## VW Mitigation Program – Combustion Freight and Marine Projects Marine Projects – Supplemental Documentation Checklist

1	Photos for Marine Vessel: <ul style="list-style-type: none"> <li>• Name of Vessel</li> <li>• Front of vessel</li> <li>• Full side view of vessel</li> <li>• Engine tag, correctly labeled for every applicable engine (with Make, Model, Year, Serial Number, HP, Tier, and Family Name)</li> </ul>	
2	Copy of Executive Order or US EPA Certificate of Conformity for: <ul style="list-style-type: none"> <li>• Existing engine</li> <li>• Replacement (new) engine</li> </ul>	
3	24 consecutive months of hour meter records	
4	Vendor Quote (dated within 90 days of application) and must include: <ul style="list-style-type: none"> <li>• Quoted Date</li> <li>• Total (including taxes and state fees)</li> <li>• Cost of parts and materials, and labor</li> <li>• Warranty information</li> </ul>	

## ATTACHMENT B



# South Coast Air Quality Management District

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

### **Business Information Request**

Dear South Coast AQMD Contractor/Supplier:

South Coast Air Quality Management District (South Coast AQMD) is committed to ensuring that our contractor/supplier records are current and accurate. If your firm is selected for award of a purchase order or contract, it is imperative that the information requested herein be supplied in a timely manner to facilitate payment of invoices. In order to process your payments, we need the enclosed information regarding your account. **Please review and complete the information identified on the following pages, remember to sign all documents for our files, and return them as soon as possible to the address below:**

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**

If you do not return this information, we will not be able to establish you as a vendor. This will delay any payments and would still necessitate your submittal of the enclosed information to our Accounting department before payment could be initiated. Completion of this document and enclosed forms would ensure that your payments are processed timely and accurately.

If you have any questions or need assistance in completing this information, please contact Accounting at (909) 396-3777. We appreciate your cooperation in completing this necessary information.

Sincerely,

Sujata Jain  
Chief Financial Officer

DH:tm

Enclosures: Business Information Request  
Disadvantaged Business Certification  
W-9  
Form 590 Withholding Exemption Certificate  
Federal Contract Debarment Certification  
Campaign Contributions Disclosure  
Direct Deposit Authorization

REV 8/19



# South Coast Air Quality Management District

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

## BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business <i>Check One:</i>	<input type="checkbox"/> Individual <input type="checkbox"/> DBA, Name _____, County Filed in _____ <input type="checkbox"/> Corporation, ID No. _____ <input type="checkbox"/> LLC/LLP, ID No. _____ <input type="checkbox"/> Other _____

## REMITTING ADDRESS INFORMATION

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

All invoices must reference the corresponding Purchase Order Number(s)/Contract Number(s) if applicable and mailed to:

**Attention: Accounts Payable, Accounting Department  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178**



## BUSINESS STATUS CERTIFICATIONS

Federal guidance for utilization of disadvantaged business enterprises allows a vendor to be deemed a small business enterprise (SBE), minority business enterprise (MBE) or women business enterprise (WBE) if it meets the criteria below.

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

### Statements of certification:

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

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

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

Check all that apply:

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

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

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

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

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

\_\_\_\_\_  
*NAME*

\_\_\_\_\_  
*TITLE*

\_\_\_\_\_  
*TELEPHONE NUMBER*

\_\_\_\_\_  
*DATE*

## Definitions

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

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

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

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

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

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

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

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

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

- a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:
  - **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars (\$10,000,000) or less over the previous three years, or**
  - A manufacturer with 100 or fewer employees.
- b. Manufacturer means a business that is both of the following:
  - 1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.
  - 2) Classified between Codes 311000 to 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

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

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

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

**Most Favored Customer** as used in this policy means that the South Coast AQMD will receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services.

**Request for Taxpayer  
Identification Number and Certification**

Give Form to the requester. Do not send to the IRS.

Go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9) for instructions and the latest information.

Print or type. See Specific Instructions on page 3.	<p><b>1</b> Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.</p> <p><b>2</b> Business name/disregarded entity name, if different from above</p> <p><b>3</b> Check appropriate box for federal tax classification of the person whose name is entered on line 1. Check only <b>one</b> of the following seven boxes.</p> <p><input type="checkbox"/> Individual/sole proprietor or single-member LLC      <input type="checkbox"/> C Corporation      <input type="checkbox"/> S Corporation      <input type="checkbox"/> Partnership      <input type="checkbox"/> Trust/estate</p> <p><input type="checkbox"/> Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____</p> <p><b>Note:</b> Check the appropriate box in the line above for the tax classification of the single-member owner. Do not check LLC if the LLC is classified as a single-member LLC that is disregarded from the owner unless the owner of the LLC is another LLC that is <b>not</b> disregarded from the owner for U.S. federal tax purposes. Otherwise, a single-member LLC that is disregarded from the owner should check the appropriate box for the tax classification of its owner.</p> <p><input type="checkbox"/> Other (see instructions) ▶ _____</p>	<p><b>4</b> Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):</p> <p>Exempt payee code (if any) _____</p> <p>Exemption from FATCA reporting code (if any) _____</p> <p><small>(Applies to accounts maintained outside the U.S.)</small></p>
	<p><b>5</b> Address (number, street, and apt. or suite no.) See instructions.</p> <p><b>6</b> City, state, and ZIP code</p> <p><b>7</b> List account number(s) here (optional)</p>	<p>Requester's name and address (optional)</p>

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

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the instructions for Part I, later. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN*, later.

**Note:** If the account is in more than one name, see the instructions for line 1. Also see *What Name and Number To Give the Requester* for guidelines on whose number to enter.

Social security number					
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or					
Employer identification number					
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	-				

**Part II Certification**

Under penalties of perjury, I certify that:

- The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- I am a U.S. citizen or other U.S. person (defined below); and
- The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

**Certification instructions.** You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

<b>Sign Here</b>	Signature of U.S. person ▶	Date ▶
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**General Instructions**

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

**Future developments.** For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to [www.irs.gov/FormW9](http://www.irs.gov/FormW9).

**Purpose of Form**

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

- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

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

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

By signing the filled-out form, you:

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

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

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

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

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

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

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

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

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

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

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

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

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

## Backup Withholding

**What is backup withholding?** Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

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

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

1. You do not furnish your TIN to the requester,
2. You do not certify your TIN when required (see the instructions for Part II for details),
3. The IRS tells the requester that you furnished an incorrect TIN,
4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or
5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate instructions for the Requester of Form W-9 for more information.

Also see *Special rules for partnerships*, earlier.

## What is FATCA Reporting?

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

## Updating Your Information

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

## Penalties

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

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

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

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

## Specific Instructions

### Line 1

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

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

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

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

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

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

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

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

### Line 2

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

### Line 3

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

IF the entity/person on line 1 is a(n) . . .	THEN check the box for . . .
• Corporation	Corporation
• Individual • Sole proprietorship, or • Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes.	Individual/sole proprietor or single-member LLC
• LLC treated as a partnership for U.S. federal tax purposes, • LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or • LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes.	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation; or S= S corporation)
• Partnership	Partnership
• Trust/estate	Trust/estate

### Line 4, Exemptions

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

#### Exempt payee code.

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

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

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

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

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

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

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

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

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities

C—A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

E—A corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G—A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I—A common trust fund as defined in section 584(a)

J—A bank as defined in section 581

K—A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

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

### Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

### Line 6

Enter your city, state, and ZIP code.

## Part I. Taxpayer Identification Number (TIN)

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

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

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

**Note:** See *What Name and Number To Give the Requester*, later, for further clarification of name and TIN combinations.

**How to get a TIN.** If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at [www.SSA.gov](http://www.SSA.gov). You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at [www.irs.gov/Businesses](http://www.irs.gov/Businesses) and clicking on Employer Identification Number (EIN) under Starting a Business. Go to [www.irs.gov/Forms](http://www.irs.gov/Forms) to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to [www.irs.gov/OrderForms](http://www.irs.gov/OrderForms) to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

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

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

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

## Part II. Certification

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

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

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

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

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

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

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

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

**What Name and Number To Give the Requester**

For this type of account:	Give name and SSN of:
1. Individual	The individual
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account <sup>1</sup>
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account
4. Custodial account of a minor (Uniform Gift to Minors Act)	The minor <sup>2</sup>
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee <sup>1</sup>
b. So-called trust account that is not a legal or valid trust under state law	The actual owner <sup>1</sup>
6. Sole proprietorship or disregarded entity owned by an individual	The owner <sup>3</sup>
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(c)(2)(i)(A))	The grantor <sup>4</sup>
For this type of account:	Give name and EIN of:
8. Disregarded entity not owned by an individual	The owner
9. A valid trust, estate, or pension trust	Legal entity <sup>4</sup>
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation
11. Association, club, religious, charitable, educational, or other tax-exempt organization	The organization
12. Partnership or multi-member LLC	The partnership
13. A broker or registered nominee	The broker or nominee

For this type of account:	Give name and EIN of:
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

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

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

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

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

\*Note: The grantor also must provide a Form W-9 to trustee of trust.

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

**Secure Your Tax Records From Identity Theft**

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

To reduce your risk:

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

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

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

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

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

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



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

If you receive an unsolicited email claiming to be from the IRS, forward this message to [phishing@irs.gov](mailto:phishing@irs.gov). You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at [spam@uce.gov](mailto:spam@uce.gov) or report them at [www.ftc.gov/complaint](http://www.ftc.gov/complaint). You can contact the FTC at [www.ftc.gov/idtheft](http://www.ftc.gov/idtheft) or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see [www.IdentityTheft.gov](http://www.IdentityTheft.gov) and Pub. 5027.

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

## Privacy Act Notice

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

**2019 Withholding Exemption Certificate****590**

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

**Withholding Agent Information**

Name \_\_\_\_\_

**Payee Information**

Name \_\_\_\_\_

 SSN or ITIN  FEIN  CA Corp no.  CA SOS #

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

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

State \_\_\_\_\_

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

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

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

 **Individuals — Certification of Residency:**

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

 **Corporations:**

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

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

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

 **Tax-Exempt Entities:**

The entity is exempt from tax under California Revenue and Taxation Code (R&amp;TC) Section 23701 \_\_\_\_\_ (Insert letter) or Internal Revenue Code Section 501(c) \_\_\_\_\_ (Insert number). If this entity ceases to be exempt from tax, I will promptly notify the withholding agent.

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

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

 **California Trusts:**

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

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

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

 **Nonmilitary Spouse of a Military Servicemember:**

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

**CERTIFICATE OF PAYEE:** Payee must complete and sign below.To learn about your privacy rights, how we may use your information, and the consequences for not providing the requested information go to [ftb.ca.gov/forms](http://ftb.ca.gov/forms) and search for 1131. To request this notice by mail, call 800.852.5711.

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

Type or print payee's name and title \_\_\_\_\_ Telephone (\_\_\_\_) \_\_\_\_\_

Payee's signature ► \_\_\_\_\_ Date \_\_\_\_\_



# 2017 Instructions for Form 590

## Withholding Exemption Certificate

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

### General Information

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

### A Purpose

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

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

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

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

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

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

### B Income Subject to Withholding

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

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

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

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

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

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

### C Who Certifies this Form

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

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

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

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

### D Definitions

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

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

Foreign refers to non-U.S.

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

### Permanent Place of Business:

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

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

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

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

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

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



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

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

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

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

## Specific Instructions

### Payee Instructions

Enter the withholding agent's name.

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

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

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

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

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

### Withholding Agent Instructions

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

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

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

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

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

## Additional Information

**Website:** For more information go to [ftb.ca.gov](http://ftb.ca.gov) and search for **nonwage**.

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

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

**Fax:** 916.845.9512

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

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

### Internet and Telephone Assistance

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

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

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

### Asistencia Por Internet y Teléfono

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

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

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

## **Certification Regarding Debarment, Suspension, and Other Responsibility Matters**

The prospective participant certifies to the best of its knowledge and belief that it and the principals:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- (b) Have not within a three year period preceding this proposal been convicted of or had a civil judgement rendered against them or commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction: violation of Federal or State antitrust statute or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (b) of this certification; and
- (d) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to \$10,000 or imprisonment for up to 5 years, or both.

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Typed Name & Title of Authorized Representative

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Signature of Authorized Representative Date

I am unable to certify to the above statements. My explanation is attached.

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## CAMPAIGN CONTRIBUTIONS DISCLOSURE

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

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

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

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

### **SECTION I.**

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

DBA, Name _____, County Filed in _____ Corporation, ID No. _____ LLC/LLP, ID No. _____
--

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

\_\_\_\_\_  
\_\_\_\_\_

### **SECTION II.**

Has Contractor and/or any parent, subsidiary, or affiliated company, or agent thereof, made a campaign contribution(s) totaling \$250 or more in the aggregate to a current member of the South Coast Air Quality Management Governing Board or member/alternate of the MSRC in the 12 months preceding the date of execution of this disclosure?

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

**Campaign Contributions Disclosure, continued:**

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

Governing Board Member or MSRC Member/Alternate	Amount of Contribution	Date of Contribution
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Name of Contributor \_\_\_\_\_

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

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

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

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

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

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

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

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

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

**DEFINITIONS**

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

- (1) Parent subsidiary. A parent subsidiary relationship exists when one corporation directly or indirectly owns shares possessing more than 50 percent of the voting power of another corporation.
- (2) Otherwise related business entity. Business entities, including corporations, partnerships, joint ventures and any other organizations and enterprises operated for profit, which do not have a parent subsidiary relationship are otherwise related if any one of the following three tests is met:
  - (A) One business entity has a controlling ownership interest in the other business entity.
  - (B) There is shared management and control between the entities. In determining whether there is shared management and control, consideration should be given to the following factors:
    - (i) The same person or substantially the same person owns and manages the two entities;
    - (ii) There are common or commingled funds or assets;
    - (iii) The business entities share the use of the same offices or employees, or otherwise share activities, resources or personnel on a regular basis;
    - (iv) There is otherwise a regular and close working relationship between the entities; or
  - (C) A controlling owner (50% or greater interest as a shareholder or as a general partner) in one entity also is a controlling owner in the other entity.



# South Coast Air Quality Management District

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

## Direct Deposit Authorization

### STEP 1: Please check all the appropriate boxes

- |  |  |
|--|--|
| <input type="checkbox"/> Individual (Employee, Governing Board Member) | <input type="checkbox"/> New Request           |
| <input type="checkbox"/> Vendor/Contractor                             | <input type="checkbox"/> Cancel Direct Deposit |
| <input type="checkbox"/> Changed Information                           |  |

### STEP 2: Payee Information

Last Name		First Name		Middle Initial	Title
Vendor/Contractor Business Name (if applicable)					
Address				Apartment or P.O. Box Number	
City		State	Zip	Country	
Taxpayer ID Number		Telephone Number		Email Address	

### Authorization

- I authorize South Coast Air Quality Management District (South Coast AQMD) to direct deposit funds to my account in the financial institution as indicated below. I understand that the authorization may be rejected or discontinued by South Coast AQMD at any time. If any of the above information changes, I will promptly complete a new authorization agreement. If the direct deposit is not stopped before closing an account, funds payable to me will be returned to South Coast AQMD for distribution. This will delay my payment.
- This authorization remains in effect until South Coast AQMD receives written notification of changes or cancellation from you.
- I hereby release and hold harmless South Coast AQMD for any claims or liability to pay for any losses or costs related to insufficient fund transactions that result from failure within the Automated Clearing House network to correctly and timely deposit monies into my account.

### STEP 3:

You must verify that your bank is a member of an Automated Clearing House (ACH). Failure to do so could delay the processing of your payment. You must attach a voided check or have your bank complete the bank information and the account holder must sign below.

### To be Completed by your Bank

<b>Staple Voided Check Here</b>	Name of Bank/Institution				
	Account Holder Name(s)				
	<input type="checkbox"/> Saving <input type="checkbox"/> Checking		Account Number		Routing Number
	Bank Representative Printed Name		Bank Representative Signature		Date
	ACCOUNT HOLDER SIGNATURE:				Date

For South Coast AQMD Use Only

Input By \_\_\_\_\_

Date \_\_\_\_\_



BOARD MEETING DATE: December 6, 2019

AGENDA NO. 8

PROPOSAL: Transfer Funds for Enhanced Particulate Monitoring Program

SYNOPSIS: This action is to transfer up to \$300,000 between Major Objects in Science and Technology Advancement's FY 2019-20 Budget to realign expenditures for the FY 2019-20 Enhanced Particulate Monitoring Program.

COMMITTEE: Administrative, November 8, 2019; Recommended for Approval

**RECOMMENDED ACTION:**

Transfer up to \$300,000 from Science and Technology Advancement's FY 2019-20 Budget, Salaries and Employee Benefits Major Object (Org 44), to Services and Supplies Major Object (Org 47), Temporary Agency Account, to realign expenditures for the FY 2019-20 Enhanced Particulate Monitoring Program.

Wayne Natri  
Executive Officer

MMM:JCL:RMB:ld

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**Background**

South Coast AQMD has been providing enhanced particulate monitoring support, including sample collection, as part of a national monitoring program since 2003 and will continue for the foreseeable future.

**Proposal**

The South Coast AQMD has received funding from the U.S. Government for the ongoing Enhanced Particulate Monitoring Program for FY 2019-20. This action is to transfer up to \$300,000 from Science and Technology Advancement's FY 2019-20 Budget, Salaries and Employee Benefits Major Object (Org 44), to Services and Supplies Major Object (Org 47), Temporary Agency Account, to realign expenditures for the FY 2019-20 Enhanced Particulate Monitoring Program with actual staffing needs.

**Resource Impacts**

U.S. Government funding will fully support the Enhanced Particulate Monitoring Program. The transfer of \$300,000 will realign expenditures for the FY 2019-20 Program.

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 9

**PROPOSAL:** Approve Contract Award, Allocation of Funds, and Issue Solicitation as Approved by MSRC

**SYNOPSIS:** As part of their FYs 2018-21 Work Program, the MSRC approved an award to provide special transit service to Dodger Stadium in 2020 and 2021. The MSRC also approved a funding allocation towards the Market Acceleration Program, with the funds to support the early deployment of near-zero emission natural gas trucks. Finally, the MSRC approved the release of a Program Opportunity Notice for Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities. At this time the MSRC seeks Board approval of the contract award and allocation, and to release the solicitation as part of the FYs 2018-21 Work Program.

**COMMITTEE:** Mobile Source Air Pollution Reduction Review, November 21, 2019; Recommended for Approval

**RECOMMENDED ACTIONS:**

1. Approve contract award to Los Angeles County Metropolitan Transportation Authority (Metro) in an amount not to exceed \$2,188,899 (using \$2,101,257 of the funds originally allocated plus an additional \$87,642 previously unallocated) to provide special bus service to Dodger Stadium in 2020 and 2021, as part of the approval of the FYs 2018-21 Work Program, as described in this letter;
2. Approve MSRC allocation in an amount not to exceed \$4,000,000 for partnership with South Coast AQMD on implementation of Market Acceleration Program, with funding to support the early deployment of near-zero emission natural gas trucks in accordance with the program terms, as part of the approval of the FYs 2018-21 Work Program, as described in this letter;
3. Issue Program Opportunity Notice for Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities as part of the approval of the FYs 2018-21 Work Program, with a targeted funding level of \$20,000,000, as described in this letter and in the attached;
4. Authorize MSRC 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 contract under the FYs 2018-21 Work Program, as described above and in this letter.

Larry McCallon  
Chair, MSRC

MMM:NB:CR

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### **Background**

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

### **Outreach**

In accordance with South Coast AQMD's Procurement Policy and Procedure, public notices advertising the Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities Program Opportunity Notice (PON) will be published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, and Riverside County Press Enterprise newspapers to leverage the most cost-effective method of outreach to the South Coast Basin. In addition, the solicitation will be advertised in the Desert Sun newspaper for expanded outreach in the Coachella Valley. Public notices advertising the Major Event Center Transportation Program were likewise published in the Los Angeles Times, the Orange County Register, the San Bernardino Sun, Riverside County Press Enterprise, and Desert Sun newspapers.

Additionally, potential bidders may be and past bidders may have been notified utilizing South Coast AQMD's own electronic listing of certified minority vendors. Notice of the solicitation will be and notice of past solicitations was e-mailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at South Coast AQMD's website (<http://www.aqmd.gov>). Further, the solicitation will be and past solicitations were posted on the MSRC's website at <http://www.cleantransportationfunding.org> and electronic notifications will be and past electronic notifications were sent to those subscribing to this website's notification service.

### **Proposals**

At its November 21, 2019 meeting, the MSRC considered recommendations from its MSRC-TAC and approved the following:

### Major Event Center Transportation Program

As part of its FYs 2018-21 Work Program, the MSRC allocated \$6.5 million for event center transportation programs and released Program Announcement #PA2019-03. The Program Announcement solicits applications from qualifying major event centers and/or transportation providers to provide transportation service for venues not currently served by sufficient transportation service. To date, the MSRC has awarded a total of \$1,631,783. The MSRC considered recommendations concerning an additional application submitted by Metro. Metro requested the MSRC to consider an award of \$2,188,899 to provide express bus service to Dodger Stadium for the 2020 and 2021 baseball seasons. For the 2020 season, service would be provided for one preseason game, 81 regular season games, one All-Star game, two special events, and up to ten post-season games. The 2021 season would have approximately 82 regular season games, two special events, and up to ten post-season games. Service would begin at least 90 minutes prior to game/event start time and would utilize “near-zero” CNG buses. Metro and the Los Angeles Dodgers are committed to provide at least \$3,011,026 in co-funding contributions to the administration and marketing of the project. The MSRC allocated an additional \$87,642 to the Program and approved a contract award to Metro in an amount not to exceed \$2,188,899 as part of the FYs 2018-21 Work Program for the Dodger Stadium Express bus service.

### Market Acceleration Program

The Market Acceleration Program (MAP) is a South Coast AQMD program to support the early deployment of near-zero emission natural gas trucks, targeting heavy-duty trucks used in short-haul drayage activities. Its key audience includes fleets who don't meet the scrap truck qualification criteria of the Prop 1B and Carl Moyer Programs, and owners of older trucks who can't afford new near-zero trucks even with state incentives. Clean Energy, which originally proposed MAP to South Coast AQMD, will promote and coordinate the program but is not a funding recipient. A funding allocation from the MSRC would augment the South Coast AQMD's existing MAP funding and increase the number of trucks scrapped and new near-zero emission trucks placed into service. At least 89 truck replacements would be expected absent any other co-funding. The MSRC considered this partnership opportunity and approved an allocation of up to \$4,000,000 to augment the South Coast AQMD funding to implement the MAP as an element of the FYs 2018-21 Work Program.

### Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities

The MSRC approved the release of PON #PON2020-01 under the FYs 2018-21 Work Program. The PON, with an initial targeted funding amount not to exceed \$20,000,000, solicits pre-proposals from owners and/or operators of warehouses, distribution centers, and logistics facilities located within the South Coast AQMD portions of Riverside or San Bernardino Counties describing how the organization would like to partner with the MSRC to implement air pollution reduction strategies and technologies at their facilities. The PON includes an open application period commencing with its release on December 6, 2019 and closing February 21, 2020. Upon receipt of a project concept, the MSRC

could a) request a more detailed proposal for possible sole-source award; b) notify entities that an RFP will be issued at a later date; or c) decline the funding request.

At this time, the MSRC requests the South Coast AQMD Board to approve the contract award, funding allocation, and release of the PON as part of approval of the FYs 2018-21 AB 2766 Discretionary Fund Work Program as outlined above. The MSRC also requests the Board to authorize the South Coast AQMD Chairman of the Board 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 South Coast AQMD 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.

### **Attachment**

Program Opportunity Notice PON2020-01 – Zero/Near-Zero Emission Warehouse & Distribution Facilities



# **Program Opportunity Notice**

**For**

**Warehouse & Distribution Facilities in Riverside  
& San Bernardino Counties**

**Financial Assistance to Transition to Zero & Near-Zero  
Emission Goods Movement Operations**

**PON2020-01**

**December 6, 2019**

Clean Transportation Funding™ from the  
**Mobile Source Air Pollution Reduction Review Committee (MSRC)**

## SECTION I: INTRODUCTION

The ability to move goods efficiently across the South Coast Basin is crucial to the economic vitality of Southern California. In Los Angeles County alone, goods movement dependent industries generate one third of the county's economy and support one third of all employment. Our region is also home to the largest container port complex in the United States. Forty percent (40%) of all containerized goods imported into the United States enter through the Ports of Long Beach and Los Angeles, known as the San Pedro Bay Ports.

While essential to our region's economy, the air pollutant emissions generated by goods movement is the number one contributor to unhealthful air quality. The San Pedro Bay Ports themselves represent the largest source for air pollutant emissions within the South Coast AQMD jurisdiction. Due to the Ports' disproportionate contribution to the emissions inventory, significant efforts and financial investments have been made to reduce emissions associated with Port operations. The results of these efforts have been highly successful, with emissions of diesel particulate matter and nitrogen oxides (NOx) down 87% and 56%, respectively, when compared to 2005 levels<sup>1</sup>. While substantial, continued reductions are necessary to meet ozone and toxic air contaminant standards as detailed in the South Coast AQMD's current Air Quality Management Plan.

However, the movement of goods does not stop at the maritime ports. Approximately 70% of the containerized cargo that moves through the San Pedro Bay Ports travels by heavy-duty diesel truck through the South Coast Basin where 40% of it ends up at a vast network of warehouses, distribution centers, and logistics facilities located in Riverside and San Bernardino counties.

Each warehouse and logistics facility is – in and of itself – a small scale port. There are over 400 of these facilities currently within Riverside and San Bernardino counties. Goods are delivered, trans-loaded, and depart each facility primarily by heavy-duty diesel trucks. Internally, containerized cargo is moved using heavy-duty diesel cargo handling equipment such as yard tractors and heavy-duty forklifts – the same equipment utilized at the maritime ports. While individually smaller in scale, when viewed collectively the hundreds of warehouses, distribution centers, and logistics facilities in the Inland Empire generate air pollutant emissions that endanger the health of the communities they are located in and adversely impact the entire South Coast region. It is for this reason that the local and State air pollution regulatory agencies are promulgating new rules and regulations to reduce air pollution generated by goods movement activities at these "Inland Ports".

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<sup>1</sup> 2017 San Pedro Bay Ports Clean Air Action Plan Update.

To reduce air pollutant emissions generated by warehouse, distribution, and logistics center operations within the South Coast AQMD portions<sup>2</sup> of Riverside and San Bernardino Counties, the MSRC Clean Transportation Funding™ Program is seeking to partner with these facilities to begin the transition to *zero or near-zero emission goods movement*.

*The MSRC has identified up to **\$20 Million Dollars (\$20,000,000)** in Clean Transportation Funding™ and is seeking facility owners and operators to partner with the MSRC to achieve Inland Port Goods Movement air pollutant reductions*

Partnering with the MSRC Clean Transportation Funding Program offers the potential for owners and operators of eligible Inland Empire facilities to receive incentives for the early implementation of key air pollution reduction strategies and potentially go “above and beyond” future air quality obligations on the horizon from State and local air quality regulators. This also affords an opportunity for warehouses, distribution centers, and logistics facilities to implement “good neighbor” policies and practices to reduce air pollution exposure to adjacent residences, their communities, and the region as a whole.

## **SECTION II: PURPOSE OF THIS PROGRAM OPPORTUNITY NOTICE**

The purpose of this Program Opportunity Notice (PON) is to identify owners and/or operators of warehouses, distribution centers, and logistics facilities located in Riverside or San Bernardino County interested in potentially partnering with the MSRC Clean Transportation Funding™ Program to implement air pollution reduction strategies and technologies at their facilities that reduce air pollutant emissions associated with Goods Movement.

*Please note that this PON is not a traditional Request for Proposals. The MSRC is soliciting **Pre-Proposals for Conceptual Projects** for MSRC Inland Port Goods Movement.*

A pre-proposal differs from a traditional proposal in that pre-proposals tend to be high level concepts that lack the level of detail normally associated with a formal “offer”.

The MSRC does retain the authority, however, to make a funding award as a result of this PON solicitation. More specifically, the following are possible outcomes of a Riverside or San Bernardino County facility submitting a Pre-Proposal in response to this PON:

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<sup>2</sup> See <https://www.aqmd.gov/nav/about/jurisdiction> for a listing of zip codes that fall within the South Coast AQMD jurisdiction.



- If the MSRC receives a unique pre-proposal that is in keeping with the program objectives, the MSRC can, at their discretion, request that the submitter prepare and submit a full proposal for possible sole-source funding consideration;
- If the MSRC receives multiple pre-proposals that are meritorious, but offer a similar approach to obtaining the program objectives, the MSRC may issue a Request for Proposals (RFP) at some future date. Submitters of pre-proposals would be required to prepare a full proposal at that time. Selection would be made on a competitive basis;
- In the event the MSRC deems a pre-proposal to be non-responsive or otherwise unacceptable to this PON, the submitter will receive notification that the pre-proposal has been declined from further consideration. Please note that this would not preclude the submitter from preparing and submitting a full proposal under an MSRC sponsored RFP. The determination of non-responsiveness is at the sole discretion of the MSRC.

*The MSRC Clean Transportation Funding™ Program is specifically interested in identifying Inland Empire Warehouse/Distribution/Logistics facilities interested in pursuing the following strategies:*

- **Purchase & Deploy Zero-Emission or Near-Zero Emission (Z/NZE) Heavy-Duty On-Road Trucks**
  - Purchase and deploy into revenue service on-road heavy-duty trucks that are zero-emission (e.g., battery or fuel cell) or equipped with a “near-zero” emission engine<sup>3</sup>. This would primarily include heavy-duty on-road trucks owned and operated by the facility owner or operator, or partnering with fleets that regularly access the facility.
- **Purchase & Deploy Off-Road Z/NZE Cargo Handling Equipment**
  - Purchase and deploy into revenue service off-road heavy-duty cargo handling equipment that are zero-emission or equipped with a near-zero emission engine. This would include, but is not necessarily limited to, zero emission battery electric yard tractors (hostlers), heavy-duty forklifts, and other types of equipment typically used to reposition containers at a warehouse or distribution center.

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<sup>3</sup> “Near-Zero” engines currently include natural gas and propane engines certified by the California Air Resources Board at the Optional Low-NOx Certification Standard of 0.02 g/bhp-hr.

- **Facility Electrification to Support Zero Emission Trucks & Off-Road Cargo Handling Equipment**
  - Design and install Electric Vehicle Support Equipment (EVSE, i.e., chargers) to allow onsite recharging of battery electric on-road trucks or off-road cargo handling equipment. Note that for EVSE projects, purchase of at least one qualifying heavy-duty vehicle may be required, subject to follow-on discussions between the MSRC and PON respondent.
  
- **Development of Onsite Renewable Natural Gas Refueling Infrastructure**
  - Design and install natural gas refueling infrastructure to allow onsite fueling of natural gas on-road trucks and off-road cargo handling equipment. Use of renewable natural gas may be required. Note that for natural gas infrastructure projects, purchase of at least one qualifying “near-zero” heavy-duty natural gas vehicle may be required, subject to follow-on discussions between the MSRC and PON respondent.
  
- **Development of Onsite Hydrogen Refueling infrastructure**
  - Design and install hydrogen refueling infrastructure to allow fueling of hydrogen fuel cell on-road trucks and off-road cargo handling equipment. The identification of a hydrogen fueled vehicle that commits to utilize the facility may be required, subject to follow-on discussions between the MSRC and PON respondent.

*The overall goal of this PON is to hear from eligible facilities located in Riverside and San Bernardino Counties as to how the MSRC Clean Transportation Program could best assist in implementing the types of clean air strategies listed above.*

### **SECTION III: HOW TO RESPOND TO THIS PON - PRE-PROPOSAL PREPARATION INSTRUCTIONS**

**Pre-Proposal Contents:** There are no strict requirements when submitting a pre-proposal response to the MSRC Clean Transportation Funding™ Program. However, the following general guidelines and content suggestions are offered to assist respondents. Recommended elements of a pre-proposal include the following:

1. **Transmittal Letter** that identifies the name of the organization submitting the pre-proposal, the location of the warehouse/distribution facility within Riverside or San Bernardino County, and contact information including but not limited to company website URL, telephone and e-mail address of the contact person(s) for technical and contractual matters, and any other relevant contact information.

2. **Description of How the MSRC Can Potentially Partner with Your Facility to Implement Identified Clean Air Strategies.** This can include any or all of the following:
  - a. Conceptual Project Description, including a proposed scope of work as it relates to project design, development, implementation, and funding requirements;
  - b. Clean Air Strategies of Most Interest to Your Organization, including identification of which zero/near zero vehicles your facility would like to add to your on-road fleet and off-road equipment;
  - c. Financial Assistance – Where can the MSRC be most beneficial in assisting your facility in achieving reductions in your facility’s emission footprint?
3. **Project Timeline**, including a preliminary time frame for project implementation.
4. **Estimated Project Costs**, including total project cost, sources of match funding or cost-sharing, and whether co-funding is secured or anticipated.

#### **SECTION IV: LEVERAGING OTHER AVAILABLE FUNDING RESOURCES**

The MSRC strongly encourages the formation of partnerships and the leveraging of multiple funding sources to increase the scope of Inland Port projects and improve their economic feasibility. To that extent, the MSRC will work with respondents to this PON to identify additional funding sources, as applicable to each conceptual project. Below are examples of other funding to potentially leverage MSRC Clean Transportation Funding™:

- South Coast AQMD Market Acceleration Program (MAP) – this program will launch in early 2020 and will offer incentives to assist owners in replacing existing diesel Class 8 on-road semi tractors with new near-zero emission natural gas Class 8 on-road tractors. For more information, see Section V of this PON for a list of staff members who can provide information on the MAP Program.
- Hybrid and Zero-Emission Truck Voucher Incentive Program (HVIP) – HVIP is sponsored by the California Air Resources Board (CARB) and offers buy-down incentives for Z/NZE heavy-duty on-road trucks – please see <https://www.californiahvip.org/> for more information.
- Clean Off-Road Equipment Voucher Incentive Project (CORE) – this CARB-sponsored program offers incentives for off-road cargo handling equipment such as yard tractors – see <https://ww2.arb.ca.gov/our-work/programs/clean-off-road-equipment-voucher-incentive-project> for more information.
- Southern California Edison Charge Ready EVSE Program – warehouse, distribution centers, and logistics facilities located within the SCE service territory may be able to take

advantage of the SCE Charge Ready Program. This is an EVSE “make ready” program that provides substantial financial incentives for the installation of electric vehicle charging equipment to support heavy-duty trucks. See <https://www.sce.com/business/electric-cars/charge-ready-transport> for more information regarding this program.

## **SECTION V: PRE-PROPOSAL SUBMITTAL INSTRUCTIONS**

The period of submittal under this PON closes on February 21, 2020, unless extended by the MSRC. Responses should be sent via e-mail to:

Cynthia Ravenstein  
MSRC Contracts Administrator  
[Cynthia@CleanTransportationFunding.org](mailto:Cynthia@CleanTransportationFunding.org)

If you have any questions regarding this Program Opportunity Notice, please direct inquiries to one of the following MSRC staff contacts:

- For **General and Administrative Assistance**, please contact:

Cynthia Ravenstein  
MSRC Contracts Administrator  
Phone: 909-396-3269  
E-mail: [Cynthia@CleanTransportationFunding.org](mailto:Cynthia@CleanTransportationFunding.org)

- For **Technical Assistance**, please contact:

Ray Gorski  
MSRC Technical Advisor  
Phone: 909-396-2479  
E-mail: [Ray@CleanTransportationFunding.org](mailto:Ray@CleanTransportationFunding.org)

## **Section VI: Pre-Proposal Evaluation**

All pre-proposals received in response to this Program Opportunity Notice will be evaluated by a Subcommittee comprised of members of the MSRC Technical Advisory Committee (MSRC-TAC) with respect to a conceptual project’s potential to successfully achieve the objectives of the program as articulated in Section II of this PON.

Based upon this initial evaluation, possible next steps include:

- A request by the MSRC for the submittal of a full proposal for possible sole-source funding consideration;
- A detailed Request for Proposals (RFP) will be issued at a later date;
- Notification that a pre-proposal has been declined from further consideration.

Respondents to this PON should be aware of the following:

- Any future award of MSRC Clean Transportation Funding™ will be predicated on acceptance of the proposal offer and the successful negotiation of a contract with the South Coast AQMD on behalf of the MSRC. Please note that any award of MSRC funding requires the successful proposer to enter into a formal contract with the South Coast AQMD on behalf of the MSRC;
- A specific scope of work for any future contract will be negotiated with the MSRC prior to contract execution;
- The targeted program funding amount is \$20 million; the MSRC reserves the right to increase or decrease this targeted amount at their discretion<sup>4</sup>.

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<sup>4</sup> Please note that the source of MSRC Clean Transportation Funding™ is motor vehicle registration fees collected by the California Department of Motor Vehicles (DMV) in accordance with the California Health and Safety Code. Thus, the availability of MSRC Clean Transportation Funding™ is contingent upon the timely receipt of funds from the DMV. Neither the MSRC nor South Coast AQMD can guarantee the collection or remittance of registration fees by the DMV.

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 10

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the October 2019 outreach activities of the Legislative, Public Affairs and Media Office, which includes Major Events, Community Events/Public Meetings, Environmental Justice Update, Speakers Bureau/Visitor Services, Communications Center, Public Information Center, Business Assistance, Media Relations, and Outreach to Community Groups and Federal, State, and Local Governments.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Wayne Nastri  
Executive Officer

DJA:LTO:DM:jns

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## **BACKGROUND**

This report summarizes the activities of the Legislative, Public Affairs and Media Office for October 2019. The report includes: Major Events; Community Events/Public Meetings; Environmental Justice Update; Speakers Bureau/Visitor Services; Communications Center; Public Information Center; Business Assistance; Media Relations; and Outreach to Community Groups and Governments.

## **MAJOR EVENTS (HOSTED AND SPONSORED)**

Each year South Coast AQMD staff engage in holding and sponsoring a number of major events throughout the South Coast AQMD's four county areas to promote, educate and provide important information to the public regarding reducing air pollution, protecting public health, and improving air quality and the economy.

#### **October 4**

South Coast AQMD held the 31<sup>st</sup> Annual Clean Air Awards at the LA Grand Hotel in downtown Los Angeles to honor those who have made outstanding clean air contributions to the health of our communities and economy. The event was attended by more than 350 guests representing non-profits, academia, industry, and governmental organizations.

#### **COMMUNITY EVENTS/PUBLIC MEETINGS**

Each year South Coast AQMD 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 South Coast AQMD 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;
- South Coast AQMD incentive programs;
- Ways to participate in South Coast AQMD's rules and policy development; and
- Assistance in resolving air pollution-related problems.

South Coast AQMD staff attended and/or provided information and updates at the following events:

#### **October 2**

Staff participated in the newly renamed John V. Denver Park Ribbon Cutting Ceremony & Tree Planting event in Menifee. The event featured a Clean Air Day Proclamation by the City Council and staff to emphasize the importance clean air and sustainability.

#### **October 5**

Staff participated in the 7<sup>th</sup> Annual Route 66 Rendezvous Event in downtown San Bernardino and displayed a hydrogen fuel cell vehicle and electric vehicles. In addition, staff shared information about South Coast AQMD, air quality issues, and clean air cars.

Staff represented South Coast AQMD at the Altadena Clean Air Day Celebration & Family Fair at the Altadena Main Library. Staff provided information on South Coast AQMD, air quality issues, residential incentives, and other programs.

### **October 11-12**

Staff exhibited at the Yucaipa Autumnfest in the Historic Uptown District. The event, which is attended by thousands, features a popular car show. South Coast AQMD staff displayed battery electric cars, provided information on clean air cars, incentive programs and the South Coast AQMD iPhone and Android apps.

### **October 16**

Staff exhibited as sponsor at the Southern California ALTCar Expo at the Riverside Convention Center in downtown Riverside. Staff also participated on a panel titled, “Alternative Technology Infrastructure and Product Investment Opportunities.”

### **October 19**

Staff exhibited at the 14th Annual Taste of Soul Family Festival in Los Angeles. The event is family oriented bringing thousands of attendees to visit the South Coast AQMD booth. Staff provided information on South Coast AQMD, air quality issues, incentive programs, clean air cars, and the South Coast AQMD iPhone and Android apps

## **ENVIRONMENTAL JUSTICE UPDATE**

The following are key environmental justice-related activities in which staff participated throughout the month of October 2019. These events involve communities affected disproportionately from adverse air quality impacts.

### **October 3**

Staff hosted the third Clean Air Ranger Education (CARE) Program to fourth and fifth grade students at Twentieth Street Elementary School in Los Angeles. There were 200 students in attendance. The assembly included information on air pollution, school flag program, South Coast AQMD iPhone and Android apps, demonstration of zero-emission landscaping equipment, and a fun and interactive dry ice experiment. Staff also interacted with over 400 students during their lunch by showing them electric vehicles, zero-emission landscaping equipment, and providing information on ways they can help clean the air.

### **October 17**

Staff held the 10<sup>th</sup> AB 617 Community Steering Committee meeting for the San Bernardino, Muscoy community. Topics for presentation and discussion included truck idling as part of the Community Emissions Reduction Plan (CERP), incentive funding programs for AB 617 projects, air monitoring and a general overview of the CERP.



### **October 23 & 24**

Staff held the 10<sup>th</sup> AB 617 Community Steering Committee meetings on consecutive days for Wilmington, Carson, West Long Beach and East Los Angeles, Boyle Heights, West Commerce, respectively. Topics for presentation and discussion included truck idling as part of the CERP, incentive funding programs for AB 617 projects, air monitoring and a general overview of the CERP.

### **October 29**

Staff participated in the So Cal Forum and Roundtable on SB 1000, the “Healthy Communities Act,” at Community Action Partnership in Riverside. The program included California State Senator Connie Leyva Leaders from the public, private and non-profit sectors representing urban and regional planning, public health and advocacy fields convened to discuss how to effectively implement environmental justice into General Plans as required by SB 1000.

Staff presented to an Urban Pollution class at California State University, Los Angeles regarding environmental justice and air quality concerns in the region. There were 40 students in attendance. Students were also provided information on South Coast AQMD’s internship program.

### **SPEAKERS BUREAU/VISITOR SERVICES**

South Coast AQMD 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. South Coast AQMD also hosts visitors from around the world who meet with staff on a wide range of air quality issues.

### **October 4**

Staff participated in the Honey Hollow Elementary School Science Night in Moreno Valley. The event was attended by over 200 students and their families. Staff provided information on South Coast AQMD, air quality issues and clean air technologies, as well as the South Coast AQMD mobile apps and residential incentive programs.

### **October 24**

Staff presented to seniors at the Ezra Center in Anaheim. The presentation featured information on South Coast AQMD, air quality issues, how to report air quality complaints, incentive programs and the South Coast AQMD iPhone and Android apps.

**October 31**

A group of undergraduate students from Hope International University in Fullerton visited South Coast AQMD. Staff presented information on South Coast AQMD, the history of air pollution, the progress made improving air quality and clean air technologies. The visit also included a tour of the laboratory and clean air vehicles as well as the fueling/charging stations.

**COMMUNICATION CENTER STATISTICS**

The Communication Center handles calls on South Coast AQMD’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 months of October were:

Calls to South Coast AQMD’s Main Line and 1-800-CUT-SMOG® Line	4,406
Calls to South Coast AQMD’s Spanish-language Line	46
Calls to Clean Air Connections	<u>7</u>
Total Calls	4,459

**PUBLIC INFORMATION CENTER STATISTICS**

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

Calls Received by PIC Staff	215
Calls to Automated System	<u>1,305</u>
Total Calls	1,520

Visitor Transactions	279
Email Advisories Sent emails	16,687

**BUSINESS ASSISTANCE**

South Coast AQMD notifies local businesses of proposed regulations so they can participate in the agency’s rule development process. South Coast AQMD 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, as summarized below:

- Provided permit application assistance to 243 companies
- Conducted 7 free on-site consultations
- Processed 72 Air Quality Permit Checklists

Types of businesses assisted:

Auto Body Shops	Gas Stations	Furniture Refinishing Facilities
Auto Repair Centers	Restaurants	Construction Firms
Printing Facilities	Plating Facilities	Architecture Firms
Manufacturing Facilities	Dry Cleaners	Engineering Firms

**MEDIA RELATIONS**

The Media Office handles all South Coast AQMD outreach and communications with television, radio, newspapers and all other publications and media operations.

Total Media Inquiries: 58

Press Releases: 1

Air Quality Advisories Issued: 27

**Major Media Topics for October**

- San Bernardino/Muscoy CERP —The San Bernardino Sun requested information on the San Bernardino/Muscoy CERP.
- Compliance Records — The San Francisco Chronicle requested enforcement documents from 2016 including complaints, inspections, NOVs, etc.
- Warehouse Development — The L.A. Times requested additional information on the development of warehouses near residential areas in the Inland Empire.
- 2019 Smog Season Data — Inland News Today requested 2019 smog season data.
- Chino Hills High School Permit — The Chino Hills Champion asked for clarification about a permit for an emergency generator located at Chino Hills High School.
- Rule 1111 — The Alpine Mountaineer requested information about furnace requirements and compliance in areas with higher altitudes.
- Torres-Martinez in Thermal —The Desert Sun requested information on agricultural burns and permits needed on tribal lands.
- AES Power Plant —The Long Beach Post, The Daily Pilot, and the Long Beach Press Telegram requested information on smoke coming from the AES power plant and NOVs issued.
- Wind/Dust Advisory —The Desert Sun and Southern California News Group asked about wind and dust advisories for Coachella Valley due to the Santa Ana winds.

- CA SIPs and Recent EPA Actions: South Coast AQMD staff was interviewed for Bloomberg's "Parts Per Billion" podcast to discuss recent actions taken by EPA, SIPs, and how goods movement affects air quality. CalMatters also spoke to South Coast AQMD staff about CARB's letter in response to U.S. EPA's claim regarding incomplete SIPs.
- Environmental Spotlight: South Coast AQMD's Executive Officer, Wayne Nastri, will be included in an email interview series for BuzzFeed, Authority Magazine and Thrive Global about "5 things we must do to engage the next generation about sustainability and the environment."
- AB 617: Women's Heart Symposium's Newsletter "Have a Heart, Save A Heart" worked with us to spotlight AB 617 work in an upcoming issue.
- Wildfires and Air Quality in Los Angeles – NBC4, LA Daily News, the LAist, KDOC, Desert Sun, Daily Mail Online, the Weather Channel, Newsweek, the Press-Enterprise, and KPCC inquired about the air quality in the region affected by fires, and were provided information or referred to our smoke advisory.
  - Wildfire Television Interviews: South Coast AQMD staff conducted live interviews with Good Day LA Fox and taped interviews with Fox News, NBC4 and NBC News Now at the West LA monitoring station to discuss our monitoring efforts for the Getty fire. Staff also conducted interviews with KDOC (Carlos and Lisa Show) to discuss the health effects of the fires in the Los Angeles area.
  - Wildfire Radio Interviews: South Coast AQMD staff interviewed with KNX, KCBS, KCIW, and KPCC radio stations on air quality due to the fires. Additional interviews were featured on *Air Talk with Larry Mantle* and *Take Two on KPCC*.
  - Wildfire and Public Health Q&A, print: South Coast AQMD staff participated in an interview with L.A. Times about our monitoring network, how we issue advisories and health effects related to wildfires. This will be included in a Q&A style piece.
- Devils Gate Sediment Project — Outlook Papers requested an update on the project and if additional NOV's had been issued.
- China Shipping — Random Lengths News asked about China Shipping, and the company's Final Supplemental Environmental Impact Report.
- Air Quality Index (AQI) — KPCC reporter sought clarification on the AQI posted on South Coast AQMD's website and real-time smoke conditions in the area.
- Rideshare Programs — LA Business Journal asked about businesses participating in South Coast AQMD program and employee retention when factoring in work commutes.

- AQ-SPEC — South Coast AQMD staff was interviewed by the Washington Post and KQED about AQ-SPEC and how low-cost sensors can be used during wildfires.
- Wind Advisory Coachella Valley — Univision and Eye on the Desert were looking for more information about high PM 10 readings in Coachella Valley.
- Office Security and Protocols — City Watch LA was seeking information on South Coast AQMD’s security and operations procedures.
- The Center Lake Hotel — L.A. Times asked for an update on a previous NOV and settlement agreement.
- CAPCOA 2019 Statistics — L.A. Times asked for the 2019 enforcement numbers submitted to CAPCOA.

### **News Releases and Announcements**

- South Coast AQMD honors clean air heroes—October 4, 2019— Press release issued announcing the winners of the 31<sup>st</sup> annual Clean Air Awards.
- South Coast AQMD Issues Smoke Advisory Due to Sandalwood and Reche Fires in Riverside County - October 10, 2019—Residents were advised of unhealthy smoke conditions due to fire.
- South Coast AQMD Issues Windblown Dust Advisory - October 10, 2019— Advised residents of dust conditions due to wind.
- South Coast AQMD Issues Smoke Advisory Due to Four Fires in Los Angeles and Riverside Counties - October 11, 2019—Residents were notified of smoke conditions due to fire.
- South Coast AQMD Issues Smoke Advisory Due to Saddleridge Fire in Los Angeles County - October 12, 2019—Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Continues Smoke Advisory Due to Saddlebridge Fire in Los Angeles County - October 13, 2019— Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Issues Smoke Advisory Due to a Debris Fire in Coachella Valley - October 15, 2019—Residents were advised of unhealthy smoke conditions due to fire.
- South Coast AQMD Continues Smoke Advisory Due to a Debris Fire in Coachella Valley - October 16, 2019 —Residents were notified of an extended advisory due to smoke conditions.

- South Coast AQMD Extends Smoke Advisory Due to a Debris Fire in Coachella Valley - October 17, 2019 — Advised residents of smoke conditions due to fire.
- South Coast AQMD Extends Smoke Advisory Due to a Debris Fire in City of Thermal - October 18, 2019—Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Extends Smoke Advisory Due to a Debris Fire in City of Thermal - October 19, 2019—Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Extends Smoke Advisory Due to a Debris Fire in City of Thermal - October 20, 2019— Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Extends Smoke Advisory Due to a Debris Fire in City of Thermal - October 21, 2019—Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Extends Smoke Advisory Due to Martinez Debris Fire in City of Thermal - October 22, 2019—Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire - October 23, 2019— Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Issues Smoke Advisory Due to the Tick Fire near Santa Clarita - October 24, 2019 — Residents were notified of smoke conditions due to fire.
- South Coast AQMD Issues Windblown Dust Advisory - October 24, 2019 — Residents were notified of dust and ash conditions.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 24, 2019 — Residents were notified of smoke conditions due to fire.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 25, 2019—Residents were notified of an extended advisory due to smoke conditions.
- South Coast AQMD Continues Smoke Advisory Due to the Tick Fire near Santa Clarita - October 25, 2019— Residents were notified of extended smoke conditions.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 26, 2019— Residents were notified of extended smoke conditions.

- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 27, 2019—Advised residents of smoke advisories.
- South Coast AQMD Issues Smoke Advisory Due to Getty Fire in Brentwood Area - October 28, 2019—Advised residents of smoke conditions due to fire.
- South Coast AQMD Issues Windblown Dust Advisory - October 28, 2019—Advised residents of dust and ash conditions.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 28, 2019—Advised residents of smoke conditions due to fire.
- South Coast AQMD Continues Windblown Dust Advisory - October 29, 2019—Advised residents of wind and dust conditions.
- South Coast AQMD Continues Smoke Advisory Due to Getty Fire in Brentwood Area - October 29, 2019—Advised residents of smoke conditions due to fire.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 29, 2019—Advised residents of smoke conditions due to fire.
- South Coast AQMD Continues Smoke Advisory Due to Getty Fire in Brentwood Area - October 30, 2019—Advised residents of smoke conditions due to fire.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 30, 2019—Advised residents of smoke conditions due to fire.
- South Coast AQMD Issues Smoke Advisory Due to Multiple Wildfires - October 31, 2019—Advised residents of smoke conditions due to fires.
- South Coast AQMD Continues Smoke Advisory Due to Martinez Fire in Thermal - October 31, 2019—Advised residents of smoke conditions due to fire.

**Media/Google Campaign:**

During the month of October, the *Right to Breathe* Google Ads played 3,912,723 times (impressions), received 1,855,709 views (counted when users watch at least 30 seconds of the ad), and were clicked 8,789 times.

**Social Media Notable posts:**

Clean Air Award: Port of Long Beach Academy (October 4): 2,652 Twitter Impressions  
Clean Air Award: SBCOG (October 4): 2,378 Twitter Impressions  
Clean Air Award: Daimler (October 4): 2,374 Twitter Impressions  
Wildfire Safety Tips (October 11): 33,259 Twitter Impressions  
Smoke Advisory (October 11): 38,168 Twitter Impressions  
Smoke Advisory Map (October 11): 22,040 Twitter Impressions  
Smoke Advisory (October 12): 28,599 Twitter Impressions  
Smoke Advisory Map (October 12): 26,484 Twitter Impressions  
Smoke Advisories Discontinued (October 14): 45,786 Twitter Impressions  
Smoke Advisory Update (Oct. 17): 1,245 Twitter Impressions  
SB/Muscoy Stream (Oct. 17): 1,172 Twitter Impressions  
Smoke Advisory Update (Oct. 18): 2,250 Twitter Impressions  
Smoke Advisory Update (Oct. 20): 1,534 Twitter Impressions  
Smoke Advisory Update (Oct. 21): 2,254 Twitter Impressions  
Smoke Advisory Update (Oct. 23): 1,449 Twitter Impressions  
Smoke Advisory Announce (October 28 [Getty Fire]): 7,435 Twitter Impressions  
Smoke Advisory Update (October 29): 8,786 Twitter Impressions  
Windblown Dust Advisory (October 29): 4,990 Twitter Impressions  
Smoke Advisories Update (October 30): 39,986 Twitter Impressions  
Wildfire Tips + App (October 30): 4,831 Twitter Impressions

**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	Glendora	Pomona
Aliso Viejo	Huntington Beach	Rancho Cucamonga
Arcadia	Irwindale	Riverside
Azusa	La Cañada Flintridge	Rosemead
Baldwin Park	La Habra	San Bernardino
Big Bear Lake	La Puente	San Dimas
Buena Park	La Verne	San Gabriel
Claremont	Lake Forest	San Marino
Colton	Los Alamitos	Sierra Madre
Covina	Los Angeles	South El Monte
Cypress	Monrovia	South Pasadena
Diamond Bar	Montclair	Temple City
Duarte	Monterey Park	Walnut
El Monte	Newport Beach	West Covina
Fountain Valley	Ontario	Yucaipa
Garden Grove	Pasadena	



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

- U.S. Representative Paul Cook
- U.S. Representative Lou Correa
- U.S. Representative Judy Chu
- U.S. Representative Harley Rouda
- U.S. Representative Raul Ruiz
- Senator Ben Allen
- Senate President Pro Tempore Toni Atkins
- Senator Maria Elena Durazo
- Senator Connie Leyva
- Senator Mike Morrell
- Senator John Moorlach
- Senator Anthony Portantino
- Senator Ling Ling Chang
- Senator Tom Umberg
- Assembly Member Wendy Carrillo
- Assembly Member Chris Holden
- Assembly Member Sharon Quirk-Silva

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

Active San Gabriel Valley  
Anaheim Chamber of Commerce  
Big Bear Chamber of Commerce  
Bear Valley Business Association  
California Conference of Carpenters  
California Natural Gas Vehicle Coalition  
CalSTART  
California State Council of Laborers  
California Teamsters  
California Trucking Association  
CalFire  
Chino Valley Chamber of Commerce  
Colton Chamber of Commerce  
Colton Public Utilities  
Environmental Defense Fund  
Inland Action, Inland Empire  
Inland Empire Utilities Agency  
International Brotherhood of Electrical Workers (IBEW) Power Professionals  
International Longshore and Warehouse Union  
Jobs to Move America  
Los Angeles Area Chamber of Commerce  
Los Angeles County Board of Supervisors  
Neighborhood Connections, City of Pasadena  
Newport Beach Chamber of Commerce  
Ontario International Airport Authority

Orange County Board of Supervisors  
Orange County Transportation Authority  
Omnitrans, San Bernardino  
Pacific Merchant Shipping Association  
Riverside Public Utilities  
San Bernardino Area Chamber of Commerce  
San Bernardino County Board of Supervisors  
San Bernardino County Transportation Authority  
San Gabriel Valley Council of Governments  
San Gabriel Valley Economic Partnership  
Santa Ana Chamber of Commerce  
Service Employees International Union  
South Pasadena Chamber of Commerce  
Southern California Association of Governments  
Truck and Engine Manufacturers Association  
Valley Industry Commerce Association  
Western Riverside Council of Governments

Staff represented South Coast AQMD and/or provided updates or a presentation to the following community and educational groups and organizations:

Altadenans for Clean Healthy Air  
California State University, Fullerton  
California State University, San Bernardino  
California Teachers Association  
Community Action Plan, Baldwin Hills  
Emanuel Romanian Church of God, Los Angeles  
Huntington Beach Union High School District  
Junior League of Pasadena  
Latino Health Collaborative, Redlands  
Pasadena Neighborhood Connections  
Pasadena Public Library  
Riverside Transportation Agency, Transportation Now  
Santa Ana College  
San Bernardino Valley Community College  
San Gabriel Valley Mountains Regional Conservancy  
Sisters of St Joseph, Orange  
Temple Beth Emet of Burbank  
University of California, Riverside

[↑ Back to Agenda](#)

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 11

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of October 1 through October 31, 2019.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Julie Prussack  
Chairman of Hearing Board

DG

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Two summaries are attached: **October 2019 Hearing Board Cases and Rules From Which Variances and Orders for Abatement Were Requested in 2019**. An index of South Coast AQMD Rules is also attached.

The total number of appeals filed during the period October 1 to October 31, 2019 is 0; and total number of appeals filed during the period of January 1 to October 31, 2019 is 3.

## Report of October 2019 Hearing Board Cases

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. AES Alamos Case No. 5278-1 (K. Manwaring)	401(b)(1) H&S 41701	Relief from opacity limits for portions of commissioning activities.	Not Opposed/Granted	EV granted commencing 10/10/19 and continuing through 11/8/19.	Opacity: TBD by 10/25/19
2. AES Huntington Beach Case No. 5202-5 (K. Manwaring)	401(b)(1) H&S 41701	Relief from opacity limits for portions of commissioning activities.	Not Opposed/Granted	EV granted commencing 10/10/19 and continuing through 11/8/19.	Opacity: TBD by 10/25/19
3. Breitburn Operating LP Case No. 4358-12 (B. Tomasovic)	203(b) 463(c)(3) 1148.1(d)(8)	Petitioner took precautionary measures to curtail operations due to high fire danger.	Not Opposed/Granted	Ex Parte EV granted commencing 10/31/19 and continuing through the end of the red flag/high wind warnings or 11/1/19, whichever comes first.	Benzene: 0.2 lb/day VOC: 22.6 lbs/day
4. Breitburn Operating LP Case No. 4358-13 (B. Tomasovic)	203(b) 463(c)(3) 1148.1(d)(8)	Petitioner took precautionary measures to curtail operations due to high fire danger.	Not Opposed/Granted	Ex Parte EV granted commencing 10/31/19 and continuing through the end of the red flag/high wind warnings or 11/1/19, whichever comes first.	Benzene: 0.07 lb/day VOC: 7.2 lbs/day
5. Browning-Ferris Industries of California Inc., Sunshine Canyon Landfill Case No. 3448-15 (S. Hanizavareh)	1150.1(d)(14) 1150.1(e)(1) 1150.1(e)(2) 1150.1(e)(3) 1150.1(e)(4) 1150.1(e)(7) 1150.1(f)(1)(A) 1150.1(f)(1)(B) 1150.1(f)(1)(C) 1150.1(f)(1)(E) 1150.1(f)(1)(G) 1150.1(f)(1)(L)	Portion of landfill gas collection system destroyed by wildfire, rendering it partially inoperable and in need of repair.	Not Opposed/Granted	Ex Parte EV granted commencing 10/15/19 and continuing for 30 days or until the IV currently scheduled for 10/23/19, whichever comes first. SV scheduled for 10/29/19.	CH4: TBD by 10/23/19 TOC: TBD by 10/23/19 TAC: TBD by 10/23/19
6. Browning-Ferris Industries of California Inc., Sunshine Canyon Landfill Case No. 3448-15 (S. Hanizavareh)	202(a) 203(b) 3002(c)(1)	Emergency generator exceeded permitted annual 200-hour operating limit due to wildfire.	Not Opposed/Granted	Ex Parte EV granted commencing 10/22/19 and continuing for 30 days or until the IV currently scheduled for 10/23/19, whichever comes first. SV scheduled for 10/29/19.	CO: 6.3 lbs/hr NOx: 6.3 lbs/hr PM: 0.2 lb/hr NMOG: 0.7 lb/hr SOx: 0.01 lb/hr

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
7. Browning-Ferris Industries of California Inc., Sunshine Canyon Landfill Case No. 3448-15 (S. Hanizavareh)	203(b) 1110.2(i)(1)(B) 1150.1(d)(10) 1150.1(d)(11) 1150.1(d)(12) 1150.1(d)(14) 1150.1(d)(20) 1150.1(e)(1) 1150.1(e)(2)(B) 1150.1(e)(2)(C) 1150.1(e)(3)(B) 1150.1(e)(3)(C) 1150.1(e)(4) 1150.1(e)(4)(A) 1150.1(e)(4)(B) 1150.1(e)(7) 1150.1(e)(7)(C) 1150.1(f)(1)(A)(iii)(I) 1150.1(f)(1)(B) 1150.1(f)(1)(L) 3002(c)(1)	Portion of landfill gas collection system destroyed by wildfire, rendering it partially inoperable and in need of repair.  Petitioner also lost power to landfill operations as a result of wildfire and needed to run back-up generator beyond annual 200-hour operating limit.	Not Opposed/Granted	IV granted commencing 10/23/19 and continuing for 90 days or until the SV hearing currently scheduled for 10/29/19, whichever comes first.	CO: 6.3 lbs/hr NOx: 6.3 lbs/hr PM: 0.2 lb/hr NMOG: 0.7 lb/hr SOx: 0.01 lb/hr  For landfill gas collection system:  CH4: TBD by 10/29/19 TOC: TBD by 10/29/19 TAC: TBD by 10/29/19

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
8. Browning-Ferris Industries of California, Inc., Sunshine Canyon Landfill Case No. 3448-15 (S. Hanizavareh)	203(b) 1110.2(i)(1)(B) 1150.1(d)(10) 1150.1(d)(11) 1150.1(d)(12) 1150.1(d)(14) 1150.1(d)(20) 1150.1(e)(1) 1150.1(e)(2)(B) 1150.1(e)(2)(C) 1150.1(e)(3)(B) 1150.1(e)(3)(C) 1150.1(e)(4) 1150.1(e)(4)(A) 1150.1(e)(4)(B) 1150.1(e)(7) 1150.1(e)(7)(C) 1150.1(f)(1)(A)(iii)(I) 1150.1(f)(1)(B) 1150.1(f)(1)(L) 3002(c)(1)	Portion of landfill gas collection system destroyed by wildfire, rendering it partially inoperable and in need of repair.  Petitioner also lost power to landfill operations as a result of wildfire and needed to run back-up generator beyond annual 200-hour operating limit.	Not Opposed/Granted	SV granted commencing 10/29/19 and continuing through 1/12/2020.	For generator:  CO: 6.3 lbs/hr NOx: 6.3 lbs/hr PM: 0.2 lb/hr NMOG: 0.7 lb/hr SOx: 0.01 l/hr  For landfill gas collection system:  CH4: TBD by TOC: TBD by TAC: TBD by
9. Carrier Corporation Case No. 6156-1 (M. Reichert)	1111	Manufacturer sought immediate product variance to supply noncompliant furnaces in high-altitude market.	Not Opposed/Granted	IPV granted commencing 10/24/19 and continuing for 90 day or until the RPV hearing currently scheduled for 12/3/19, whichever comes first.	NOx: .001 lb/day per furnace
10. City of Riverside (Tequesquite Landfill) Case No. 6157-1 (M. Reichert)	203(b) 1150.1(d)(8)	Flare at closed landfill was vandalized and relief from operating flare properly was required until a necessary repair part could be received from overseas.	Not Opposed/Granted	Ex Parte EV granted commencing 10/25/19 and continuing for 30 days or until the EV hearing currently scheduled for 10/31/19, whichever comes first.	VOC: 10 lbs/day  Methane: TBD by 12/3/19  TAC: TBD by 12/3/19

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
11. City of Riverside (Tequesquite Landfill) Case No. 6157-1 (S. Hanizavareh)	203(b) 1150.1(d)(8)	Flare at closed landfill was vandalized and relief from operating flare properly was required until a necessary repair part could be received from overseas.	Not Opposed/Granted	EV granted commencing 10/31/19 and continuing for 30 days from the granting of the Ex Parte EV, or upon notification that operation of all equipment for which a variance was granted has been fully restored.	VOC: 10 lbs/day  Methane: TBD by 12/3/19  TAC: TBD by 12/3/19
12. County of San Bernardino – Fleet Management Case No. 6070-4 (B. Tomasovic)	203(b)	Emergency generator exceeded permitted annual 200-hour operating limit due to wildfire.	Not Opposed/Granted	Ex Parte EV granted commencing 10/31/19 and continuing for 30 days or until the SV hearing currently scheduled for 11/21/19, whichever comes first.	CO: 0.02 lb/hr NOx: 0.5 lb/hr PM: 0.03 lb/hr SOx: 0.001 lb/hr VOC: 0.03 lb/hr
13. Goodman Manufacturing Company L.P. Case No. 6155-1 (M. Reichert)	1111	Manufacturer sought immediate product variance to supply noncompliant furnaces in high-altitude market.	Not Opposed/Dismissed	IV dismissed without prejudice.	N/A
14. Goodman Manufacturing Company, L.P. Case No. 6155-1 (M. Reichert)	1111	Manufacturer requested reconsideration by the Hearing Board for an immediate product variance to supply noncompliant furnaces in high-altitude market.	Not Opposed/Granted	IPV granted commencing 10/23/19 and continuing for 90 days or until the RPV hearing currently scheduled for 12/3/19, whichever comes first.	NOx: .001 lb/day per furnace
15. James Hardie Building Products Inc. Case No. 5694-2 (T. Barrera)	203(b) 1146(c)(5)	Petitioner sought to run backup boiler after catastrophic failure of main boiler.	No Position/Dismissed	IV dismissed without prejudice.	N/A
16. Los Angeles County – Internal Services Department Case No. 6127-3 (M. Reichert)	203(b) 3002(c)(1)	Emergency generator exceeded permitted annual 200-hour operating limit due to wildfire.	Not Opposed/Granted	Ex Parte EV granted commencing 10/25/19 and continuing for 30 days or until the SV hearing currently scheduled for 11/12/19, whichever comes first.	CO2: 1075 lbs/day NOx: 29 lbs/day SO2: 2 lbs/day

Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
17. Signal Hill Petroleum Inc. Case No. 2166-19 (S. Hanizavareh)	203(b) 2004(f)(1)	Petitioner sought to operate and repair new turbine which was unexpectedly exceeding the 5ppm NOx permit limit.	Not Opposed/Granted	Ex Parte EV granted commencing 10/15/19 and continuing through until the SV hearing currently scheduled for 11/13/19.	NOx: 20 lbs/day
18. South Coast AQMD vs. City of San Bernardino Municipal Water Department Case No. 6124-2 (N. Feldman)	1196	Require compliance with fleet rules.	Stipulated/Issued	O/A issued commencing 10/3/19 and continuing through 12/15/2023. The Hearing Board shall retain jurisdiction over this matter until 12/15/2023.	N/A
19. South Coast AQMD vs. Climate Industries, Inc. (dba Howard Industries) Case No. 6153-2 (M. Reichert)	1111	Distribution of non-compliant furnace.	Not Stipulated/Issued and found violation to issue non-stipulated Order.	O/A commencing 10/24/19 and continuing through to 2/29/2020. The Hearing Board shall retain jurisdiction over this matter until 2/29/2020.	N/A
20. South Coast AQMD vs. D&D Disposal Inc. dba West Coast Rendering Co. Case No. 3462-4 (D. Hsu)	415(d)(1)(B)(ii) 415 (d)(1)(C)(ii) 415(e)(1) 415 (e)(5) 415(e)(6)	Requested the Board's jurisdiction to extend due to violation of the Order by Respondent.	Not Stipulated/Modified	Mod. O/A issued commencing 10/30/19 and continuing until compliance with the terms of the Order is achieved. The Hearing Board shall retain jurisdiction over this matter until compliance with the terms of the Order is achieved.	N/A
21. South Coast AQMD vs. Weber Metals, Inc. Case No. 6136-1 (D. Hsu)	1430	Respondent sought extension of deadline for installation of final APC device due to unexpected catastrophic failure of the newly designed device.	Stipulated/Modified	Mod. O/A issued commencing 10/30/19 and continuing through 8/31/2020. The Hearing Board shall retain jurisdiction over this matter until 8/31/2020.	N/A



Case Name and Case No. (South Coast AQMD Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
22. The Termo Company Case No. 3014-16 (B. Tomasovic)	203(b) 463(c) 1148.1(d)(8) 1173(d)(1)(B)	Petitioner sought relief from venting gas to atmosphere as a result of the shutdown if Signal Hill's turbine.	Not Opposed/Granted	Ex Parte EV granted commencing 10/23/19 and continuing through until the SV hearing currently scheduled for 11/13/19.	Benzene: TBD by 11/11/19  VOC: TBD by 11/11/19
23. Trane U.S. Inc.(Subsidiary of Ingersoll Rand Company) Case No. 6150-2 (M. Reichert)	1111	Manufacturer sought immediate product variance to supply noncompliant furnaces in high-altitude market.	Not Opposed/Granted	IPV granted commencing 10/23/19 and continuing for 90 days or until the RPV hearing currently scheduled for 11/14/19, whichever comes first.	NOx: .001 lb/day per furnace
24. Union Pacific Railroad Company Case No. 4979-3 (T. Barrera)	401(b) 405(a) H&S 41701	Relief from opacity limits to run antique locomotive through the Basin on commemorative tour.	Not Opposed/Granted	SV granted commencing 10/9/19 and continuing through 10/18/19.	Opacity: TBD by 10/18/19
25. Verizon Wireless Case No. 6139-2 (B. Tomasovic)	203(b)	Two emergency generators exceeded permitted annual 200-hour operating limit due to wildfire.	Not Opposed/Granted	Ex Parte EV granted commencing 10/31/19 and continuing for 30 days or until the SV hearing currently scheduled for 11/21/19, whichever comes first.	CO: 14 lbs/day NOx: 10.5 lbs/day VOC: 10.5 lbs/day

TBD: To be determined  
TOC: Toxic Organic Compounds  
VOC: Volatile Organic Compounds

**Acronyms**

APC: Air Pollution Control  
CO: Carbon Monoxide  
EV: Emergency Variance  
IV: Interim Variance  
IPV: Interim Product Variance  
Mod. O/A: Modification Order for Abatement  
N/A: Not Applicable  
NMOG: Non-Methane Organic Gas  
NOx: Oxides of Nitrogen  
O/A: Order for Abatement  
PM: Particulate Matter  
RV: Regular Variance  
RPV: Regular Product Variance  
SV: Short Variance  
SOx: Oxides of Sulfur  
TAC: Toxic Air Contaminants

Rules from which Variances and Orders for Abatement were Requested in 2019														
	2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Actions
109(c)(1)								1						1
201			1											1
202(a)											1			1
202(c)			1					1						2
203(a)			1		1		1	1		1				5
203(b)		1	3	6	5	7	2	2	2	3	13			44
401(b)											1			1
401(b)(1)											2			2
401(b)(1)(B)									1					1
405(a)											1			1
407								1						1
415(d)(1)(B)(ii)							1				1			2
415(d)(1)(C)(ii)							1				1			2
415(e)(1)							1				1			2
415(e)(5)							1				1			2
415(e)(6)							1				1			2
461(c)(1)(A)			2					1						3
461(c)(2)(A)			2											2
461(c)(3)(P)			2											2
461(e)(5)							1	1						2
463©												1		1
463(c)(2)						2	1							3
463(c)(3)											2			2
463(e)(4)						2	1							3
463(f)(1)(C)						2	1							3
1110.2(d)(1)(F)									1					1
1110.2(d)(1)(L)				1										1
1110.2(h)									1					1
1110.2(i)(1)(B)												2		2
1110.2(i)(1)(J)				1										1
1111												5		5
1111(c)(4)										1				1
1146(c)(5)												1		1
1147			1											1
1147(c)(1)					1								1	2
1148.1(d)(8)												3		3
1150.1(d)(1)(C)(i)							1							1
1150.1(d)(8)												2		2
1150.1(d)(10)												2		2
1150.1(d)(11)												2		2
1150.1(d)(12)												2		2
1150.1(d)(14)												3		3
1150.1(d)(20)												2		2
1150.1(e)(1)												3		3
1150.1(e)(2)												1		1
1150.1(e)(2)(B)												2		2
1150.1(e)(2)(C)												2		2
1150.1(e)(3)												1		1
1150.1(e)(3)(B)												2		2
1150.1(e)(3)(C)												2		2
1150.1(e)(4)												3		3

Rules from which Variances and Orders for Abatement were Requested in 2019

	2019	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Actions
1150.1(e)(4)(A)											2			2
1150.1(e)(4)(B)											2			2
1150.1(e)(7)											3			3
1150.1(e)(7)(C)											2			2
1150.1(f)(1)(A)											1			1
1150.1(f)(1)(A)(iii)(I)											2			2
1150.1(f)(1)(B)											3			3
1150.1(f)(1)(C)											1			1
1150.1(f)(1)(E)											1			1
1150.1(f)(1)(G)											1			1
1150.1(f)(1)(L)											3			3
1150.1(f)(2)(A)								1						1
1158(d)(2)						2	1							3
1173(d)(1)(B)											1			1
1178(d)(2)						2	1							3
1178(g)						1								1
1178(h)(2)						1	1							2
1178(h)(4)			1											1
1196											1			1
1303								1						1
1303(a)								1						1
1303(b)					1									1
1420.2(g)(3)(B)										1				1
1430				1							1			2
1430(d)(8)				1										1
1430(e)(2)								1						1
1470(c)(2)(C)(iv)(I)		1			1	3	2			1				8
2004(f)(1)										1	1			2
2202(a)										1				1
2202(b)										1				1
2202(e)										1				1
2202(i)		1			1	5	2		2	1				12
3002(c)(1)									1		4			5
H&S 41701			1								3			4
H&S 41960.2			1											1

**SOUTH COAST AQMD RULES AND REGULATIONS INDEX  
FOR 2019 HEARING BOARD CASES AS OF OCTOBER 31, 2019**

**REGULATION I – GENERAL PROVISIONS**

Rule 109      Recordkeeping for Volatile Organic Compound Emissions

**REGULATION II – PERMITS**

Rule 201      Permit to Construct  
Rule 202      Temporary Permit to Operate  
Rule 203      Permit to Operate

**REGULATION IV – PROHIBITIONS**

Rule 401      Visible Emissions  
Rule 405      Solid Particulate Matter - Weight  
Rule 407      Liquid and Gaseous Air Contaminants  
Rule 415      Odors from Animal Rendering Facilities  
Rule 461      Gasoline Transfer and Dispensing  
Rule 463      Organic Liquid Storage

**REGULATION XI - SOURCE SPECIFIC STANDARDS**

Rule 1110.2    Emissions from Gaseous- and Liquid-Fueled Engines  
Rule 1111      Reduction of NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces  
Rule 1147      NO<sub>x</sub> Reductions from Miscellaneous Sources  
Rule 1148.1    Oil and Gas Production Wells  
Rule 1150.1    Control of Gaseous Emissions from Municipal Solid Waste Landfills  
Rule 1153.1    Emissions of Oxides of Nitrogen from Commercial Food Ovens  
Rule 1158      Storage, Handling, and Transport of Coke, Coal and Sulfur  
Rule 1178      Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities  
Rule 1196      Clean On-Road Heavy-Duty Public Fleet Vehicles

**REGULATION XIII – NEW SOURCE REVIEW**

Rule 1303      Requirements

**REGULATION XIV – TOXICS**

- Rule 1420.2 Emission Standards for Lead from Metal Melting Facilities
- Rule 1430 Control of Emissions from Metal Grinding Operations at Metal Forging Facilities
- Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Ignition Engines

**REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

- Rule 2004 Requirements

**REGULATION XXII - ON-ROAD MOTOR VEHICLE MITIGATION**

- Rule 2202 On-Road Motor Vehicle Mitigation Options

**REGULATION XXX - TITLE V PERMITS**

- Rule 3002 Requirements

**CALIFORNIA HEALTH AND SAFETY CODE**

- §41701 Restricted Discharges
- §41960.2 Maintenance of Vapor Control System

[↑ Back to Agenda](#)

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 12

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from October 1, 2019 through October 31, 2019, and legal actions filed by the General Counsel's Office from October 1 through October 31, 2019. An Index of South Coast AQMD Rules is attached with the penalty report.

COMMITTEE: Stationary Source, November 15, 2019, Reviewed

RECOMMENDED ACTION:  
Receive and file this report.

Bayron T. Gilchrist  
General Counsel

BTG:ew

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There are no Civil Filings for October 2019

**Attachments**

October 2019 Penalty Report

Index of South Coast AQMD Rules and Regulations

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

**October 2019 Settlement Penalty Report**

<u><b>Total Penalties</b></u>	
<b>Civil Settlements:</b>	<b>\$101,950.00</b>
<b>MSPAP Settlements:</b>	<b>\$33,938.00</b>
<b>Hearing Board Settlements:</b>	<b>\$40,000.00</b>
<b>Total Cash Settlements:</b>	<b>\$175,888.00</b>
<b>Total SEP Value:</b>	<b>\$0.00</b>
<b>Fiscal Year through 10 / 2019 Cash Total:</b>	<b>\$8,528,327.86</b>
<b>Fiscal Year through 10 / 2019 SEP Value Only Total:</b>	<b>\$0.00</b>

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>Civil Settlements</b>						
189661	CARNEVALE & SON CONSTRUCTION, INC	1403	10/25/2019	DH	P67467	\$4,050.00
124805	EXIDE TECHNOLOGIES	221 1420.2	10/4/2019	NSF	P67460	\$10,000.00
157359	HENKEL ELECTRONIC MATERIALS, LLC	2004 2012 3002	10/30/2019	NSF	P66212	\$9,000.00
164214	KIBRIYA ENTERPRISES, INC	461	10/22/2019	WBW	P68114 P68117	\$400.00
189871	LA KINGS VALLEY ICE CENTER	1415.1	10/22/2019	DH	P66964	\$2,500.00
187301	MC NOON CRYSTAL IMPORT INC, M&M ELECTRIC	1403 40 CFR 60, QQQ	10/16/2019	KER	P66290	\$1,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
35302	OWENS CORNING ROOFING AND ASPHALT, LLC	2004	10/23/2019	DH	P63689 P66163	\$1,500.00
156737	PARAMOUNT OIL, INC.	203 461 H&S 41960	10/25/2019	MJR	P64666	\$3,500.00
136	PRESS FORGE CO	402 2004 1430 H&S 41700	10/15/2019	NSF	P62084 P65225 P65229 P65859 P66164 P68304	\$42,500.00
152707	SENTINEL ENERGY CENTER LLC	2004(f)(1) 3002(c)(1)	10/22/2019	KER	P66063	\$7,000.00
189629	SIGNET SM, LLC	1403	10/3/2019	DH	P67466	\$1,500.00
106623	SUPERIOR SUPER WAREHOUSE #106	201 203(a) 1415	10/17/2019	DH	P60699 P63942	\$19,000.00

**Total Civil Settlements: \$101,950.00**



Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>MSPAP Settlements</b>						
186754	ADAME LANDSCAPE INC	203(a)	10/3/2019	GC	P67355	\$600.00
164625	ADVANTAGE MAILING	203 1415	10/17/2019	GC	P65792	\$1,800.00
117435	ALLOY PROCESSING	1469	10/22/2019	GC	P66461	\$500.00
169038	BC TRAFFIC SPECIALIST	403(d)(2)	10/3/2019	GC	P65058	\$1,040.00
129388	BONAKDAR'S CHEVRON/HOSSEIN ENT. INC.	461	10/3/2019	GC	P68108	\$638.00
123702	CALEX ENGINEERING COMPANY	203(a)	10/22/2019	GC	P66773	\$270.00
162886	CELEBRITY CLEANERS	203(b)	10/17/2019	GC	P56746	\$850.00
162886	CELEBRITY CLEANERS	1421	10/17/2019	GC	P56745	\$400.00
117840	CITY OF MONTEBELLO	461(e)(2)	10/17/2019	TF	P63940	\$1,000.00
161604	DYNALECTRIC COMPANY	203	10/3/2019	GC	P67652	\$640.00
169976	FORCE ENVIRONMENTAL INC	1403	10/3/2019	GC	P66459	\$840.00
184544	GOLDEN STATE ENTERPRISES, LLC	461	10/3/2019	GC	P66355	\$600.00
34038	HACIENDA LA PUENTE SCH DIST	461	10/22/2019	GC	P65173	\$850.00
34038	HACIENDA LA PUENTE SCH DIST	461(c)(3)(Q)	10/22/2019	GC	P65855	\$300.00
92863	HARBOR TRUCK BODIES INC	203	10/3/2019	GC	P65176	\$1,360.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
178709	KLONDIKE CONSTRUCTION SERVICES, INC	1403	10/17/2019	TF	P67413	\$2,000.00
95955	MOUNTAIN VIEW USD MADRID JR HIGH SCH				P67415	
11443	LETNER ROOFING CO				P67416	
31727	LA CO., SHERIFF'S DEPT.	461	10/22/2019	TF	P63924	\$800.00
183061	LIMONITE C&C, LLC	461	10/17/2019	TF	P66377	\$400.00
186811	LOYALTY CONSTRUCTION INC	1403	10/17/2019	TF	P66706	\$1,000.00
157743	M & G AUTO BODY	1151	10/22/2019	TF	P63792	\$1,200.00
107149	MARKLAND MANUFACTURING INC	203	10/3/2019	TF	P63099	\$850.00
171258	MURILLO CONSTRUCTION CLEAN UP	1403	10/17/2019	TF	P66421	\$1,000.00
187312	PACIFIC SOUTHWEST BUILDERS INC				P66422	
98196	NICKEY CARDLOCK	461	10/22/2019	TF	P68132	\$750.00
		H&S 41960.2				
143921	PILOT TRAVEL CENTERS, LLC	461	10/17/2019	TF	P67225	\$800.00
158057	POWER TRIP RENTALS	13 CCR 2460	10/3/2019	TF	P68510	\$800.00
143968	RAFIK'S 76 STATION	461	10/3/2019	TF	P67215	\$850.00
157279	ROSE CLEANERS	1421	10/3/2019	TF	P50745	\$500.00
188903	SBR ROOFING	1403	10/22/2019	TF	P67605	\$800.00
189005	ADR PREFERRED BUSINESS PROPERTIES	40 CFR 60, QQQ			P67606	
6069	STEINER CORP	1146	10/22/2019	TF	P63883	\$1,600.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
18606	STEINER CORP, AMERICAN LINEN	1146	10/22/2019	TF	P66826	\$1,600.00
135965	SUNSTATE EQUIPMENT CO. LLC	203(b)	10/22/2019	TF	P69504	\$1,600.00
149045	TRANCAS OIL COMPANY, INC.	461 H&S 41960	10/22/2019	TF	P68409	\$800.00
185750	TRK DEVELOPMENT	403	10/17/2019	TF	P67555	\$800.00
173196	ULTIMATE AUTO BODY	109 203(b) 1151(e)(1) 1171(c)(1)	10/29/2019	TF	P66785	\$2,000.00
183108	URBAN COMMONS LLC EVOLUTION HOSPITALITY	2004	10/17/2019	TF	P66858	\$1,000.00
10534	YORBA LINDA COUNTRY CLUB	203	10/22/2019	TF	P65188	\$300.00
150423	YOSSI 76, JOSSI J SHIMSHI	201 203	10/22/2019	TF	P67224	\$800.00
<b>Total MSPAP Settlements: \$33,938.00</b>						

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>Hearing Board Settlements</b>						
104234	MISSION FOODS CORPORATION	202 203(b) 1153.1 1303	10/22/2019	KCM	5400-4	\$25,000.00
10966	WEBER METALS INC	402 3002 H&S 41700	10/31/2019	DH	6136-1	\$15,000.00
<b>Total Hearing Board Settlements: \$40,000.00</b>						

## **SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX FOR OCTOBER 2019 PENALTY REPORT**

### **REGULATION I - GENERAL PROVISIONS**

Rule 109 Recordkeeping for Volatile Organic Compound Emissions

### **REGULATION II - PERMITS**

Rule 201 Permit to Construct  
Rule 202 Temporary Permit to Operate  
Rule 203 Permit to Operate  
Rule 221 Plans

### **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 1151 Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations  
Rule 1153.1 Emissions of Oxides of Nitrogen from Commercial Food Ovens  
Rule 1171 Solvent Cleaning Operations

### **REGULATION XIII - NEW SOURCE REVIEW**

Rule 1303 Requirements

### **REGULATION XIV - TOXICS**

Rule 1403 Asbestos Emissions from Demolition/Renovation Activities  
Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems  
Rule 1415.1 Reduction of Refrigerant Emissions from Stationary Refrigeration Systems  
Rule 1420.2 Emission Standards for Lead from Metal Melting Facilities  
Rule 1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations  
Rule 1430 Control of Emissions from Metal Grinding Operations at Metal Forging Facilities  
Rule 1469 Hexavalent Chromium Emissions from Chrome Plating and Chromic Acid Anodizing Operations

**REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

Rule 2004 RECLAIM Program Requirements

Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

**REGULATION XXX - TITLE V PERMITS**

Rule 3002 Requirements for Title V Permits

**CALIFORNIA HEALTH AND SAFETY CODE**

41700 Violation of General Limitations

41960 Certification of Gasoline Vapor Recovery System

41960.2 Gasoline Vapor Recovery

**CALIFORNIA CODE OF REGULATIONS**

13 CCR 2460 Portable Equipment Testing Requirements

**CODE OF FEDERAL REGULATIONS**

40 CFR 60, QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater

 [Back to Agenda](#)

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 13

REPORT: Lead Agency Projects and Environmental Documents Received

SYNOPSIS: This report provides a listing of CEQA documents received by the South Coast AQMD between October 1, 2019 and October 31, 2019, and those projects for which the South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, November 15, 2019, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Wayne Nastri  
Executive Officer

PF:SN:JW:LS:JI

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**CEQA Document Receipt and Review Logs (Attachments A and B)** – Each month, the South Coast AQMD receives numerous CEQA documents from other public agencies on projects that could adversely affect air quality. A listing of all documents received during the reporting period October 1, 2019 through October 31, 2019 is included in Attachment A. A list of active projects from previous reporting periods for which South Coast AQMD staff is continuing to evaluate or has prepared comments is included in Attachment B. A total of 61 CEQA documents were received during this reporting period and 33 comment letters were sent.

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 attachment notes proposed projects where the South Coast AQMD has been contacted regarding potential air quality-related environmental justice concerns. The South Coast AQMD has established an internal central contact to receive information on projects

with potential air quality-related environmental justice concerns. The public may contact the South Coast AQMD about projects of concern by the following means: in writing via fax, email, or standard letters; through telephone communication; and as part of oral comments at South Coast AQMD meetings or other meetings where South Coast AQMD staff is present. The attachments also identify, for each project, the dates of the public comment period and the public hearing date, if applicable. 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 was 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 South Coast AQMD'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.

Staff focuses on reviewing and preparing comments for projects: where the South Coast AQMD is a responsible agency; that may have significant adverse regional air quality impacts (e.g. special event centers, landfills, goods movement); that may have localized or toxic air quality impacts (e.g. warehouse and distribution centers); where environmental justice concerns have been raised; and which a lead or responsible agency has specifically requested South Coast AQMD review. If staff provided written comments to the lead agency as noted in the column "Comment Status," there is a link to the "South Coast AQMD 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 October 1, 2019 through October 31, 2019, the South Coast AQMD received 61 CEQA documents. Attachment B lists documents that are ongoing active projects. Of the total of 84 documents listed in Attachments A and B:

- 33 comment letters were sent;
- 31 documents were reviewed, but no comments were made;
- 15 documents are currently under review;
- 0 document did not require comments (e.g., public notices);
- 0 documents were not reviewed; and
- 5 documents were screened without additional review.

(The above statistics are from October 1, 2019 to October 31, 2019, 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 South Coast AQMD’s CEQA webpage at the following internet address:  
<http://www.aqmd.gov/home/regulations/ceqa/commenting-agency>.

**South Coast AQMD Lead Agency Projects (Attachment C)** – Pursuant to CEQA, the South Coast AQMD 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 for action is considered to be a “project” as defined by CEQA. For example, an Environmental Impact Report (EIR) is prepared when the South Coast AQMD, as lead agency, finds substantial evidence that the project may have significant adverse effects on the environment. Similarly, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) may be prepared if the South Coast AQMD determines that the 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 projects will not have a significant adverse effect on the environment and, therefore, do not require the preparation of an EIR.

Attachments C to this report summarizes the active projects for which the South Coast AQMD is lead agency and is currently preparing or has prepared environmental documentation. As noted in Attachment C, the South Coast AQMD continued working on the CEQA documents for three active projects during August.

### **Attachments**

- A. Incoming CEQA Documents Log
- B. Ongoing Active Projects for Which South Coast AQMD Has or Will Conduct a CEQA Review
- C. Active South Coast AQMD Lead Agency Projects

**ATTACHMENT A\***  
**INCOMING CEQA DOCUMENTS LOG**  
**October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Warehouse &amp; Distribution Centers</b> <b>RVC191010-05</b> Plot Plan No. 180022 - Fast Track No. 2017-04	The proposed project consists of construction of 135,054 square feet of warehouse and commercial uses on 56.95 acres. The project is located near the southeast corner of Sky Canyon Drive and Sparkman Way near the community of French Valley. Reference RVC170103-02  Comment Period: 10/2/2019 - 11/5/2019 Public Hearing: 11/5/2019	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>RVC191016-01</b> IDI Rider 2 and 4 Warehouses and Perris Valley Storm Drain Channel Improvement Project	The proposed project consists of construction of two warehouses totaling 1,373,449 square feet and improvements to 3,490 linear feet of an existing storm drain channel on 94.7 acres. The project is located on the southeast corner of Morgan Street and Redlands Avenue. Reference RVC190509-02 and RVC190507-09  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/november/RVC191016-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/november/RVC191016-01.pdf</a>  Comment Period: 10/16/2019 - 11/14/2019 Public Hearing: 11/6/2019	Notice of Preparation	City of Perris	South Coast AQMD staff commented on 11/5/2019
<b>Warehouse &amp; Distribution Centers</b> <b>RVC191023-01</b> Horizon Business Park Warehouse Project (MA181211)	The proposed project consists of construction of a 310,760-square-foot warehouse on 13.9 acres. The project is located on the northwest corner of Etiwanda Avenue and Cantu-Galleano Ranch Road. Reference RVC181205-03  Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Jurupa Valley	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>SBC191001-02</b> Casmalia and Locust Warehousing Project	The proposed project consists of construction of three warehouses totaling 87,189 square feet on 5.13 acres. The project is located on the southwest corner of Casmalia Street and Locust Avenue.  Comment Period: 9/20/2019 - 10/9/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Rialto	Document reviewed - No comments sent

\*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**  
**October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Industrial and Commercial</i> <b>LAC191023-06</b> ENV-2018-7626: 222 Corinth Avenue	The proposed project consists of demolition of 52,506 square feet of existing buildings and construction of a 134,996-square-foot office building on 3.28 acres. The project is located on the southeast corner of Olympic Boulevard and Corinth Avenue in the community of West Los Angeles.  Comment Period: 10/3/2019 - 10/23/2019    Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<i>Industrial and Commercial</i> <b>RVC191001-07</b> MA19203 (PAR19006) Pedley Road	The proposed project consists of construction of a 14,591-square-foot automobile servicing building on 0.77 acres. The project is located on the southwest corner of Pedley Road and 63rd Street.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-07.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-07.pdf</a>  Comment Period: 9/30/2019 - 10/14/2019    Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 10/8/2019
<i>Industrial and Commercial</i> <b>RVC191001-16</b> PM 37746, PP2019-0007, and V2019-0002	The proposed project consists of construction of a 101,690-square-foot industrial building on 4.8 acres. The project is located on the northeast corner of East Grand Boulevard and 3rd Street.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-16.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-16.pdf</a>  Comment Period: 9/25/2019 - 10/10/2019    Public Hearing: 10/10/2019	Site Plan	City of Corona	South Coast AQMD staff commented on 10/8/2019
<i>Industrial and Commercial</i> <b>RVC191015-01</b> MA19211 (CUP199004)	The proposed project consists of construction of a 20,000-square-foot semi-trailer rental and service facility on 17.18 acres. The project is located at 5610 Market Street on the southwest corner of Market Street and Rubidoux Boulevard.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191015-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191015-01.pdf</a>  Comment Period: 10/11/2019 - 10/30/2019    Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 10/22/2019
<i>Industrial and Commercial</i> <b>SBC191001-06</b> Altitude Business Centre Project	The proposed project consists of demolition of 87,000 square feet of residential and agricultural uses and construction of 25 commercial buildings totaling 1,313,000 square feet on 72.9 acres. The project is located on the southeast corner of Kimball Avenue and Euclid Avenue. Reference SBC190501-16 and SBC170519-02  Comment Period: N/A    Public Hearing: 10/7/2019	Final Environmental Impact Report	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 A**  
**INCOMING CEQA DOCUMENTS LOG**  
**October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Waste and Water-related</i> <b>LAC191001-09</b> Southern California Gas Company, Pico Rivera Base Facility	The proposed project consists of modifications to an existing hazardous waste facility permit to include revisions to waste codes. The project is located at 8101 South Rosemead Boulevard near the southwest corner of Rosemead Boulevard and Slauson Avenue within the City of Pico Rivera.  Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>LAC191002-01</b> Rho-Chem LLC	The proposed project consists of modifications to an existing hazardous waste facility permit to include a material handling and packaging procedure. The project is located at 425 Isis Avenue near the southwest corner of Isis Avenue and West Manchester Boulevard within the City of Inglewood. Reference LAC190716-05 and LAC130716-06  Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>LAC191010-02</b> San Pedro Boat Works	The proposed project consists of development of removal actions to clean up, remove, and dispose contaminated soil with metals, total petroleum hydrocarbons, polynuclear aromatic hydrocarbons, and polychlorinated biphenyls on 3.07 acres. The project is located at Berth 44 on the southwest end of Miners Street within the Port of Los Angeles. Reference LAC190321-01  Comment Period: N/A Public Hearing: N/A	Response to Comments	Department of Toxic Substances Control	Document reviewed - No comments sent
<i>Waste and Water-related</i> <b>LAC191023-02</b> Ocean Water Desalination Project	The proposed project consists of construction of an ocean water desalination facility with a capacity ranging from 20 to 60 million gallons per day of potable drinking water, 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 LAC180327-10 and LAC150901-03  Comment Period: N/A Public Hearing: 11/18/2019	Final Environmental Impact Report	West Basin Municipal Water District	Document reviewed - No comments sent

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**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
PROJECT TITLE				
<p><i>Waste and Water-related</i></p> <p><b>ORC191015-04</b> Former Tom's Truck Center</p>	<p>The proposed project consists of development of cleanup actions to excavate, remove, and dispose contaminated soil with lead and total petroleum hydrocarbon on 6.7 acres. The project is located at 639 East 3rd Street on the northwest corner of East 3rd Street and Lacy Street within the City of Santa Ana.</p> <p style="text-align: center;">Comment Period: 10/11/2019 - 11/12/2019      Public Hearing: N/A</p>	Draft Removal Action Workplan	Department of Toxic Substances Control	Document reviewed - No comments sent
<p><i>Waste and Water-related</i></p> <p><b>RVC191010-06</b> Stringfellow Superfund Site</p>	<p>The proposed project consists of development of remedial actions to clean up contaminated groundwater with perchlorate, trichloroethene, and chloroform on 17 acres. The project is located at 3400 Pyrite Street near the northeast corner of Pyrite Street and Granite Hill Drive within the City of Jurupa Valley. Reference RVC181023-09, RVC171025-06, RVC150814-02, and SBC140319-01</p> <p style="text-align: center;">Comment Period: N/A      Public Hearing: 10/23/2019</p>	Community Notice	Department of Toxic Substances Control	Document reviewed - No comments sent
<p><i>Waste and Water-related</i></p> <p><b>SBC191001-17</b> Elder Creek Channel Improvement Project</p>	<p>The proposed project consists of a 700-foot extension of the flood control boundary and improvements to the existing stormwater channels to withstand a 100-year flood event. The project is located along the Elder Creek Channel between Old Greenspot Road and Plunge Creek within the City of Highland. Reference SBC120427-03</p> <p style="text-align: center;">Comment Period: 9/27/2019 - 10/30/2019      Public Hearing: N/A</p>	Mitigated Negative Declaration	County of San Bernardino Department of Public Works	Document reviewed - No comments sent
<p><i>Waste and Water-related</i></p> <p><b>SBC191011-03</b> Huston Creek Waste Water Treatment Plant Dewatering Building and Primary Clarifier Project</p>	<p>The proposed project consists of construction of a 0.7-million-gallon-per-day water clarifier 38 feet in diameter and 15 feet deep, a water holding tank 23 feet in diameter and 15 feet deep, and a 3,468-square-foot building on three acres. The project is located at 24516 Lake Drive near the northeast corner of Lake Drive and Edelweiss Drive in the community of Crestline within San Bernardino County.</p> <p style="text-align: center;">Comment Period: 10/8/2019 - 11/6/2019      Public Hearing: 11/14/2019</p>	Notice of Intent to Adopt a Mitigated Negative Declaration	Crestline Sanitation District	Document reviewed - No comments sent

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SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Transportation</b> <b>LAC191002-03</b> Shoemaker Bridge Replacement Project	The proposed project consists of replacement of an existing 0.4-mile bridge and roadway improvements. The project is located along West Shoreline Drive between the southern end of State Route 710 at the Los Angeles River (Post Mile (PM) 6.0) to the 10th Street off-ramp (PM 6.4) within the City of Long Beach. Reference LAC160407-08  Comment Period: 9/26/2019 - 11/12/2019 Public Hearing: 10/17/2019	Notice of Availability of a Draft Environmental Impact Report/ Environmental Assessment	California Department of Transportation	Document reviewed - No comments sent
<b>Transportation</b> <b>ORC191001-05</b> Superior Avenue Pedestrian and Bicycle Bridge and Parking Lot Project	The proposed project consists of construction of a 280-foot by 16-foot overcrossing bridge, a 65,000-square-foot surface parking lot, and a 0.3-acre park on 3.4 acres. The project is located on the northeast corner of Superior Avenue and Highway 101.  Comment Period: 9/23/2019 - 10/23/2019 Public Hearing: 11/19/2019	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Newport Beach	Document reviewed - No comments sent
<b>Transportation</b> <b>ORC191001-10</b> State Route 55 Improvement Project	The proposed project consists of widening of a 7.3-mile segment of State Route (SR) 55 from four lanes to five lanes between the interchange of Interstate 5 and SR-55 (Post Mile (PM) 10.4) to the interchange of SR-55 and SR-91 (PM R17.9). The project traverses through the cities of Anaheim, Tustin, and Santa Ana in Orange County.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC191001-10.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC191001-10.pdf</a>  Comment Period: 9/30/2019 - 10/30/2019 Public Hearing: 10/16/2019	Negative Declaration	California Department of Transportation	South Coast AQMD staff commented on 10/22/2019
<b>Transportation</b> <b>RVC191011-02</b> County Line Road Transportation Corridor Project	The proposed project consists of construction of 7,084 feet of roadway improvements. The project is located along County Line Road between Park Avenue in the City of Calimesa to Bryant Street in the City of Yucaipa.  Comment Period: 10/11/2019 - 11/12/2019 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Calimesa	Document reviewed - No comments sent

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SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Transportation</i> <b>RVC191022-03</b> Interstate 15 Express Lanes Project Southern Extension	The proposed project consists of construction of 14.5 miles of freeway lanes along Interstate 15 from the intersection of State Route 74 and Central Avenue (Post Mile (PM) 22.3) in the City of Lake Elsinore to Cajalco Road (PM 36.8) in the community of Temescal Valley in Riverside County. Reference RVC160513-04 and RVC150730-09  Comment Period: 10/22/2019 - 11/22/2019      Public Hearing: 11/12/2019	Notice of Preparation	California Department of Transportation	Under review, may submit written comments
<i>Institutional (schools, government, etc.)</i> <b>LAC191009-02</b> Rancho Los Amigos South Campus Project	The proposed project consists of demolition of 105 existing buildings, and construction of three buildings totaling 650,000 square feet and two parking structures totaling 953,750 square feet on a 35-acre portion of 74 acres. The project is located on the southwest corner of Golondrinas Street and Dahlia Street within the City of Downey. Reference LAC170809-05  Comment Period: 10/9/2019 - 11/22/2019      Public Hearing: 10/28/2019	Draft Environmental Impact Report	County of Los Angeles	Under review, may submit written comments
<i>Institutional (schools, government, etc.)</i> <b>ORC191001-08</b> Chet Holifield Federal Building	The proposed project consists of construction of a one-million-square-foot building on 86.5 acres. The project is located on the southeast corner of Avila Road and Alicia Parkway within the City of Laguna Niguel.  Comment Period: 9/23/2019 - 10/21/2019      Public Hearing: 10/2/2019	Notice of Intent to Prepare an Environmental Impact Statement	United States General Services Administration	Document reviewed - No comments sent
<i>Institutional (schools, government, etc.)</i> <b>ORC191015-03</b> EF Education First: International Language Campus	The proposed project consists of construction of a 68,000-square-foot school to accommodate 1,347 students and 85,500 square feet of housing facilities with 627 beds on 6.13 acres. The project is located at 3150 Bear Street on the southeast corner of Bear Street and Interstate 405.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/november/ORC191015-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/november/ORC191015-03.pdf</a>  Comment Period: 10/15/2019 - 11/4/2019      Public Hearing: 11/25/2019	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Costa Mesa	South Coast AQMD staff commented on 11/1/2019

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<b><i>Institutional (schools, government, etc.)</i></b> <b>RVC191011-01</b> Longfellow Elementary School Expansion Project	The proposed project consists of demolition of two residential units, one inn, and 12 portable classrooms. The project will also include construction of three buildings with 12 classrooms and modernization of six buildings. The project is located at 3610 Eucalyptus Avenue on the southwest corner of Sixth Street and Franklin Avenue within the City of Riverside. Reference RVC190703-06 and RVC190102-10  Comment Period: N/A Public Hearing: 11/4/2019	Final Environmental Impact Report	Riverside Unified School District	Document reviewed - No comments sent
<b><i>Medical Facility</i></b> <b>RVC191015-05</b> Kaiser Permanente Moreno Valley Medical Center	The proposed project consists of demolition of 147,200 square feet of existing structures and construction of 1,125,000 square feet of medical service facilities with 460 hospital beds on 30 acres. The project is located at 27300 Iris Avenue on the northwest corner of Iris Avenue and Oliver Street. Reference RVC181127-05  Comment Period: 10/11/2019 - 11/25/2019 Public Hearing: N/A	Draft Environmental Impact Report	City of Moreno Valley	Under review, may submit written comments
<b><i>Medical Facility</i></b> <b>SBC191016-02</b> PROJ-2019-0004	The proposed project consists of construction of a 105,051-square-foot assisted living facility with 109 beds and subterranean parking on 3.16 acres. The project is located at 13225 Serenity Trail near the southeast corner of Serenity Trail and Hillview Drive South.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC191016-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC191016-02.pdf</a>  Comment Period: 10/11/2019 - 10/30/2019 Public Hearing: N/A	Site Plan	County of San Bernardino	South Coast AQMD staff commented on 10/22/2019
<b><i>Retail</i></b> <b>LAC191023-07</b> ENV-2019-5436: 20539 Ventura Boulevard	The proposed project consists of demolition of 49,920 square feet of existing structures and construction of a 140,040-square foot retail building on 2.78 acres. The project is located near the northeast corner of Ventura Boulevard and Premiere Hills Drive in the community of Canoga Park-Winnetka-Woodland Hills-West Hills.  Comment Period: 10/17/2019 - 11/6/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent

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<b>General Land Use (residential, etc.)</b> <b>LAC191001-04</b> 1045 Olive Project	The proposed project consists of demolition of 35,651 square feet of existing structures, and construction of a 751,777-square-foot building with 794 residential units and 12,504 square feet of commercial uses with subterranean parking on 0.96 acres. The project is located on the northwest corner of South Olive Street and West 11th Street in the community of Central City. Reference LAC180522-13 and LAC171221-03  Comment Period: 9/26/2019 - 11/12/2019                      Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> <b>LAC191001-11</b> 340 South Hill Street Equity Residential Mixed-Use Project	The proposed project consists of demolition of an 850-square-foot restaurant, and construction of an 850,000-square-foot building with 428 residential units, commercial and retail uses, and subterranean parking on 0.75 acres. The project is located on the southeast corner of South Hill Street and West 4th Street in the community of Central City. Reference LAC170221-01  Comment Period: 9/26/2019 - 10/28/2019                      Public Hearing: N/A	Sustainable Communities Environmental Assessment	City of Los Angeles	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> <b>LAC191001-12</b> The Arroyo at Monrovia Station Project	The proposed project consists of demolition of 47,112 square feet of existing residential and industrial uses, and construction of 302 residential units totaling 318,612 square feet, and 7,080 square feet of commercial uses with subterranean parking on 2.9 acres. The project is located on the southeast corner of West Evergreen Avenue and South Magnolia Avenue. Reference LAC190528-03  Comment Period: 9/26/2019 - 11/13/2019                      Public Hearing: 11/13/2019	Draft Environmental Impact Report	City of Monrovia	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> <b>LAC191017-01</b> Modera Argyle	The proposed project consists of demolition of 61,816 square feet of existing buildings, and construction of a 237,159-square-foot building with 276 residential units and 27,000 square feet of retail uses with subterranean parking on 1.1 acres. The project is located on the southeast corner of Argyle Avenue and Selma Avenue in the community of Hollywood. Reference LAC190418-04 and LAC170818-04  Comment Period: N/A    Public Hearing: N/A	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent

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SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<p><i>Plans and Regulations</i></p> <p><b>LAC191011-04</b> Monterey Park Focused General Plan Update</p>	<p>The proposed project consists of updates to the General Plan land use element to remove growth control zoning and create land use policies to attract economic and housing development with a planning horizon year of 2040. The project encompasses 4,270 acres and is bounded by Interstate 10 to the north, City of Rosemead to the east, State Route 60 to the south, and Interstate 710 to the west. Reference LAC190611-03 and LAC190416-04</p> <p style="text-align: center;">Comment Period: N/A <span style="float: right;">Public Hearing: 10/28/2019</span></p>	<p style="text-align: center;">Final Environmental Impact Report</p>	<p>City of Monterey Park</p>	<p>Document reviewed - No comments sent</p>
<p><i>Plans and Regulations</i></p> <p><b>LAC191016-05</b> General Plan Land Use and Urban Design Elements Project</p>	<p>The proposed project consists of updates to the City's General Plan Land Use Element and Urban Design Element to guide future development with a planning horizon year of 2040. The project encompasses 50 square miles and is bounded by State Route 91 to the north, Interstate 605 to the east, East Ocean Boulevard to the south, and State Route 47 to the west. Reference LAC190619-06, LAC160913-06, and LAC150519-04</p> <p style="text-align: center;">Comment Period: N/A <span style="float: right;">Public Hearing: 10/17/2019</span></p>	<p style="text-align: center;">Response to Comments</p>	<p>City of Long Beach</p>	<p>Document reviewed - No comments sent</p>

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**ATTACHMENT B\***  
**ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS**  
**OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Goods Movement</b> <b>LAC190905-02</b> Berths 97-109 [China Shipping] Container Terminal Project	Staff provided public comments at the Los Angeles Board of Harbor Commissioners Special Meeting on October 8, 2019 for the proposed project. The proposed project consists of modifications to ten of 52 mitigation measures that were previously approved in the 2008 EIS/EIR, and six of ten modified mitigation measures are related to air quality. The project will also include an increase in the cargo throughput by 147,504 twenty-foot equivalent units (TEUs) from 1,551,000 TEUs to 1,698,504 TEUs in 2030. The project is located at the Port of Los Angeles on the northeast corner of State Route 47 and Interstate 110 in the communities of San Pedro and Wilmington. Reference LAC181002-11, LAC170616-02, LAC150918-02, LAC081218-01, LAC080501-01, LAC060822-02, and LAC170725-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-02.pdf</a> Comment Period: N/A Public Hearing: 10/8/2019	Final Supplemental Environmental Impact Report	City of Los Angeles Harbor Department	South Coast AQMD staff commented on 10/4/2019
<b>Warehouse &amp; Distribution Centers</b> <b>LAC190920-01</b> Bridge Point South Bay II Warehouse Project, Project No. 2017-004820-(2)	The proposed project consists of construction of a 203,877-square-foot warehouse on 8.98 acres. The project is located at 20850 South Normandie Avenue on the southeast corner of South Normandie Avenue and Torrance Boulevard in the community of West Carson. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190920-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190920-01.pdf</a> Comment Period: 9/19/2019 - 10/23/2019 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Los Angeles	South Coast AQMD staff commented on 10/22/2019
<b>Warehouse &amp; Distribution Centers</b> <b>RVC190924-01</b> Barker Logistics LLC EIR Plot Plan PPT190008	The proposed project consists of construction of a 694,630-square-foot warehouse on 31.55 acres. The project is located on the northeast corner of Placentia Avenue and Patterson Street in the community of Mead Valley. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-01.pdf</a> Comment Period: 9/13/2019 - 10/13/2019 Public Hearing: 10/7/2019	Notice of Preparation	County of Riverside	South Coast AQMD staff commented on 10/8/2019
<b>Warehouse &amp; Distribution Centers</b> <b>RVC190924-02</b> San Gorgonio Crossing/Gateway Center Project	This document includes additional air quality and energy analyses in response to the Riverside County Superior Court's decision for the proposed project. The proposed project consists of construction of a 1,823,760-square-foot warehouse on a 140.23-acre portion of 229 acres. This project will also include 84.8 acres of open space. The project is located on the northwest corner of Cherry Valley Boulevard and Vineland Street in the community of Cherry Valley. Reference RVC170921-02, RVC170609-02, RVC170125-04, RVC161129-06, and RVC150113-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-02.pdf</a> Comment Period: 9/20/2019 - 10/23/2019 Public Hearing: N/A	Notice of Preparation	County of Riverside	South Coast AQMD staff commented on 10/22/2019

\*Sorted by Comment Status, followed by Land Use, then County, then date received.  
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SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>Transportation</i> <b>LAC190905-01</b> Westside Purple Line Extension Wilshire/Rodeo Station North Portal Project	The proposed project consists of development of three build alternatives for a transit station ranging from 6,200 square feet to 9,200 square feet. The project is located along Wilshire Boulevard between North Beverly Drive and North Crescent Drive.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-01.pdf</a>  Comment Period: 9/5/2019 - 10/7/2019    Public Hearing: 9/19/2019	Notice of Preparation	City of Beverly Hills	South Coast AQMD staff commented on 10/1/2019
<i>Transportation</i> <b>LAC190911-01</b> SR-110 Arroyo Seco Parkway Safety and Operational Enhancement Project	The proposed project consists of construction of 4.81-mile roadway improvements. The project is located along Arroyo Seco Parkway from Figueroa Street off-ramp (Post Mile (PM) 25.78) within the City of Los Angeles to Orange Grove (PM 30.59) within the City of South Pasadena.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190911-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190911-01.pdf</a>  Comment Period: 9/9/2019 - 10/24/2019    Public Hearing: 9/30/2019	Notice of Preparation	California Department of Transportation	South Coast AQMD staff commented on 10/8/2019
<i>Transportation</i> <b>SBC190924-03</b> BNSF Ono Lead Track Extension Project	The proposed project consists of construction of two rail track segments totaling 4.3 miles along the existing Burlington Northern Santa Fe corridor from the intersection of State Street and University Parkway in the community of Muscoy within San Bernardino County to the intersection of West Fifth Street and North Mt. Vernon Avenue in the City of San Bernardino.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC190924-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC190924-03.pdf</a>  Comment Period: 9/23/2019 - 10/22/2019    Public Hearing: N/A	Notice of Preparation	City of San Bernardino	South Coast AQMD staff commented on 10/22/2019
<i>Institutional (schools, government, etc.)</i> <b>RVC190917-05</b> K-8 STEAM Academy	The proposed project consists of construction of a 124,361-square-foot elementary school with 1,191 classroom seats on 23 acres. The project is located on the northwest corner of Washington Street and Abelia Street in the community of French Valley within Riverside County.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-05.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-05.pdf</a>  Comment Period: 9/18/2019 - 10/18/2019    Public Hearing: 11/2/2019	Negative Declaration	Temecula Valley Unified School District	South Coast AQMD staff commented on 10/16/2019
<i>Retail</i> <b>ORC190919-06</b> Bayside Family Resort Hotel	The proposed project consists of construction of a 201,499-square-foot hotel with 275 rooms and a 5.21-acre surface parking lot on 14.29 acres. The project is located on the northwest corner of Pacific Coast Highway and Jamboree Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190919-06.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190919-06.pdf</a>  Comment Period: 9/16/2019 - 10/16/2019    Public Hearing: 9/25/2019	Notice of Preparation	City of Newport Beach	South Coast AQMD staff commented on 10/8/2019

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SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<i>General Land Use (residential, etc.)</i> <b>LAC190903-02</b> Duarte Station Specific Plan	The proposed project consists of construction of 1,400 residential units, 12,500 square feet of retail uses, and 100,000 square feet of office uses on 19.09 acres. The project is located on the northwest corner of Highland Avenue and Duarte Road. Reference LAC190321-05 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-02.pdf</a> Comment Period: 8/27/2019 - 10/10/2019 Public Hearing: N/A	Subsequent Environmental Impact Report	City of Duarte	South Coast AQMD staff commented on 10/10/2019
<i>General Land Use (residential, etc.)</i> <b>LAC190903-12</b> The Villages at the Alhambra	The proposed project consists of demolition of 93,098 square feet of existing structures and construction of 1,060 residential units totaling 1,357,630 square feet with subterranean parking on 38.38 acres. The project is located on the northwest corner of South Fremont Avenue and West Mission Road. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-12.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-12.pdf</a> Comment Period: 9/3/2019 - 11/1/2019 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Alhambra	South Coast AQMD staff commented on 10/17/2019
<i>General Land Use (residential, etc.)</i> <b>LAC190906-07</b> Rose Hill Courts Redevelopment Project	The proposed project consists of demolition of 82,645 square feet of existing structures, and construction of nine buildings totaling 156,926 square feet with 185 residential units and 6,366 square feet of office uses on 5.24 acres. This project will also include 125,022 square feet of open space. The project is located at 4446 Florizel Street on the southwest corner of Florizel Street and McKenzie Street in the community of El Sereno. Reference LAC180926-03 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190906-07.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190906-07.pdf</a> Comment Period: 9/6/2019 - 10/21/2019 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report/Draft Environmental Impact Statement	City of Los Angeles Housing Authority	South Coast AQMD staff commented on 10/17/2019
<i>General Land Use (residential, etc.)</i> <b>LAC190918-03</b> 8850 Sunset Boulevard Project	The proposed project consists of demolition of 48,450 square feet of existing structures, and construction of a 369,000-square-foot building with 41 residential units and a hotel with 115 rooms with subterranean parking on 39,983 square feet. The project is located on the southwest corner of Sunset Boulevard and Larrabee Street. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190918-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190918-03.pdf</a> Comment Period: 9/19/2019 - 10/25/2019 Public Hearing: 10/10/2019	Notice of Preparation	City of West Hollywood	South Coast AQMD staff commented on 10/8/2019

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



**ATTACHMENT C**  
**ACTIVE SOUTH COAST AQMD LEAD AGENCY PROJECTS**  
**THROUGH OCTOBER 31, 2019**

PROJECT DESCRIPTION	PROPONENT	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 South Coast AQMD requirements to limit the sulfur content of diesel fuels. Litigation regarding the CEQA document was filed. Ultimately, the California Supreme Court concluded that the South Coast AQMD had used an inappropriate baseline and directed the South Coast AQMD 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 South Coast AQMD 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. South Coast AQMD staff has reviewed the responses to comments and provided edits which the consultant is incorporating into the Final EIR.</p>	<p>Environmental Audit, Inc.</p>
<p>Quemetco is proposing to modify existing South Coast AQMD 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) was released for a 56-day public review and comment period from August 31, 2018 to October 25, 2018, and 154 comment letters were received. Two CEQA scoping meetings were held on September 13, 2018 and October 11, 2018 in the community. South Coast AQMD staff is reviewing the comments received.</p>	<p>Trinity Consultants</p>
<p>Tesoro is proposing to revise the project originally analyzed in the Final Environmental Impact Report for the May 2017 Tesoro Los Angeles Refinery Integration and Compliance Project (LARIC) to adjust the construction schedule and to modify its Title V permit to: 1) relocate the propane recovery component of the original project from the Carson Operations Naphtha Isomerization Unit to the Carson Operations C3 Splitter Unit; 2) increase the throughput of the Carson Operations Tank 35; and, 3) update the toxic air contaminant speciation for the six crude oil storage tanks at the Carson crude terminal with additional data.</p>	<p>Tesoro Refining &amp; Marketing Company, LLC (Tesoro)</p>	<p>Addendum to the Final Environmental Impact Report for the May 2017 Tesoro Los Angeles Refinery Integration and Compliance Project (LARIC)</p>	<p>South Coast AQMD staff provided edits to the Revised Draft Addendum.</p>	<p>Environmental Audit, Inc.</p>

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 14

REPORT: Rule and Control Measure Forecast

SYNOPSIS: This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2020.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:  
Receive and file.

Wayne Natri  
Executive Officer

PMF:SN:SR:AK:ZS

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## 2020 MASTER CALENDAR

The South Coast AQMD is required by state law to publish a list of all rules potentially scheduled for consideration during the coming year. The Rule and Control Measure Forecast is expanded for this purpose and includes a list of the proposed and proposed amended rules scheduled for 2020.

The 2020 Master Calendar provides a list of proposed or proposed amended rules for each month, with a brief description, and a notation in the third column indicating if the rulemaking is for the 2016 AQMP, Toxics, Assembly Bill 617 (AB 617) BARCT, AB 617 Community Emission Reduction Plan (CERP), or Other. Projected emission reductions will be determined during rulemaking. The following symbols next to the rule number indicate if the rulemaking will be a potentially significant hearing will reduce criteria pollutants, or is part of the RECLAIM transition.

*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.*

## 2020 MASTER CALENDAR

Month	Title and Description	Type of Rulemaking
<b>January</b>		
102	<p><b>Definition of Terms</b> Proposed Amended Rule 102 will clarify that “South Coast AQMD” is the South Coast Air Quality Management District. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
1100	<p><b>Implementation Schedule for NOx Facilities</b> Proposed Amended Rule 1100 will clarify the definition of “industry-specific category.” <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 BARCT
<b>February</b>		
1107	<p><b>Coating of Metal Parts and Products</b> Proposed Amended Rule 1107 will remove exemptions for certain categories consistent with comments from U.S. EPA. <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
<b>March</b>		
N/A	<p><b>Ports MOU/Potential Regulations</b> The proposed MOUs with the marine ports will implement the facility-based mobile source measure MOB-01 from the 2016 AQMP. In the event an agreement is not reached for an MOU approach with the ports, staff will pursue a regulatory approach. <i>Zorik Pirveysian 909.396.2431; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 CERP
<b>April</b>		
218*# 218.1	<p><b>Continuous Emission Monitoring</b> <b>Continuous Emission Monitoring Performance Specifications</b> Proposed Amended Rules 218 and 218.1 will revise provisions for continuous emissions monitoring systems for non-RECLAIM facilities, and RECLAIM and former RECLAIM facilities that transition to a command-and-control regulatory structure. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
445*	<p><b>Wood Burning Devices (PM 2.5 Contingency)</b> Proposed Amended Rule 445 will include contingency provisions in the event the region fails to attain the PM2.5 federal ambient air quality standards or to meet any reasonable further progress requirements. <i>Tracy Goss 909.396.3106; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 MASTER CALENDAR (Continued)**

<b>Month</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
<b>May</b>		
Reg. III	<b>Fees</b> Proposed amendments to Regulation III will incorporate the Consumer Price Index adjustment to reflect inflation pursuant to Rule 320. Other proposed amendments may be needed to update and add fees associated with existing programs and implementation of new or revised programs. <i>Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	Other
2305 <sup>*+</sup>	<b>Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program</b> Proposed Rule 2305 will reduce and facilitate local and regional emission reductions associated with warehouses and mobile sources attracted to warehouses. <i>Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	AQMP/ AB 617 CERP
<b>June</b>		
1117 <sup>##</sup>	<b>Emissions of Oxides of Nitrogen from Glass Melting Furnaces</b> Proposed Amended Rule 1117 will establish NOx emission limits to reflect Best Available Retrofit Control Technology for glass melting furnaces and will apply to RECLAIM and non-RECLAIM facilities. <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	AQMP/ AB 617 BARCT
1150.3 <sup>*+</sup>	<b>NOx Emission Reductions from Combustion Equipment at Landfills</b> Proposed Rule 1150.3 will establish NOx emission limits for combustion equipment burning biofuels to reflect Best Available Retrofit Control Technology and include monitoring, reporting, and recordkeeping requirements at landfills. <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	AQMP/ AB 617 BARCT
1179.1 <sup>*+</sup>	<b>NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Work Facilities</b> Proposed Rule 1179.1 will establish NOx emission limits for combustion equipment burning biofuels to reflect Best Available Retrofit Control Technology and include monitoring, reporting, and recordkeeping requirements at publicly owned treatment works. <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	AQMP/ AB 617 BARCT

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure



**2020 MASTER CALENDAR (Continued)**

Month	Title and Description	Type of Rulemaking
August		
<p>1147*+ 1147.1*+  1100##</p>	<p><b>NOx Reductions from Miscellaneous Sources</b>  <b>NOx Reductions from Large Miscellaneous Combustion</b>  Proposed Rule 1147.1 will establish NOx emission limits to reflect Best Available Retrofit Control Technology for large miscellaneous combustion sources and will apply to RECLAIM and non-RECLAIM facilities. Proposed Amended Rule 1147 will remove equipment that will be regulated under Proposed Rule 1147.1 and, if needed, revise NOx emission limits to reflect current Best Available Retrofit Control Technology.</p> <p><b>Implementation Schedule for NOx Facilities</b>  Proposed Amended Rule 1100 will establish the implementation schedule for Rule 1147 and 1147.1 equipment at NOx RECLAIM and former NOx RECLAIM facilities.  <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	<p>Other/ AB 617 BARCT</p>
<p>1147*+ 1147.2*+  1100*#</p>	<p><b>NOx Reductions from Miscellaneous Sources</b>  <b>NOx Reductions from Metal Melting and Heat Treating Furnaces</b>  Proposed Rule 1147.2 will establish NOx emission limits to reflect Best Available Retrofit Control Technology for metal melting and heat treating furnaces and will apply to RECLAIM and non-RECLAIM facilities. Proposed Amended Rule 1147 will remove equipment that will be regulated under Proposed Rule 1147.2.</p> <p><b>Implementation Schedule for NOx Facilities</b>  Proposed Amended Rule 1100 will establish the implementation schedule for Rule 1147 and 1147.2 equipment at NOx RECLAIM facilities that are transitioning to command-and-control.  <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	<p>AQMP/ AB 617 BARCT</p>

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 MASTER CALENDAR (Continued)**

<b>Month</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
<b>August</b> (Continued)		
442.1 1107 1124 1136 1145 1171	<p><b>Usage of Solvent Coating of Metal Parts and Products Aerospace Assembly and Component Manufacturing Operations Wood Products Coatings Plastic, Rubber, Leather, and Glass Coatings Solvent Cleaning Operations</b></p> <p>Proposed Rule 442.1 will prohibit the sale, distribution, and application of materials that do not meet the VOC limits specified in Regulation XI rules. Proposed amendments may also be needed to prohibit circumvention of VOC limits in Rules 1107, 1124, 1136, 1145, and 1171.</p> <p><i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
<b>September</b>		
1109*+## 1109.1*+##	<p><b>Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries Reduction of Emissions of Oxides of Nitrogen from Refinery Equipment</b></p> <p>Proposed Rule 1109.1 will establish NOx emission limits to reflect Best Available Retrofit Control Technology for NOx emitting equipment at petroleum refineries and related operations, and include monitoring, reporting, and recordkeeping requirements. Rule 1109 is proposed to be rescinded.</p> <p><i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 BARCT/ AB 617 CERP
<b>October</b>		
1450*	<p><b>Control of Methylene Chloride Emissions</b></p> <p>Proposed Rule 1450 will reduce methylene chloride emissions from furniture stripping and establish monitoring, reporting, and recordkeeping requirements.</p> <p><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; and Socio: Ian MacMillan 909.396.3244</i></p>	Toxics

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 MASTER CALENDAR (Continued)**

<b>Month</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
<b>October</b> (Continued)		
1469.1*	<b>Spraying Operations Using Coatings Containing Chromium</b> Proposed Amended Rule 1469.1 will establish additional requirements to address hexavalent chromium emissions from spraying operations using chromium primers or coatings. <i>Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	Toxics/ AB 617 CERP
<b>November</b>		
1407.1*	<b>Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations</b> Proposed Rule 1407.1 will establish requirements to reduce point source and fugitive toxic air contaminant emissions from metal melting operations. <i>Michael Morris 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	Toxics/ AB 617 CERP
1435*	<b>Control of Emissions from Metal Heat Treating Processes</b> Proposed Rule 1435 will establish requirements to reduce point source and fugitive toxic air contaminants including hexavalent chromium emissions from heat treating processes. Proposed Rule 1435 will also include monitoring, reporting, and recordkeeping requirements. <i>Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	Toxics/ AB 617 CERP
<b>December</b>		
1147*+ 1147.3*+ #	<b>NOx Reductions from Miscellaneous Sources</b> <b>NOx Reductions for Equipment at Aggregate Facilities</b> Proposed Rule 1147.3 will establish NOx emission limits to reflect Best Available Retrofit Control Technology for NOx equipment at aggregate facilities and will apply to RECLAIM and non-RECLAIM facilities. Proposed Amended Rule 1147 will remove equipment that will be regulated under Proposed Rule 1147.3. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244</i>	AQMP/ AB 617 BARCT
1426*	<b>Reduction of Toxic Air Contaminants from Metal Finishing Operations</b> Proposed amendments to Rule 1426 will establish requirements to reduce nickel, cadmium, hexavalent chromium, and other air toxics from plating and related operations. Proposed Amended Rule 1426 will establish requirements to control point source and fugitive toxic air contaminant emissions. <i>Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i>	Toxics/ AB 617 CERP

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 MASTER CALENDAR (Continued)**

Month	Title and Description	Type of Rulemaking
December (Continued)		
2202*	<p><b>On-Road Motor Vehicle Mitigation Options</b>                      Proposed Amended Rule 2202 will streamline implementation for regulated entities, as well as reduce review and administration time for South Coast AQMD staff. Concepts may include program components to facilitate achieving average vehicle ridership (AVR) targets.  <i>Carol Gomez 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
Reg. XXIII*+	<p><b>Facility-Based Mobile Sources</b>                      Proposed rules within Regulation XXIII would reduce emissions from indirect sources (e.g., mobile sources that visit facilities). The rule or set of rules that would be brought for Board consideration would reduce emissions from railyards.  <i>Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176 Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ Toxics/ AB 617 CERP

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

## 2020 To-Be-Determined

2020	Title and Description	Type of Rulemaking
209	<p><b>Transfer and Voiding of Permits</b> Staff may propose amendments to clarify requirements for change of ownership and permits and the assessment of associated fees. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
219	<p><b>Equipment Not Requiring a Written Permit Pursuant to Regulation II</b> Proposed Amended Rule 219 will add or revise equipment not requiring a written permit. <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
222	<p><b>Filing Requirements for Specific Emission Sources Not Requiring a Written Permit Pursuant to Regulation II</b> Proposed Amended Rule 222 will add or revise equipment subject to filing requirements. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
223	<p><b>Emission Reduction Permits for Large Confined Animal Facilities</b> Proposed Amended Rule 223 will seek additional ammonia emission reductions from large confined animal facilities by lowering the applicability threshold. Proposed amendments will implement BCM-04 in the 2016 AQMP. <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
407 <sup>#</sup>	<p><b>Liquid and Gaseous Air Contaminants</b> Proposed Amended Rule 407 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT
425	<p><b>Odors from Cannabis Processing</b> Proposed Rule 425 will establish requirements for control of odors from cannabis processing. <i>Tracy Goss 909.396.3106; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
431.1 <sup>#</sup>	<p><b>Sulfur Content of Gaseous Fuels</b> Proposed Amended Rule 431.1 will assess exemptions, including RECLAIM, and update other provisions, if needed. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT/ AB 617 CERP
431.2 <sup>#</sup>	<p><b>Sulfur Content of Liquid Fuels</b> Proposed Amended Rule 431.2 will assess exemptions, including RECLAIM, and update other provisions, if needed. <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT/ AB 617 CERP

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

## 2020 To-Be-Determined (Continued)

2020	Title and Description	Type of Rulemaking
431.3 <sup>#</sup>	<p><b>Sulfur Content of Fossil Fuels</b>  Proposed Amended Rule 431.3 will assess exemptions, including RECLAIM, and update other provisions, if needed.  <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT/ AB 617 CERP
461	<p><b>Gasoline Transfer and Dispensing</b>  Proposed Amended Rule 461 will reflect information from CARB, corrections, revisions, and additions to improve the effectiveness, enforceability, and clarity of the rule.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ Toxics
462	<p><b>Organic Liquid Loading</b>  Proposed Amended Rule 462 will incorporate the use of advanced techniques to detect fugitive emissions and Facility Vapor Leak. Other amendments may be needed to streamline implementation and add clarity.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
463	<p><b>Organic Liquid Storage</b>  Proposed Amended Rule 463 will address the current test method and improve the effectiveness, enforceability, and clarity of the rule. Proposed amendments may also be needed to ensure consistency with Rule 1178.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
468 <sup>#</sup>	<p><b>Sulfur Recovery Units</b>  Proposed Amended Rule 468 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT
469 <sup>#</sup>	<p><b>Sulfuric Acid Units</b>  Proposed Amended Rule 469 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT
1101 <sup>#</sup>	<p><b>Secondary Lead Smelters/Sulfur Oxides</b>  Proposed Amended Rule 1101 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

## 2020 To-Be-Determined (Continued)

2020	Title and Description	Type of Rulemaking
1105 <sup>#</sup>	<p><b>Fluid Catalytic Cracking Units SO<sub>x</sub></b>  Proposed Amended Rule 1105 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT/ AB 617 CERP
1110.2 <sup>*+##</sup>	<p><b>Emissions from Gaseous - and Liquid-Fueled Engines</b>  Proposed amendments may be needed for Rule 1110.2 to incorporate possible comments by U.S. EPA for approval in the SIP and/or to address use of emergency standby engines for Public Safety Power Shutoff programs.  <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 BARCT
1111	<p><b>Reduction of NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces</b>  Proposed amendments may be needed for Rule 1111 to address furnaces used in high altitude areas and/or weatherized furnaces.  <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
1113	<p><b>Architectural Coatings</b>  Amendments may be needed to clarify applicability of the rule with respect to distribution.  <i>Dave DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
1118 <sup>*</sup>	<p><b>Control of Emissions from Refinery Flares</b>  Proposed Amended Rule 1118 will revise provisions to further reduce flaring. The AB 617 Community Emission Reduction Plan has an emission reduction target to reduce flaring by 50 percent if feasible.  <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 CERP
1119 <sup>#</sup>	<p><b>Petroleum Coke Calcining Operations – Oxides of Sulfur</b>  Proposed Amended Rule 1119 will update SO<sub>x</sub> emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 BARCT/ AB 617 CERP
1121 <sup>*</sup>	<p><b>Control of Nitrogen Oxides from Residential Type, Natural-Gas-Fired Water Heaters</b>  Proposed amendments may be needed further reduce NO<sub>x</sub> emissions from water heaters.  <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

## 2020 To-Be-Determined (Continued)

2020	Title and Description	Type of Rulemaking
1133.3	<p><b>Emission Reductions from Greenwaste Composting Operations</b>  Proposed Amended Rule 1133.3 will seek additional VOCs and ammonia emission reductions from greenwaste and foodwaste composting. Proposed amendments will implement BCM-10 in the 2016 AQMP.</p> <p><i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
1134	<p><b>Emissions of Oxides of Nitrogen from Stationary Gas Turbines</b>  Proposed Amended Rule 1134 will revise monitoring, reporting, and recordkeeping provisions to reflect amendments to Proposed Amended Rules 218 and 218.1 and possibly other amendments to address comments from U.S. EPA and to streamline implementation.</p> <p><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 BARCT
1135	<p><b>Emissions of Oxides of Nitrogen from Electricity Generating Facilities</b>  Proposed Amended Rule 1135 will revise monitoring, reporting, and recordkeeping provisions to reflect amendments to Proposed Amended Rules 218 and 218.1 and possibly other amendments to address comments from U.S. EPA.</p> <p><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 BARCT
1138	<p><b>Control of Emissions from Restaurant Operations</b>  Proposed Amended Rule 1138 will further reduce emissions from char boilers.</p> <p><i>Tracy Goss 909.396.3106; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
1142	<p><b>Marine Tank Vessel Operations</b>  Proposed Amended Rule 1142 will address VOC and hydrogen sulfide emissions from marine tank vessel operations and provide clarifications.</p> <p><i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
1146 <sup>#</sup>	<p><b>Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters</b>  Proposed amendments to Rule 1146 may be needed to clarify provisions for industry-specific categories and to incorporate comments from U.S. EPA.</p> <p><i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other

\* Potentially significant hearing

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# Part of the transition of RECLAIM to a command-and-control regulatory structure



**2020 To-Be-Determined (Continued)**

2020	Title and Description	Type of Rulemaking
1146.1 <sup>#</sup>	<p><b>Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters</b></p> <p>Proposed amendments to Rule 1146.1 may be needed to clarify provisions for industry-specific categories and to incorporate comments from U.S. EPA.</p> <p><i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
1146.2 <sup>#</sup>	<p><b>Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters</b></p> <p>Proposed Amended Rule 1146.2 will be revised to lower the NO<sub>x</sub> emission limit to reflect Best Available Retrofit Control Technology.</p> <p><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP/ AB 617 BARCT
1148.1 <sup>*</sup>	<p><b>Oil and Gas Production Wells</b></p> <p>Proposed Amended Rule 1148.1 will evaluate exemptions under Rule 463 to harmonize implementation for low producers. Other proposed amendments may be needed to further reduce emissions from operations, implement early leak detection, odor minimization plans, and enhanced emissions and chemical reporting from oil and drilling sites consistent with the AB 617 Community Emission Reduction Plan.</p> <p><i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other/ AB 617 CERP
1148.2	<p><b>Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers</b></p> <p>Proposed amendments to Rule 1148.2 may be needed to improve notifications of well working activities to the community.</p> <p><i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other/ AB 617 CERP
1166	<p><b>Volatile Organic Compound Emissions from Decontamination of Soil</b></p> <p>Proposed Amended Rule 1166 will update requirements, specifically concerning notifications and usage of mitigation plans (site specific versus various locations).</p> <p><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other

\* Potentially significant hearing

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# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 To-Be-Determined (Continued)**

2020	Title and Description	Type of Rulemaking
1173	<p><b>Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants</b>                      Proposed revisions to Rule 1173 are being considered based on recent U.S. EPA regulations and CARB oil and gas regulations and revisions to improve the effectiveness, enforceability, and clarity of the rule. Other proposed amendments may be needed to further reduce emissions from operations, implement early leak detection, odor minimization plans, and enhanced emissions and chemical reporting from oil and drilling sites consistent with the AB 617 Community Emission Reduction Plan.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other/ AB 617 CERP
1176	<p><b>VOC Emissions from Wastewater Systems</b>                      Proposed Amended Rule 1176 will clarify the applicability of the rule to include bulk terminals under definition of "Industrial Facilities," and streamline and clarify provisions.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other/ AB 617 CERP
1178	<p><b>Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities</b>                      Proposed Amended Rule 1178 will incorporate the use of more advanced detection methods for earlier leak detection and improve leak detection and repair programs for storage tanks to further reduce VOC emissions. Proposed amendments will implement one of the actions in the AB 617 Community Emission Reduction Plan.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AB 617 CERP
1180	<p><b>Refinery Fenceline and Community Air Monitoring</b>                      Revisions to Rule 1180 could be considered to clarify applicability including modification or removal of the threshold exemption for petroleum refineries from the requirements of the rule.  <i>Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
1403*	<p><b>Asbestos Emissions from Demolition/Renovation Activities</b>                      Proposed Amended Rule 1403 will enhance implementation, improve rule enforceability, and align provisions with the applicable U.S. EPA National Emission Standard for Hazardous Air Pollutants (NESHAP) and other state and local requirements as necessary.  <i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics

\* Potentially significant hearing

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# Part of the transition of RECLAIM to a command-and-control regulatory structure

## 2020 To-Be-Determined (Continued)

2020	Title and Description	Type of Rulemaking
1415 1415.1	<p><b>Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems, and Reduction of Refrigerant Emissions from Stationary Refrigeration Systems</b></p> <p>Proposed Amended Rules 1415 and 1415.1 will align requirements with the proposed CARB Refrigerant Management Program and U.S. EPA's Significant New Alternatives Policy Rule provisions relative to prohibitions on specific hydrofluorocarbons.</p> <p style="text-align: center;"><i>David De Boer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Other
1420	<p><b>Emissions Standard for Lead</b></p> <p>Proposed Amended Rule 1420 will update requirements to address arsenic emissions to close a regulatory gap between Rule 1420 and Rule 1407 - Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations.</p> <p style="text-align: center;"><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics
1420.2	<p><b>Emission Standards for Lead from Metal Melting Facilities</b></p> <p>Proposed Amended Rule 1420.2 will update requirements to address arsenic emissions to close a regulatory gap between Rule 1420 and Rule 1407 - Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations.</p> <p style="text-align: center;"><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics
1445	<p><b>Control of Toxic Emissions from Laser Arc Cutting</b></p> <p>Proposed Rule 1445 will establish requirements to reduce toxic metal particulate emissions from laser arc cutting.</p> <p style="text-align: center;"><i>TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics
1469*	<p><b>Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations</b></p> <p>Proposed amendments to Rule 1469 may be needed to address use of chemical fume suppressants or other implementation issues.</p> <p style="text-align: center;"><i>Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics
1470	<p><b>Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines</b></p> <p>Proposed Amended Rule 1470 will establish additional provisions to reduce the exposure to diesel particulate from new and existing small (<math>\leq 50</math> brake horsepower) diesel engines located near sensitive receptors. Proposed amendments may be needed to address use of engines during Public Safety Power Shutoffs.</p> <p style="text-align: center;"><i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics

\* Potentially significant hearing

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# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 To-Be-Determined (Continued)**

2020	Title and Description	Type of Rulemaking
1472	<p><b>Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines</b>  Proposed Amended Rule 1472 will remove provisions that are no longer applicable, update and streamline provisions, and assess the need for a Compliance Plans.  <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	Toxics
1480	<p><b>Toxics Monitoring</b>  Proposed amendments to Rule 1480 may be needed to remove fee provisions if they are incorporated in Regulation III.  <i>Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244</i></p>	Toxics/ AB 617 CERP
Reg. XIII <sup>*#</sup>	<p><b>New Source Review</b>  Proposed Amended Regulation XIII will revise New Source Review provisions to address facilities that are transitioning from RECLAIM to a command-and-control regulatory structure. Staff may be proposing a new rule within Regulation XIII to address offsets for facilities that transition out of RECLAIM.  <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP
Reg. XX <sup>*#</sup>	<p><b>RECLAIM</b>  Proposed Amended Regulation XX will address the transition of RECLAIM facilities to a command and control regulatory structure  <i>Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244</i></p>	AQMP

\* Potentially significant hearing

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# Part of the transition of RECLAIM to a command-and-control regulatory structure

**2020 To-Be-Determined (Continued)**

<b>2020</b>	<b>Title and Description</b>	<b>Type of Rulemaking</b>
<p>Reg. II, IV, XIV, XI, XIX, XXIII, XXIV, XXX and XXXV</p>	<p>Various rule amendments may be needed to meet the requirements of state and federal laws, implement OEHHA’s 2015 revised risk assessment guidance, changes from OEHHA to new or revised toxic air contaminants or their risk values, address variance issues/technology-forcing limits, to abate a substantial endangerment to public health or additional reductions to meet SIP short-term measure commitments. The associated rule development or amendments include, but are not limited to, South Coast AQMD existing, or new rules to implement the 2012 or 2016 AQMP measures. This includes measures in the 2016 AQMP to reduce toxic air contaminants or reduce exposure to air toxics from stationary, mobile, and area sources. Rule adoption or 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 adoption or amendments may be needed to implement AB 617 including but not limited to BARCT rules, Community Emission Reduction Plans prepared pursuant to AB 617, or new or amended rules to abate a public health issue identified through ambient monitoring.</p>	<p>Other/ AQMP/ Toxics/ AB 617 BARCT/ AB 617 CERP</p>

\* Potentially significant hearing

+ Reduce criteria air contaminants and assist toward attainment of ambient air quality standards

# Part of the transition of RECLAIM to a command-and-control regulatory structure

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 15

REPORT: Annual Audited Financial Statements for FY Ended June 30, 2019

SYNOPSIS: This item transmits the annual audited financial statements of the South Coast AQMD. The South Coast AQMD has received an unmodified opinion (the highest obtainable) on its financial statements.

COMMITTEE: Administrative, November 8, 2019, Reviewed

**RECOMMENDED ACTION:**

Receive and file the South Coast AQMD's Comprehensive Annual Financial Report (CAFR) and Single Audit Reports for the FY ended June 30, 2019.

Wayne Natri  
Executive Officer

SJ:tm

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**Background**

The audit of the South Coast AQMD financial statements, along with the Single Audit Reports for the Fiscal Year ended June 30, 2019, have been completed by BCA Watson Rice, LLP. South Coast AQMD has received an unmodified opinion on its financial statements. An unmodified opinion is the highest obtainable, assuring interested parties that South Coast AQMD's financial statements fairly present the agency's financial position.

**Attachments**

- The Comprehensive Annual Financial Report (CAFR), which includes the Independent Auditor's Report, was previously provided to Board Members and will be available at South Coast AQMD's library or website at <http://www.aqmd.gov/home/about/finance>.
- Single Audit Reports that include Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with Government Auditing Standards, Independent Auditor's Report on Compliance with Each Major Federal Program; Report on Internal Control over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance. Copies were previously provided to Board Members and will be available at South Coast AQMD's library or website at <http://www.aqmd.gov/home/about/finance>.



# Comprehensive Annual Financial Report

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Year Ended June 30, 2019

South Coast Air Quality Management District  
Diamond Bar, California



## **MISSION STATEMENT**

South Coast AQMD's mission is to clean the air and protect the health of all residents in the South Coast Air District through practical and innovative strategies.



*South Coast*  
*Air Quality Management District*

Diamond Bar, California

Comprehensive Annual Financial Report  
Year Ended June 30, 2019

Prepared by:  
Finance Office  
Sujata Jain, Assistant Deputy Executive Officer

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***SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT***

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Comprehensive Annual Financial Report  
Year Ended June 30, 2019

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**Table of Contents**

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**PAGE**

**INTRODUCTORY SECTION**

Governing Board.....	i
Letter of Transmittal .....	ii
Government Finance Officers Association Certificate of Achievement for Excellence in Financial Reporting .....	ix
Organizational Chart.....	x

**FINANCIAL SECTION**

Independent Auditor's Report.....	1
Management's Discussion and Analysis .....	4

Basic Financial Statements:

Government-wide Financial Statements:

Statement of Net Position .....	21
Statement of Activities.....	22

Fund Financial Statements:

Governmental Funds:

Balance Sheet.....	23
Reconciliation of the Governmental Funds Balance Sheet to the Government-wide Statement of Net Position .....	24
Statement of Revenues, Expenditures, and Changes in Fund Balances .....	25
Reconciliation of the Governmental Funds Statement of Revenues, Expenditures, and Changes in Fund Balances to the Government-wide Statement of Activities.....	26

Fiduciary Funds:

Statement of Fiduciary Net Position.....	27
Statement of Changes in Fiduciary Net Position.....	28

Notes to the Basic Financial Statements .....	29
---	----

## Table of Contents

---

### Required Supplementary Information:

General Fund – Budget and Actual (Non-GAAP Budgetary Basis) Schedule .....	72
Schedule of South Coast AQMD's Proportionate Share of Net Pension Liability – Last 10 Fiscal Years .....	73
Schedule of South Coast AQMD's Contributions – Pensions – Last 10 Fiscal Years .....	74
Schedule of South Coast AQMD's Proportionate Share of Net OPEB Liability – Last 10 Fiscal Years .....	75
Schedule of South Coast AQMD's Contributions – OPEB – Last 10 Fiscal Years ...	76
Notes to Required Supplementary Information .....	77

### Other Supplementary Information:

Non-major Governmental Funds .....	79
Combining Balance Sheet.....	86
Combining Statement of Revenues, Expenditures, and Changes in Fund Balance .....	95
Combining Statement of Changes in Assets and Liabilities – Agency Funds....	104

### STATISTICAL SECTION:

Schedule 1 – Net Position by Component – Last Ten Fiscal Years (accrual basis of accounting) .....	105
Schedule 2 – Changes in Net Position – Last Ten Fiscal Years – (accrual basis of accounting) .....	106
Schedule 3 – Fund Balances of Governmental Funds – Last Ten Fiscal Years – (modified accrual basis of accounting).....	108
Schedule 4 – Changes in Fund Balances of Governmental Funds – Last Ten Fiscal Years – (modified accrual basis of accounting).....	109
Schedule 5 – Expenditures by Major Object – General Fund (Budgetary Basis) – Last Ten Fiscal Years.....	110
Schedule 6 – Expenditures by Major Object – General Fund (GAAP Basis) – Last Ten Fiscal Years.....	111
Schedule 7 – Debt Capacity – Ratios of Outstanding Debt by Type – Last Ten Fiscal Years – (amounts expressed in thousands) .....	112
Schedule 8 – Revenues by Major Source – General Fund – Last Ten Fiscal Years.....	113
Schedule 9 – Revenues by Fee Source – General Fund – Last Ten Fiscal Years .....	114
Schedule 10 – Emission Fee Revenues – Last Ten Fiscal Years .....	115
Notes Associated with Financial Charts .....	116
Schedule 11 – Revenue Capacity – Largest Payers of Emission-Based Fees at a Single Location – Current Year and Ten Years Ago.....	119
Key Air Quality and Demographic Information Regarding the Region Included in the South Coast Air Quality Management District .....	120

## Table of Contents

---

Schedule 12 – South Coast Air Basin Smog Trend – Last Ten Calendar Years .....	121
Schedule 13 – Four-County Area Population – Last Ten Calendar Years .....	122
Schedule 14 – Los Angeles, Orange, Riverside, San Bernardino Counties, and State of California Civilian Employment – Last Ten Calendar Years .....	123
Schedule 15 – Vehicle Registrations (Automobiles and Trucks) for Four County Area – Last Ten Calendar Years .....	124
Schedule 16 – Full-time Equivalent South Coast AQMD Employees by Function/Program – Last Ten Fiscal Years .....	125
Schedule 17 – Operating Indicators by Function – Last Ten Fiscal Years .....	126
Schedule 18 – Capital Assets Statistics by Function/Program – Last Ten Fiscal Years .....	127
Demographic and Miscellaneous Statistics .....	128

***SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT***

***GOVERNING BOARD***

*June 30, 2019*

*WILLIAM A. BURKE, Ed.D*  
*Chairman*  
*Speaker of the Assembly Appointee*

*BEN BENOIT*  
*Vice Chair*  
*County of Riverside*  
*Cities Representative*

*LISA A. BARTLETT*  
*County of Orange Representative*

*LARRY McCALLON*  
*County of San Bernardino*  
*Cities Representative*

*GIUSEPPE ANTHONY BUSCAINO*  
*City of Los Angeles Representative*

*JUDITH M. MITCHELL*  
*County of Los Angeles*  
*Cities Representative*  
*Western Region*

*MICHAEL A. CACCIOTTI*  
*County of Los Angeles*  
*Cities Representative*  
*Eastern Region*

*V. MANUEL PEREZ*  
*County of Riverside Representative*

*VANESSA DELGADO*  
*Senate Rules Committee Appointee*

*DWIGHT ROBINSON*  
*County of Orange*  
*Cities Representative*

*JANICE HAHN*  
*County of Los Angeles Representative*

*JANICE RUTHERFORD*  
*County of San Bernardino Representative*

*VACANT*  
*Governor's Appointee*

*WAYNE NASTRI*  
*Executive Officer*



# South Coast Air Quality Management District

South Coast  
AQMD

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

October 11, 2019

Chairman, Governing Board and Residents  
Of the South Coast Air Quality Management District

State law requires that local governments publish within nine months of the close of each fiscal year a complete set of audited financial statements presented in conformity with generally accepted accounting principles (GAAP) and audited in accordance with generally accepted auditing standards by a firm of licensed certified public accountants. This report is published to fulfill that requirement for the fiscal year ended June 30, 2019.

This report consists of management's representations concerning the finances of the South Coast Air Quality Management District (South Coast AQMD), Diamond Bar, California. Management assumes full responsibility for the completeness and reliability of all of the information presented in this report, based upon a comprehensive framework of internal control that it has established for this purpose. Because the cost of internal control should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. As management, we assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material respects.

South Coast AQMD's financial statements have been audited by BCA Watson Rice LLP, Certified Public Accountants. The goal of the independent audit is to provide reasonable assurance that the financial statements of South Coast AQMD for the fiscal year ended June 30, 2019 are free of material misstatements. The independent auditors concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified (clean) opinion that South Coast AQMD's financial statements for the fiscal year ended June 30, 2019 are fairly presented in conformity with accounting principles generally accepted in the United States. The independent auditor's report is located at the front of the financial section of this report.

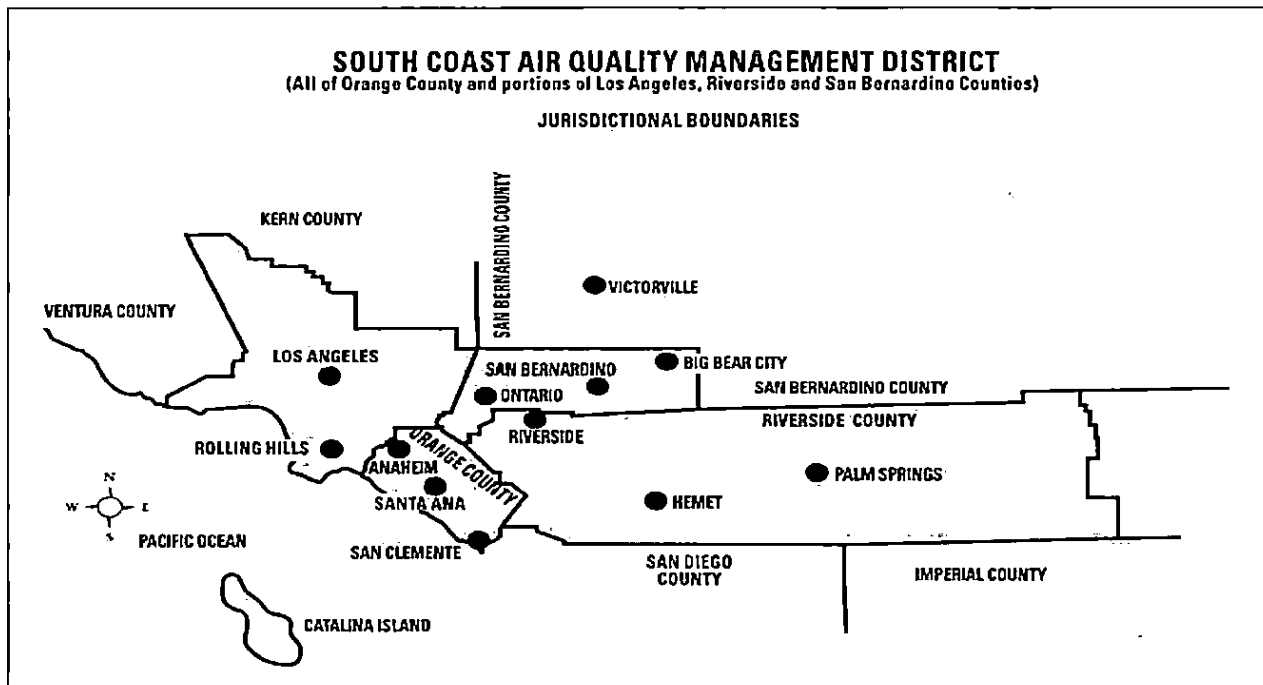
The independent audit of the financial statements of South Coast AQMD was part of a broader, federally mandated "Single Audit" designed to meet the special needs of Federal

grantor agencies. The standards governing Single Audit engagements require the independent auditor to report not only on the fair presentation of the financial statements, but also on the audited government's internal controls and compliance with special emphasis on internal controls and compliance with federal statutes, regulations, and terms and conditions involving the administration of Federal awards. These reports are available in South Coast AQMD's separately issued Single Audit Report.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditor's report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

### *Profile of the South Coast Air Quality Management District*

The South Coast Air Quality Management District began operation on February 1, 1977 as a regional governmental agency established by the California Legislature pursuant to the Lewis Air Quality Management Act. South Coast AQMD encompasses all of Orange County and parts of Los Angeles, San Bernardino and Riverside Counties, representing over 17 million residents. It succeeded the Southern California Air Pollution Control District and its predecessor four county air pollution control districts, of which the Los Angeles County Air Pollution Control District was the oldest in the nation, having been formed in 1947.



South Coast AQMD's Governing Board is composed of 13 members, including four members appointed by the Boards of Supervisors of the four counties in South Coast AQMD's jurisdiction, six members appointed by cities in South Coast AQMD's jurisdiction and three members appointed by the Governor, the Speaker of the State Assembly and the Rules Committee of the State Senate, respectively. The members appointed by the various Boards of Supervisors and cities consist of one member of the Board of Supervisors of Los Angeles, Orange, Riverside, and San Bernardino Counties, respectively, and a mayor or member of the city council of a city within Orange, Riverside and San Bernardino Counties. Los Angeles County cities have three representatives, one each from the western and eastern portions of the county and one member representing the City of Los Angeles. Each Board member serves a four year term. The Board appoints the agency's Executive Officer and General Counsel. The Executive Officer in turn appoints the heads of the various agency departments.

Southern California has the most serious air quality problem in the country. A combination of poor atmospheric ventilation, a capping temperature inversion, bordering mountains and sunny days act to enhance smog formation and effectively trap pollutants in the Basin. South Coast AQMD is responsible for monitoring air pollution within the Basin and for developing and administering programs to reduce air pollution levels below the health-based standards established by the state and federal governments.

South Coast AQMD provides a full range of air pollution control activities, including permitting, site inspection, air quality attainment planning, rule making, air quality monitoring and technology advancement. Government Accounting Standards Board Statement No. 61 requires that certain separate but related component units be included with South Coast AQMD for reporting purposes. This report includes the South Coast Air Quality Management District Building Corporation (Corporation) as a blended component unit. South Coast AQMD may impose its will on the component unit, including the ability to appoint, hire, reassign or dismiss management. There are also financial benefit/burden relationships between South Coast AQMD and the Corporation. For additional information, see Note 1 to the financial statements.

The annual budget serves as the foundation for South Coast AQMD's financial planning and control. The Governing Board is required to adopt an annual budget by July 1 of each fiscal year. South Coast AQMD's annual appropriated budgets are adopted for the General Fund. Budgets are adopted on a budgetary basis that includes encumbrances as expenditures. All annual appropriations lapse at fiscal year end to the extent they have not been expended or encumbered. Amendments to increase the budget must be approved by the Governing Board. Budgets for Special Revenue Funds are not adopted due to the narrow focus (advance technology demonstration projects/emission reduction projects) and limited life of many of these special revenues. Expenditures from the Special Revenue Funds require Governing Board approval and are primarily related to contractual obligations with vendors and grantees. Administrative expenditures related to managing



and accounting for Special Revenue Fund projects are appropriated within the General Fund budget.

South Coast AQMD maintains budgetary controls through both signature authority and automated budget checking. The objective of these controls is to ensure compliance with specific special revenue fund appropriations and the annual appropriated budget approved by the Governing Board. South Coast AQMD maintains an encumbrance accounting system of purchase orders and contracts at the fund level as a means of accomplishing budgetary control. Open encumbrances are reported as committed fund balance at the end of the fiscal year. Purchase orders and contracts are reviewed to ensure that funds are available and that requests are properly authorized prior to being released or executed.

The accounting principles applied in reporting budgetary expenditures differ in some respects from the generally accepted accounting principles applied in the reporting of the financial statements. Reconciliation of these differences is presented in the Required Supplementary Information section of this report.

As reflected in the statements and schedules included in the financial section of this report, South Coast AQMD continues to meet its responsibility for sound financial management.

### ***Factors Affecting Financial Condition***

South Coast AQMD is a fee-supported agency and does not receive sales or property tax support. Approximately 71% of its General Fund revenue is derived from permit evaluation fees, annual permit renewal fees, emission fees, Hearing Board fees, Area Sources, Toxic Hot Spots, penalties and settlements, interest earnings, and other revenues. The remaining 29% of its General Fund revenue is derived from federal grants, state grants, California Air Resources Board (CARB) subvention funds, and motor vehicle fees.

To meet its program commitments, despite new federal and state mandates, increased workload complexity, and ongoing cost containment efforts, South Coast AQMD continues to streamline many of its operations. Compared to the fiscal year 1991-92 General Fund budget, the fiscal year 2018-19 General Fund budget reflects funded staffing levels that are approximately 25% below the 1991-92 level. The budgeted General Fund expenditures, when adjusted for inflation, are approximately 15% less than the 1991-92 period.

Government-wide revenues during this fiscal year increased by 31.9% as compared to the prior fiscal year, primarily due to increase in the grants such as the incentive portion of the Community Air Protection Program (CAPP) and subsequent increase in revenue. General Fund revenues increased by 2.6% as compared to the prior fiscal year, primarily

due to increase in state grants such as the implementation portion of CAPP, increase in Title V and non-Title V by 10.66% and 4% respectively and increase in CPI of 3.4%. Future changes in government-wide revenue are highly dependent on the timing of receipts and continuation of state and federal grant funding, while General Fund revenues are expected to continue to remain generally stable through the following fiscal year due to the strengthening of the economic environment.

Government-wide expenses increased when compared to the prior fiscal year by 32.1% primarily due to expenditures related to state grants such as Carl Moyer AB 923 program and the incentive portion of CAPP. General Fund expenditures increased by 7.7% as compared to the prior fiscal year, due to increased employee retirement plan contributions, slight salary increases and expenditures related to grants such as the implementation portion of CAPP. Future changes in government-wide expenses are highly dependent on the timing of receipts and continuation of state and federal grant funding, while General Fund expenditures are expected to increase through the following fiscal year due to the continued increases in employee retirement plan contributions.

### ***Long-term Financial Planning***

In addressing long-term program costs, South Coast AQMD has pursued actions over the past several years including legislative changes to the employee retirement plan, labor negotiations, and the use of one-time revenues to lower its long-term retirement costs. As part of the annual budget process, South Coast AQMD prepares a five year financial plan that demonstrates the commitment to meet future financial challenges and uncertainties while continuing to protect the health of the residents within the South Coast AQMD boundaries and remaining sensitive to business. During the current fiscal year and beyond, South Coast AQMD continues to look for cost savings and operational efficiencies as a means of balancing revenues and expenditures to ensure long term financial sustainability.

### ***Relevant Financial Policies***

In recent years, South Coast AQMD's Governing Board has made several policy decisions to meet future financial challenges and uncertainties while continuing to protect the health of the residents within the South Coast AQMD boundaries and remaining sensitive to business. These policy decisions include reducing debt, negotiating reductions in the cost of pensions, and reviewing and revising fee policies. In fiscal year 2012-13, debt associated with the Headquarters building was eliminated, while additional funds were set aside in fiscal year 2013-14 to pay for outstanding debt related to pension obligation bonds. Starting fiscal year 2017-18 employer pick-up of employee retirement plan contributions was completely phased out and the entire employee contribution portion of the pension cost is picked up by employees. This was eliminated at the direction of the Governing Board and was part of a three-year labor agreement. Over the

past decade and continuing, changes and reductions in pension benefits and costs have been successfully negotiated with the employees of South Coast AQMD as a means of curbing the cost of pensions and associated liabilities.

In fiscal year 2010-11, South Coast AQMD's Governing Board approved a rule which provides that certain fees be automatically adjusted effective July 1 of each year by the California Consumer Price Index for the preceding calendar year unless the Governing Board by rule decides not to implement such fee increase for a given year, either for all fees or for a specified fee or fees.

To more fully recover costs for certain South Coast AQMD activities, in fiscal year 2018-19 there was a 3.4% fee increase due to CPI. In June 2017, the Board approved fee increases for three fiscal years starting in FY 2017-18 through FY 2019-20. This approval included a Title V fee increase of 10.67% annually for the three years, for an overall increase of 32%; and a non-Title V fee increase of 4% annually for FY 2017-18 and FY 2018-19, for an overall increase of 8%.

Additionally, the Governing Board adopted a fund balance policy for the General Fund so that an amount equal to at least 20% of General Fund revenues is maintained in the combination of Assigned and Unassigned General Fund Balance. The policy serves to mitigate current and future risks related to potential revenue shortfalls and/or unanticipated expenditures.

### ***Major Initiatives***

The mission of South Coast AQMD is to protect public health from air pollution with sensitivity to the impacts of its actions on the community, public agencies and businesses. To carry out this mission, South Coast AQMD has developed the following goals:

- I. Achieve clean air standards.
- II. Enhance public education and equitable treatment for all communities.
- III. Operate efficiently and transparently.

During fiscal year 2018-19, South Coast AQMD advanced many projects which were particularly important to achieving our mission and goals, including: emissions reductions as specified in the 2016 Air Quality Management Plan; conduct monitoring of at least ten facilities and reduce emissions from those found to have high toxics risk to the community; complete all Title V inspectors training and support development of Cleaner Advanced Technology, development of enhanced emissions/ambient monitoring capabilities, increased communication between South Coast AQMD and all stakeholders, and internal business process improvement such as reducing the number of pending permit applications in the backlog.

## *Awards and Acknowledgements*

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the South Coast Air Quality Management District for its Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2018. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized Comprehensive Annual Financial Report, whose contents conform to program standards. The Comprehensive Annual Financial Report must satisfy both generally accepted accounting principles and applicable legal requirements. The Certificate of Achievement is valid for a period of one year only. We believe our current report continues to meet the Certificate of Achievement program requirements, and we are submitting it to GFOA to determine its eligibility for another certificate.

The preparation of our comprehensive annual financial report was made possible by the dedicated services of the accounting, financial services, and management staff of the Finance Office. These members have our sincere appreciation for the contribution made in the preparation of this report.

Recognition is also given to the Governing Board for their leadership and support and to all employees of South Coast AQMD who continue their work to accomplish South Coast AQMD's mission of protecting public health from air pollution with sensitivity to the impacts of its actions on the community and businesses.

Respectfully submitted,



Wayne Natri  
*Executive Officer*



Sujata Jain, CPA  
*Assistant Deputy Executive Officer, Finance*



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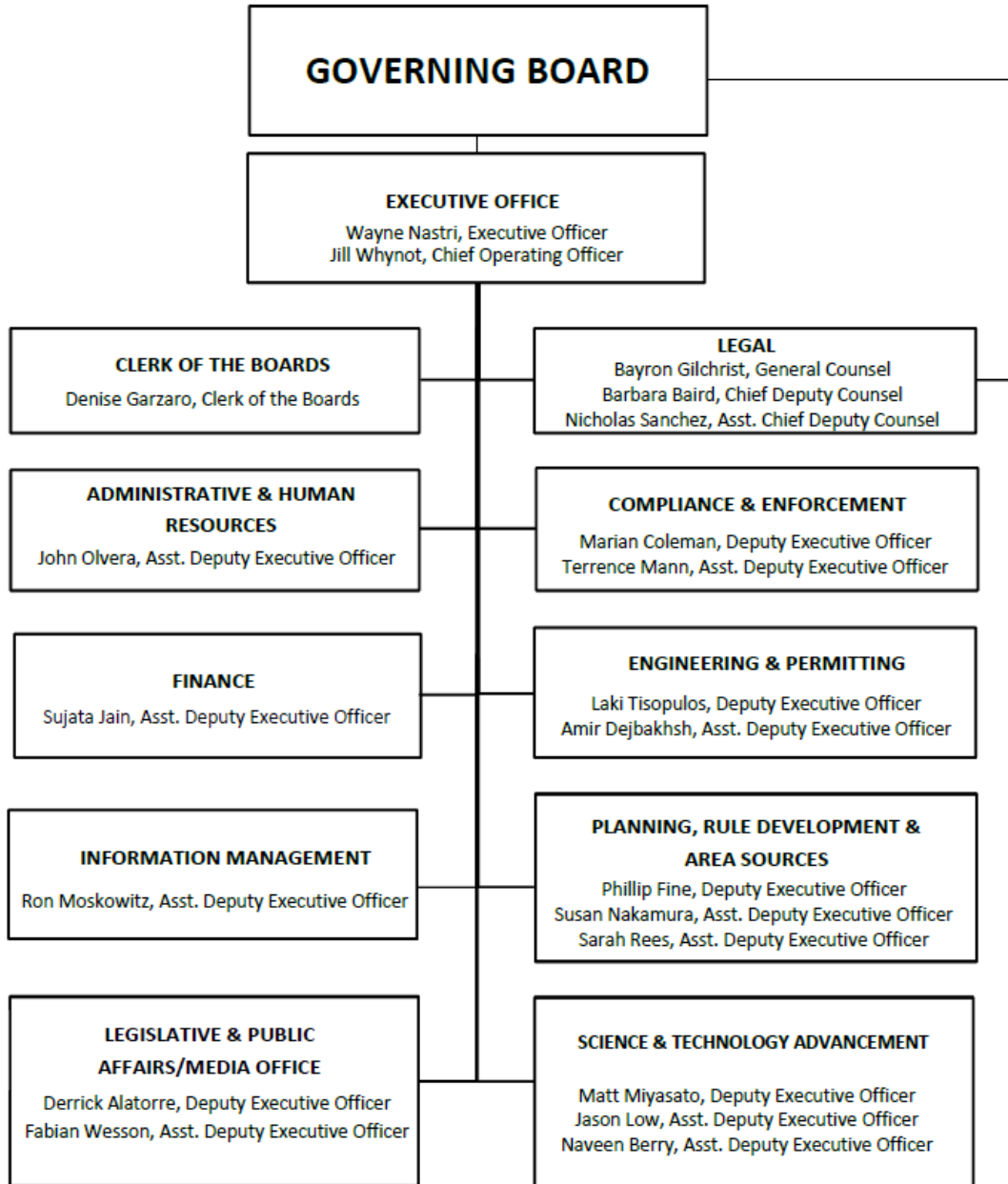
For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**June 30, 2018**

*Christopher P. Morill*

Executive Director/CEO

**South Coast Air Quality Management District, California  
Organizational Chart  
June 30, 2019**





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## INDEPENDENT AUDITOR'S REPORT

The Governing Board of  
South Coast Air Quality Management District

### **Report on the Basic Financial Statements**

We have audited the accompanying basic financial statements of the governmental activities, the blended component unit, each major fund, and the aggregate remaining fund information of the South Coast Air Quality Management District (South Coast AQMD), as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise the South Coast AQMD's basic financial statements as listed in the table of contents.

### ***Management's Responsibility for the Financial Statements***

South Coast AQMD's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditor's Responsibility***

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the basic financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.



We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### ***Opinions***

In our opinion the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the blended component unit, each major fund, and the aggregate remaining fund information of the South Coast AQMD, as of June 30, 2019, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matter***

As discussed in note IF to the financial statements, South Coast AQMD adopted Governmental Accounting Standards Board (GASB) Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* for the year ended June 30, 2019. Our opinion is not modified with respect to this matter.

### ***Other Matters***

#### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and the required supplementary information on pages 4-20 and 72-78, respectively, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### ***Other Information***

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the South Coast AQMD's basic financial statements. The introductory section, combining and individual nonmajor fund financial statements, and statistical section are presented for the purposes of additional analysis and are not a required part of the basic financial statements.

The combining and individual nonmajor fund financial statements are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other



records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with the auditing standards generally accepted in the United States of America. In our opinion, the combining and individual nonmajor fund financial statements are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

*BCA Watson Rice, LLP*

Torrance, California  
October 11, 2019

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

As management of the South Coast Air Quality Management District (South Coast AQMD), we offer readers of South Coast AQMD's financial statements this narrative overview and analysis of the financial activities of South Coast AQMD for fiscal year ended June 30, 2019. Please read it in conjunction with the accompanying transmittal letter, the basic financial statements, and the accompanying notes to those financial statements.

**A. Financial Highlights**

- Total assets and deferred outflows of resources of South Coast AQMD exceeded its total liabilities and deferred inflows of resources at the close of the most recent fiscal year by \$692.3 million (net position), an increase of \$109.4 million was the change in net position for the current year. The net position of \$692.3 million consisted of: \$35.5 million net investment in capital assets; \$785.7 million restricted for long-term emission-reduction projects; and a deficit of \$128.9 million unrestricted net position primarily due to a net pension liability of \$218.2 million.
- As of the close of the fiscal year, South Coast AQMD's governmental funds reported combined ending fund balances of \$857.1 million, an increase of \$114.2 million in comparison to the prior year. Of the \$857.1 million combined ending fund balances, \$71.0 million represents the fund balance of the General Fund.
- Out of the general fund balance of \$71.0 million at the end of the fiscal year, \$64,226 was nonspendable, \$12.3 million was committed, \$6.1 million was assigned and \$52.5 million was unassigned, which is 32.9% of the general fund expenditures.
- South Coast AQMD's capital assets decreased by \$254,863 from the prior year.
- South Coast AQMD's long-term debt decreased by \$2.9 million or 7.8% of the long term debt outstanding.
- South Coast AQMD's net pension liability increased by \$4.2 million or 1.9% from the prior year.

**B. Overview of the Financial Statements**

This discussion and analysis is intended to serve as an introduction to South Coast AQMD's basic financial statements. South Coast AQMD's basic financial statements have three components: 1) Government-wide Financial Statements; 2) Fund Financial Statements; and 3) Notes to the Basic Financial Statements. This report also contains supplementary information in addition to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

In general, the purpose of financial reporting is to provide the external parties that read financial statements with information that will help them make decisions or draw conclusions about an entity. In order to address the needs of as many parties as reasonably possible, South Coast AQMD, in accordance with required reporting standards, presents government-wide financial statements and fund financial statements.

**Government-wide Financial Statements**

The focus of government-wide financial statements is on the overall financial position and activities of South Coast AQMD. These financial statements are constructed around the concept of a primary government and its component unit, excluding fiduciary funds. The financial statements of South Coast AQMD's fiduciary funds are not included in the government-wide financial statements because these funds cannot be used to finance South Coast AQMD's activities.

The government-wide financial statements are designed to provide readers with a broad overview of South Coast AQMD's finances in a manner similar to a private sector business. These financial statements include the Statement of Net Position and the Statement of Activities.

The Statement of Net Position reports all assets and deferred outflows of resources held and liabilities and deferred inflows of resources owed by South Coast AQMD using the accrual basis of accounting which is similar to the accounting method used by most private sector companies. The difference between assets and liabilities is reported as net position. Over time increases or decreases in net position serve as a useful indicator of whether South Coast AQMD's financial position is improving or deteriorating.

The Statement of Activities presents information showing how South Coast AQMD's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods such as earned but unused vacation leave.

**Fund Financial Statements**

A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. South Coast AQMD, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All of the funds of South Coast AQMD can be divided into two categories: governmental funds and fiduciary funds.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

**Governmental Funds**

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on current sources and uses of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. Non-financial assets such as land and building and long-term liabilities such as pension obligation bonds payable or long term liabilities that will not be paid with current assets are excluded. Such information on available spendable resources may be useful in evaluating South Coast AQMD's near-term financing requirements. The Basic Governmental Fund Statements can be found under the Fund Financial Statements section of this report.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the Government-wide Financial Statements. By doing so, readers may better understand the long-term impact of South Coast AQMD's near-term financing decisions. Information from the Governmental Funds Balance Sheet and the Governmental Funds Statement of Revenues, Expenditures and Changes in Fund Balances is used to facilitate the comparison between governmental funds and governmental activities. The reconciliation between the Governmental Funds Balance Sheet and the Government-wide Statement of Net Position can be found under the Fund Financial Statements section. The reconciliation of the total change in fund balances for all governmental funds to the change in net position can also be found under that same section.

South Coast AQMD maintains 45 individual special revenue funds, one debt service fund, one capital projects fund, and a blended component unit in addition to the General Fund. Four of the special revenue funds are considered major funds. The information for the major special revenue funds is presented separately in the Governmental Fund Balance Sheet and in the Governmental Fund Statement of Revenues, Expenditures and Changes in Fund balances. Data for the other 41 non-major special revenue funds, debt service fund, capital projects fund and blended component unit are combined into a single, aggregated presentation. Individual fund data for each of the 41 non-major governmental funds, debt service fund, capital projects fund, and blended component unit, is reported in the Other Supplementary Information section of this report.

South Coast AQMD adopts an annual appropriated budget for its General Fund. A budgetary comparison statement has been provided for the General Fund to demonstrate compliance with this budget. This is presented in the Required Supplementary Information (RSI) section of this report. Also, presented in RSI are South Coast AQMD's schedule of proportionate share of net pension liability, schedule of

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

proportionate share of net OPEB liability, and schedules of contributions for pensions and OPEB.

**Fiduciary Funds**

Fiduciary Funds represent Agency Funds and Retirement Benefit Trust Fund which are custodial in nature and do not involve measurement of results of operations. South Coast AQMD's fiduciary activities are reported in separate Statements of Fiduciary Net Position. These statements are excluded from South Coast AQMD's other financial statements because the resources of fiduciary funds, by definition, cannot be used to support South Coast AQMD's own programs. South Coast AQMD is responsible for ensuring that the assets reported in these funds are used for their intended purposes. The accounting used for fiduciary funds is much like that used for proprietary funds.

South Coast AQMD's Fiduciary Fund Financial Statements for the Agency Funds and Retirement Benefit Trust Fund are presented under the Fund Financial Statements section.

**Notes to the Basic Financial Statements**

The Notes to the Basic Financial Statements provide additional information that is essential to the reader for a full understanding of the data provided in the Government-wide and fund financial statements.

**Other Information**

In addition to the basic financial statements and accompanying notes, this report also presents a RSI section concerning the General Fund's budgetary comparison schedule and budgetary reconciliation. Also included in RSI are South Coast AQMD's schedule of proportionate share of net pension liability, schedule of proportionate share of net OPEB liability, and schedules of contributions for pensions and OPEB.

Individual fund data for each of the non-major governmental funds is included in the Other Supplementary Information section.

The Statistical section provides readers with information covering financial trends, revenue capacity, debt capacity, demographic and economic information, and operating information.

**C. Government-wide Financial Analysis**

Our analysis focuses on the net position and changes in net position of South Coast AQMD's governmental and business-type activities.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

The schedule below presents a condensed Statement of Net Position as of June 30, 2019 compared with the prior fiscal year.

**Net Position  
(amounts expressed in thousands)**

	Governmental Activities		Business-Type Activities		TOTAL	
	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18	FY 2018-19	FY 2017-18
Current and other assets	\$ 932,368	\$ 802,067	\$ -	\$ -	\$ 932,368	\$ 802,067
Capital assets	35,502	35,756	-	-	35,502	35,756
Total assets	<u>967,870</u>	<u>837,823</u>	<u>-</u>	<u>-</u>	<u>967,870</u>	<u>837,823</u>
Deferred outflow of resources-pension	88,553	101,723	-	-	88,553	101,723
Deferred outflow of resources-OPEB	231	233	-	-	231	232
Total deferred outflow of resources	<u>88,784</u>	<u>101,956</u>	<u>-</u>	<u>-</u>	<u>88,784</u>	<u>101,956</u>
Other liabilities	77,996	61,954	-	-	77,996	61,954
Long-term liabilities	255,824	254,938	-	-	255,824	254,938
Total liabilities	<u>333,820</u>	<u>316,892</u>	<u>-</u>	<u>-</u>	<u>333,820</u>	<u>316,892</u>
Deferred inflow of resources-pension	29,738	39,614	-	-	29,738	39,614
Deferred inflow of resources-OPEB	810	360	-	-	810	360
Total deferred inflow of resources	<u>30,548</u>	<u>39,974</u>	<u>-</u>	<u>-</u>	<u>30,548</u>	<u>39,974</u>
Net Position:						
Net investment in capital assets	35,502	35,757	-	-	35,502	35,757
Restricted for:						
Restricted for long-term emission-reduction projects	785,722	676,857	-	-	785,722	676,857
Unrestricted	(128,939)	(129,701)	-	-	(128,939)	(129,701)
Total net position	<u>\$ 692,285</u>	<u>\$ 582,913</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 692,285</u>	<u>\$ 582,913</u>

As noted earlier, net position may serve over time as a useful indicator of South Coast AQMD's financial position. At the close of the most recent fiscal year, South Coast AQMD's assets exceeded liabilities by \$692.6 million.

The largest portion of South Coast AQMD's net position, \$785.7 million, represents resources that are subject to external restrictions on how they may be used. The revenue in special revenue funds is restricted to expenditures for specific purposes. Approximately \$35.5 million of South Coast AQMD's net position reflect its investment in capital assets used by South Coast AQMD (e.g. land, buildings, equipment, and vehicles) less any related debt used to acquire those assets that is still outstanding. South Coast AQMD uses these capital assets in carrying out its mission of protecting public health while being sensitive to the economic needs of local businesses. Consequently, these assets are not available for future spending. Although South Coast AQMD's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources since the capital assets themselves cannot be used to liquidate these liabilities. The debt service installment schedules for the 1995 and 2004 Pension Obligation Bonds will be fully paid by fiscal years 2022 and 2024, respectively.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

The remaining portion of South Coast AQMD's net position of governmental activities, a deficit of \$128.9 million, is unrestricted. The deficit is mainly due to the net pension liability. At the end of the current fiscal year, South Coast AQMD had a negative balance in the unrestricted categories of net position and positive fund balance in restricted and net investment in capital asset category.

The net position for governmental activities increased by \$109.4 million compared with the prior fiscal year. Most of the increase was due to revenues in long-term emission-reduction projects.

Program revenues increased by approximately \$111.7 million, 35.8% change from the prior year. These are largely due to increase of approximately \$84.9 million in state grant, \$9.3 million in other revenues, and \$6.4 million in interest revenue of special revenue funds. The increase of state grant is mainly due to the new funding of the incentive portion of Community Air Protection (AB 134) Fund. General revenue decreased by \$7.2 million, compared with the prior fiscal year, which is primarily attributed to a decrease in penalties and settlements.

Expenses increased by \$79.5 million largely due to a higher amount paid for fiscal year 2018-19 long-term emission reduction projects as compared to fiscal year 2017-18.

A condensed Schedule of Changes in Net Position for the fiscal year ending June 30, 2019 compared with the prior fiscal year can be found on the following page.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

**Changes in Net Position  
(amounts expressed in thousands)**

	<u>Governmental Activities</u>		<u>Business-type Activities</u>		<u>TOTAL</u>	
	<u>FY 2018-19</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u>	<u>FY 2017-18</u>	<u>FY 2018-19</u>	<u>FY 2017-18</u>
Revenues:						
Program Revenues:						
Fees and charges – stationary sources	\$ 101,804	\$ 100,355	\$ -	\$ -	\$ 101,804	\$ 100,355
Fees and charges – mobile sources	26,106	26,027	-	-	26,106	26,027
Operating grants and subventions	295,517	185,367	-	-	295,517	185,367
General Revenues:						
Grants and subventions – not restricted to specific programs	2,865	2,880	-	-	2,865	2,880
Interest	1,977	1,041	-	-	1,977	1,041
Penalties and settlements	7,197	14,316	-	-	7,197	14,316
Other revenues	1,422	1,154	-	-	1,422	1,154
Total revenues	<u>436,888</u>	<u>331,140</u>	<u>-</u>	<u>-</u>	<u>436,888</u>	<u>331,140</u>
Expenses:						
Advance clean air technology	11,521	9,271	-	-	11,521	9,271
Ensure compliance with clean air rules	52,353	50,528	-	-	52,353	50,528
Customer service and business assistance	11,638	9,743	-	-	11,638	9,743
Develop programs to achieve clean air	9,408	8,637	-	-	9,408	8,637
Develop rules to achieve clean air	14,276	10,013	-	-	14,276	10,013
Monitoring air quality	26,547	20,822	-	-	26,547	20,822
Timely review of permits	33,951	33,302	-	-	33,951	33,302
Policy support	1,028	667	-	-	1,028	667
Interest on long-term debt	3,605	3,732	-	-	3,605	3,732
Long-term emission reduction projects	163,188	101,304	-	-	163,188	101,304
Total expenses	<u>327,515</u>	<u>248,019</u>	<u>-</u>	<u>-</u>	<u>327,515</u>	<u>248,019</u>
Increase/(Decrease) in net position, before transfers	109,373	83,121	-	-	109,373	83,121
Transfers	-	1,253	-	(1,253)	-	-
Increase/(Decrease) in net position	109,676	84,374	-	(1,253)	109,676	83,121
Net position beginning, as previously reported	582,913	502,025	-	1,253	582,913	503,278
Restatement of net positions	-	(3,486)	-	-	-	(3,486)
Net position ending, as restated	<u>\$ 692,286</u>	<u>\$ 582,913</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 692,286</u>	<u>\$ 582,913</u>

Note: Net position beginning of fiscal year 2017-18 has been restated to reflect the changes related to the implementation of GASB Statement No. 75.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

**Governmental Activities**

The objective of the statement of activities is to report the full cost of providing government services for that year. The format also permits the reader to ascertain the extent to which each function is either self-financing or draws from the general funds of the government.

The Statement of Activities presents information showing how South Coast AQMD's net position changed during fiscal year 2019. All changes in net position are reported as soon as the underlying event occurs regardless of the timing of the cash flows.

The Governmental activities of South Coast AQMD are predominantly supported by fees, grants, state subvention, penalties, and settlements. The penalties and settlements are one-time revenues which are over and above the regular revenues directly related to the programs. The governmental activities of South Coast AQMD are: Advance Clean Air Technology, Ensure Compliance with Clean Air Rules, Customer Service and Business Assistance, Develop Programs to Achieve Clean Air, Develop Rules to Achieve Clean Air, Monitoring Air Quality, Timely Review of Permits, Policy Support, and Long-Term Emission Reduction Projects.

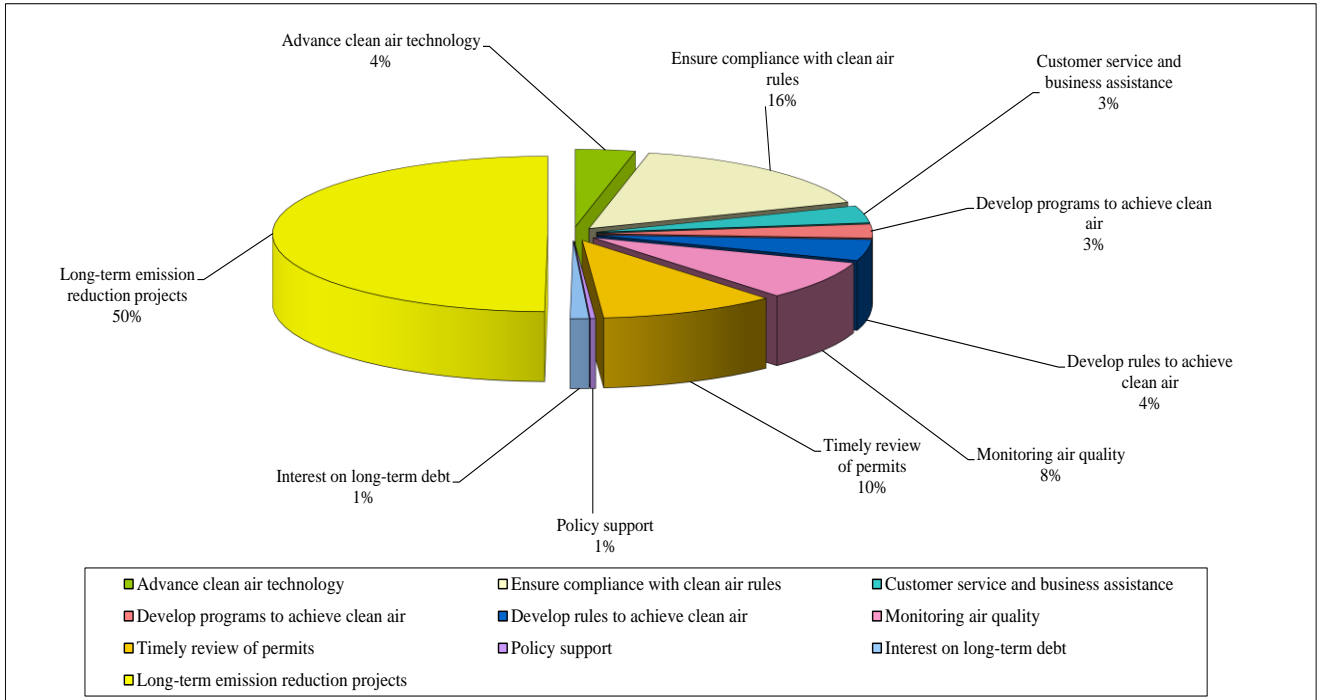
There was an increase in program revenues in the Operating Grants and Subvention Revenues Sources. The program revenues in this revenue category are made up of revenues from mostly restricted revenue derived from federal and state funds. Following is an explanation of the significant revenue variances from fiscal year 2017-18 to fiscal year 2018-19:

- **Community Air Protection AB 134 Fund** – Established in fiscal year 2017-18 to recognize the allocation of AB 617 Community Air Protection incentive funds (AB 134 revenue) awarded and received from CARB. These funds are intended to implement projects that are identified in approved AB 617 Community Emissions Reduction Plans and in other communities that are disproportionately impacted by air pollution. In fiscal year 2018-19, this fund recognized the first allocation of \$106.2 million in state grant revenue.

**Business-type Activities**

The Business-type Activities section reports transactions relating to the CNG fueling station. The CNG fueling station were closed in fiscal year 2017-18. Thus, no business-type activities were reported in this financial statements.

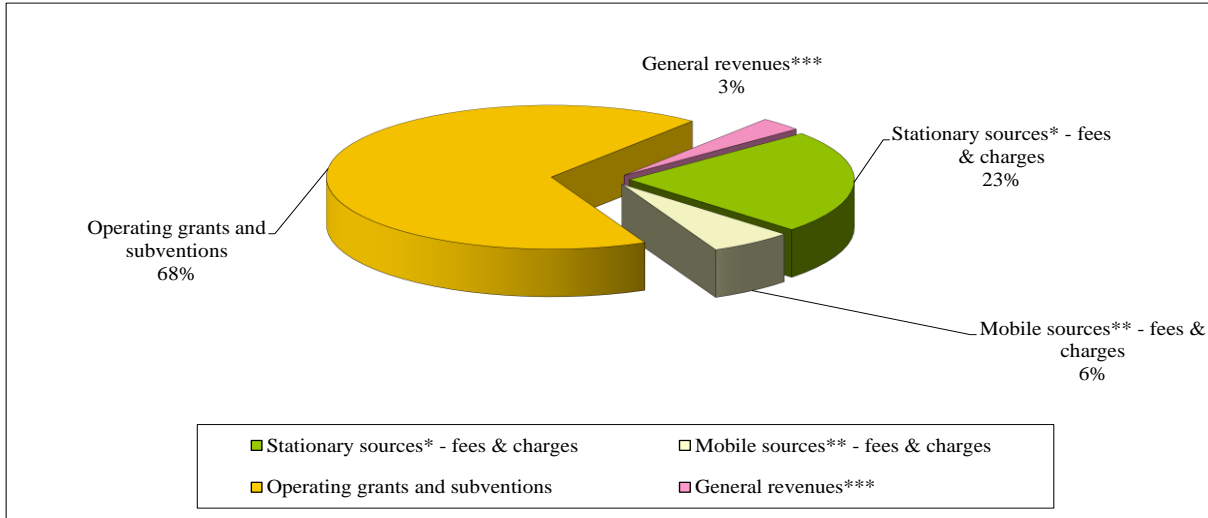
**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
EXPENSES BY ACTIVITY  
Governmental Activities  
FY 2018-19**



Activity	FY 18-19	FY 17-18	FY 16-17	FY 15-16	FY 14-15	FY 13-14
Advance clean air technology	\$ 11,520,547	\$ 9,271,026	\$ 7,825,599	\$ 7,119,417	\$ 5,539,607	\$ 6,212,087
Ensure compliance with clean air rules	52,353,479	50,528,522	49,316,129	45,622,680	43,252,162	48,813,991
Customer service and business assistance	11,637,664	9,743,294	9,260,504	8,337,319	6,124,811	8,332,770
Develop programs to achieve clean air	9,407,869	8,636,784	11,335,498	10,444,147	9,727,624	11,147,303
Develop rules to achieve clean air	14,275,590	10,013,098	7,604,041	7,566,089	7,161,179	7,514,210
Monitoring air quality	26,547,245	20,822,380	17,856,869	16,028,394	13,197,801	14,969,083
Timely review of permits	33,951,378	33,301,565	31,520,083	27,891,070	24,431,059	27,821,032
Policy support	1,028,495	667,046	885,773	511,705	331,652	1,204,588
Interest on long-term debt	3,605,251	3,731,589	3,906,955	3,884,990	4,031,178	4,102,888
Long-term emission reduction projects	163,187,839	101,304,229	101,008,426	87,079,799	210,229,182	154,939,035
<b>Total</b>	<b>\$ 327,515,357</b>	<b>\$ 248,019,533</b>	<b>\$ 240,519,877</b>	<b>\$ 214,485,610</b>	<b>\$ 324,026,255</b>	<b>\$ 285,056,987</b>

Source: FY 2018-19 CAFR Statement of Activities

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT’S DISCUSSION AND ANALYSIS  
REVENUES BY MAJOR SOURCE  
Governmental Activities  
FY 2018-19



Source	FY 18-19	FY 17-18	FY 16-17	FY 15-16	FY 14-15	FY 13-14
Stationary sources* - fees & charges	\$ 101,804,325	\$ 100,354,910	\$ 94,279,518	\$ 89,264,511	\$ 88,120,829	\$ 87,160,484
Mobile sources** - fees & charges	26,106,160	26,026,673	28,087,131	25,743,988	24,526,008	24,307,527
Operating grants and subventions	295,516,665	185,367,622	222,070,040	122,424,397	149,766,034	164,053,936
General revenues***	13,460,793	20,644,444	16,664,195	10,148,573	14,043,695	23,570,233
<b>Total</b>	<b>\$ 436,887,943</b>	<b>\$ 332,393,649</b>	<b>\$ 361,100,884</b>	<b>\$ 247,581,469</b>	<b>\$ 276,456,566</b>	<b>\$ 299,092,180</b>

\* Stationary sources consist of refineries, power plants, manufacturing facilities and small businesses.

\*\* Mobile sources are motorized vehicles that typically include automobiles, trucks, aircraft, ships, trains, and self-propelled construction equipment.

\*\*\* General Revenues include Penalties/Settlements, Interest, and dollars that are not restricted to specific stationary source.

Source: FY 2018-19 CAFR Statement of Activities

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

The following schedule presents the cost of each South Coast AQMD program as well as each program's net cost (total cost less revenues generated by the activities):

**GOVERNMENTAL ACTIVITIES**

**Net (Expense) Revenue  
(amounts expressed in thousands)**

	<b><u>FY 2018-19</u></b>	
	<b><u>Total Cost of Program Activities</u></b>	<b><u>Net Cost of Program Activities</u></b>
Advance clean air technology	\$ 11,521	\$ (4,290)
Ensure compliance with clean air rule	52,353	(4,345)
Customer service and business assistance	11,638	(769)
Develop programs to achieve clean air	9,408	(486)
Develop rules to achieve clean air	14,276	(725)
Monitoring air quality	26,547	(1,191)
Timely review of permits	33,951	(1,344)
Policy support	1,028	(84)
Interest on long-term debt	3,605	(3,605)
Long-term emission reduction projects	163,188	112,751
Total	<u>\$ 327,515</u>	<u>\$ 95,912</u>

The program activities are described as follows:

- **Advance Clean Air Technology** – Identify technologies from anywhere in the world that may have application in reducing emissions from mobile and stationary sources in South Coast AQMD's jurisdiction. Promote development and assess the use of clean fuels and low-emitting technologies. Implement and administer state- and federal-funded programs for retrofitting, re-powering, or replacing diesel engines with newer and cleaner engines and projects to reduce air pollution associated with freight movement along California's trade corridors.
- **Ensure Compliance with Clean Air Rules** – Perform inspections, source tests, sample collection, the certification of Continuous Emission Monitoring Systems (CEMS), emissions audits, and respond to and resolve public complaints to ensure compliance with South Coast AQMD rules for existing major and small stationary sources of all pollutants.
- **Customer Service and Business Assistance** – Provide local government, business, and the public with access and input into the regulatory and policy processes of South Coast AQMD. Assist cities and others with AB 2766 projects. Interact with local, state and federal agencies and others to share air quality information, resolve jurisdictional questions, and implement joint programs. Implement comprehensive public information, legislative and customer service programs.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS**

**June 30, 2019**

- **Develop Programs to Achieve Clean Air** – Develop a regional Air Quality Management Plan (AQMP) to achieve federal and state ambient air quality standards and to meet all other requirements of the federal and California Clean Air Acts. Analyze air quality data and provide an estimate of pollutant emissions by source category. Develop pollutant control strategies and project future air quality using computer models and statistical analysis of alternative control scenarios.
- **Develop Rules to Achieve Clean Air** – Develop emission reduction regulations for sulfur dioxide, nitrogen dioxide, organic gases, particulate matter, toxics, and other pollutants to implement the regional AQMP, Tanner Air Toxics Process (AB 1807), National Emission Standards for Hazardous Air Pollutants (NESHAPS), and Prevention of Significant Deterioration (PSD) requirements.
- **Monitoring Air Quality** – Operate and maintain within South Coast AQMD's jurisdiction a network of air quality monitoring sites for ozone, nitrogen oxides, sulfur oxides, particulate matter, carbon monoxide and other pollutants to obtain data regarding public exposure to air contaminants. Analyze, summarize, and report air quality information generated from the monitoring sites. Prepare meteorological forecasts and models.
- **Timely Review of Permits** – Ensure timely processing of permits for new sources based on compliance with New Source Review and other applicable local, state and federal air quality rules and regulations.
- **Policy Support** – Provide support staff to the Governing Board, Board committees, and various advisory and other groups as well as ad hoc committees and Rule working groups. Monitor potential changes to state and federal legislation and budgets that may affect South Coast AQMD.
- **Interest on Long-Term Debt** – Identify the cost of borrowing on Pension Obligation Bonds to partially retire the Unfunded Actuarial Accrued Liability (UAAL) due to San Bernardino County Employees' Retirement Association (SBCERA).
- **Long-term Emission Reduction Projects** – Generate funding for long-term projects that reduce emissions in the South Coast Air Basin. Funding for special funds activities are recognized when received and projects carried out may extend over multiple fiscal years.

**D. Financial Analysis of South Coast AQMD's Funds**

As noted earlier, South Coast AQMD uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

**Governmental Funds**

The focus of South Coast AQMD's governmental funds is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing South Coast AQMD's financing requirements. In particular, unassigned fund balance may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year.

As of the end of the fiscal year, South Coast AQMD's governmental funds reported combined ending fund balances of \$857.1 million, an increase of \$114.2 million in comparison with the prior year. Approximately 91.7% of these fund balances (\$786.1 million) constitutes the portion pertaining to special revenue funds. Expenditures under these funds are restricted for specific purposes. The long-term contractual commitments related to these special fund programs, such as replacement of diesel-fueled trucks, involve multiple-year spending.

- **The General Fund** is the operating fund of South Coast AQMD. At the end of the fiscal year, the total fund balance of the General Fund was \$71.0 million. The unassigned fund balance was \$52.5 million or 73.9% of the total fund balance; assigned was \$6.1 million or 8.6% of the total fund balance. The assigned amount represents South Coast AQMD's intended use of the financial resources in future periods. One measure of the General Fund's liquidity is the comparison of both assigned and unassigned fund balance to total expenditures. The assigned and unassigned fund balance represent 36.8% of total General Fund expenditures, while total fund balance represents 44.5% of the total General Fund expenditures. In the General Fund, the assigned and unassigned fund balance may serve as a useful measure of South Coast AQMD's net resources available for spending at the end of the fiscal year.

General Fund's revenues increased in fiscal year 2018-19 by \$4.0 million. This increase is primarily due to revenue increases from the state grants and annual renewal fees offsetting by decreased penalties and settlements.

Overall, General Fund's expenditures increased in fiscal year 2018-19 by \$10.8 million primarily due to higher salaries and employment benefits expenditures as compared to prior fiscal year. This is due primarily to increased cost associated with the three year labor agreement, increased in retirement plan contribution, and adding positions.

Fund balance changes in other major governmental funds are noted below:

- **Mobile Sources Air Pollution Reduction Fund** – The fund balance increased compared with the prior year by \$4.1 million due to revenues exceeding expenditures in fiscal year 2018-19. Many of the contracts executed in this

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

special revenue fund are multi-year and the projects are often long-term and expenditures can vary significantly from year to year.

- **Community Air Protection AB 134 Fund** – This fund was established to account for AB 617 Community Air Protection incentive funds. The fund balance increased by \$90.5 million due to revenues exceeding expenditures in fiscal year 2018-19. This fund recognized the first allocation of \$106.2 million in state grant revenue during the fiscal year 2018-19, and multi-year projects that are identified in approved AB 617 Community Emissions Reduction Plans were started for this new funding.
- **Carl Moyer Program (CMP) AB 923 Fund** – The fund balance decreased by \$20.8 million due to expenditures exceeding revenues in fiscal year 2018-19. Many of the contracts executed in this special revenue fund are multi-year and expenditures can vary significantly from year to year.
- **Prop 1B Goods Movement Fund** – This fund was established to account for voter approved transportation bond dollars. The fund balance decreased in fiscal year 2018-19 by \$22.6 million due to expenditures exceeding revenues in fiscal year 2018-19. No state grant received in fiscal year 2018-19. Many of the contracts executed in this special revenue fund are multi-year and expenditures can vary significantly from year to year.

**E. General Fund Budgetary Highlights**

Overall, the fiscal year 2018-19 adopted budget represented a \$12.8 million (8.5%) increase in expenditures over the fiscal year 2017-18 adopted budget. The fiscal year 2018-19 adopted budget increased due to adding 47 grant funded positions, cost increases associated with the three year labor agreement and an increase in retirement contribution rates. On a budgetary basis, actual fiscal year 2018-19 General Fund revenues/transfers in exceeded expenditures/transfers out by \$3.3 million.

South Coast AQMD adopts an annual operating budget for the General Fund. During budget preparation, South Coast AQMD estimates its revenues using realistic but conservative methods so as to budget its expenditure appropriations and activities in a prudent manner. As a result, South Coast AQMD adopts budget amendments during the fiscal year to reflect availability of additional revenues for expansion of existing programs and any budget transfers between major accounts.

The fiscal year 2018-19 amended budget compared to the adopted budget reflected an increase in appropriations of \$14.9 million. The changes to the budget were the result of Governing Board actions that allocated additional funding after the budget was

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

adopted. Also, changes can be attributed to Governing Board approved use of unassigned fund balance for program needs that were unknown at the time the budget was developed.

Additional funding was appropriated during fiscal year 2018-19 from the following:

EPA - \$1,938,000 for the following programs: Photochemical Assessment Monitoring Stations (PAMS), PM 2.5 Monitoring, Science to Achieve Results (STAR) research grant for low cost air monitoring sensors, the National Air Toxics Monitoring Program, Near Road NO<sub>2</sub> and enhanced particulate monitoring programs.

Clean Fuels Program Fund – \$305,000 to assist in conducting the fifth Multiple Air Toxics Exposure Study (MATES V).

Rule 1118 Mitigation Fund – \$1,326,000 to assist in conducting the fifth Multiple Air Toxics Exposure Study (MATES V).

Rule 1180 Special Revenue Fund – \$1,996,000 for the installation and operation of community air monitoring stations near refineries.

BP ARCO Settlement Projects Fund – \$352,000 to implement an air quality educational program in 100 high schools and for the purchase integrated filter-based samplers.

HEROS II Special Revenue Fund – \$90,000 for Enhanced Fleet Modernization Program (EFMP) web-based application.

CARB - \$2,073,000 of AB 617 funding to develop an air monitoring plan for the state and then select the highest priority locations for community air monitoring systems.

Designation for Permit Streamlining – \$1,079,000 for permitting system automation projects.

Unassigned Fund Balance – \$5,725,000 for specialized legal services, systems development, software licenses, two annual air quality events and the restoration of budget reductions that occurred during the Fiscal Year 2018-19 budget development.

For fiscal year 2018-19, actual revenues were below the final budget by \$4.9 million or 3.0% and expenditure savings were \$16.3 million or 10.1%.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

Actual revenue was below the final budget primarily due to annual renewal fee revenue and mobile source/clean fuel revenue being lower than anticipated. The amounts estimated for clean fuels/mobile sources were lower due to the timing of the projects that are reimbursed.

The expenditure savings can be primarily attributed to salary savings, which was a result of an increase of 109 positions (47 at budget adoption and 62 mid-year) since the start of Fiscal Year 2018-19. Additional significant savings were achieved through prudent purchase decisions and postponing contract work and fixed asset purchases.

**F. Capital Assets and Debt Administration**

**Capital Assets**

South Coast AQMD's investment in capital assets is mostly for its governmental activities. The book value was \$35.5 million (net of accumulated depreciation of \$94.9 million) as of June 30, 2019. This investment in capital assets includes land, buildings, laboratory equipment, air monitoring stations, intangible assets (internally generated software) and South Coast AQMD fleet vehicles. Depreciation on capital assets is recognized in the Government-wide financial statements.

Additional information on the capital assets can be found in Note V under the Notes to the Basic Financial Statements section.

**Long-Term Debt**

At the end of the current fiscal year, South Coast AQMD had total long-term debt outstanding of \$34.4 million, including the current portion of \$5.5 million. The amount of \$19.3 million represents the Pension Obligation Bonds. The 1995 series issued in December 1995 (outstanding balance of \$1.4 million) and the 2004 series issued in June 2004 (outstanding balance of \$17.9 million) retired the Unfunded Actuarial Accrued Liability due to San Bernardino County Employees' Retirement Association as of June 30, 2004. Other long-term debt includes general liability claims and workers' compensation claims payable of \$1.4 million and compensated absences of \$13.7 million.

Additional information on South Coast AQMD's long-term debt can be found in Note VII under the Notes to the Basic Financial Statements section of this report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2019**

**G. Economic Factors and Next Year's Budget and Rates**

The fiscal year 2019-20 expenditure budget decreased by 3.7% compared to the fiscal year 2018-19 amended budget. The budget reflects a decrease of \$6.6 million in expenditures from the fiscal year 2018-19 Amended Budget and an \$8.2 million increase from the fiscal year 2018-19 Adopted Budget. The increase in expenditures from the fiscal year 2018-19 Adopted Budget can be mainly attributed to the following: an increase of 63 FTEs for grant funded programs, increases in retirement contribution rates, and cost increases associated with recent labor agreements which expire in December 2020.

In fiscal year 2019-20 revenues are projected to increase by approximately \$5.3 million from the fiscal year 2018-19 adopted budget. The increase in revenue can be attributed to a 3.5% CPI fee increase in most stationary source fees along with an additional fee adjustment to permit processing and annual operating permit renewal fees of 10.66% for Title V facilities. Also, the increase in revenue can be attributed additional grant funding for the AB 617 Community Air Protection Program. Nevertheless, in recent years, South Coast AQMD's revenues have not kept pace with program costs mainly due to increases in retirement rates as the result of market losses to the retirement system's investments.

Moreover, since fiscal year 1991-92, the South Coast AQMD has reduced staffing and program costs despite increased program requirements. The fiscal year 2019-20 expenditure budget is \$170.9 million and includes 939 authorized positions. Compared to fiscal year 1991-92, this reflects a reduction of 19% in authorized positions. Program costs, however, will exceed the fiscal year 1991-92 budget by \$57.9 million (approximately 51%). Using inflation-adjusted dollars, however, this year's budget request is 12% less than the budget approved in fiscal year 1991-92.

**H. Requests for Information**

This financial report is designed to provide a general overview of South Coast AQMD's finances for readers of the financial statements. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Finance Office, South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA 91765-4182.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**STATEMENT OF NET POSITION**  
**June 30, 2019**

	Governmental Activities
<b>ASSETS</b>	
Current Assets:	
Cash and pooled cash	\$ 833,008,293
Investments	55,488,009
Interest receivable	4,450,205
Due from other governmental agencies	32,281,770
Accounts receivable, net	7,075,458
Inventories	64,226
Total current assets	932,367,961
Noncurrent Assets:	
Capital assets not being depreciated:	
Land	8,829,792
Capital assets, net of accumulated depreciation:	
Buildings and improvements	10,301,034
Intangibles (software)	7,282,065
Equipment, vehicles and furniture	9,088,711
Total noncurrent assets	35,501,602
<b>TOTAL ASSETS</b>	<b>967,869,563</b>
<b>DEFERRED OUTFLOWS OF RESOURCES</b>	
Deferred outflow of resources-pension	88,552,655
Deferred outflow of resources-OPEB	230,900
<b>TOTAL DEFERRED OUTFLOWS OF RESOURCES</b>	<b>88,783,555</b>
<b>LIABILITIES</b>	
Current Liabilities:	
Accounts payable and accrued liabilities	\$ 39,583,461
Interest payable	2,767,832
Salaries and benefits payable	5,441,321
Unearned revenue	30,203,442
Long term debt - due within one year	5,450,182
Total current liabilities	83,446,238
Noncurrent liabilities - due in more than one year:	
Long term debt	28,965,170
Net pension liability	218,228,092
Net OPEB liability	3,180,000
Total noncurrent liabilities	250,373,262
<b>TOTAL LIABILITIES</b>	<b>333,819,500</b>
<b>DEFERRED INFLOWS OF RESOURCES</b>	
Deferred inflow of resources-pension	29,738,188
Deferred inflow of resources-OPEB	810,000
<b>TOTAL DEFERRED INFLOWS OF RESOURCES</b>	<b>30,548,188</b>
<b>NET POSITION</b>	
Net investment in capital assets	35,501,602
Restricted for:	
Long-term emission-reduction projects	785,722,419
Unrestricted	(128,938,591)
<b>TOTAL NET POSITION</b>	<b>\$ 692,285,430</b>

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATEMENT OF ACTIVITIES  
For the Year Ended June 30, 2019**

Functions/ Programs	Program Revenues				Net (Expense) Revenue and Changes in Net Position
	Fees and Charges				
	Expenses	Stationary Sources **	Mobile Sources	Operating Grants and Subventions	
Governmental Activities:					
Advance clean air technology	\$ 11,520,547	\$ -	\$ 7,020,716	\$ 209,630	\$ (4,290,201)
Ensure compliance with clean air rules	52,353,479	42,139,939	3,065,350	2,803,427	(4,344,763)
Customer service and business assistance	11,637,664	6,601,509	2,574,623	1,692,300	(769,232)
Develop programs to achieve clean air	9,407,869	4,179,013	2,807,536	1,935,629	(485,691)
Develop rules to achieve clean air	14,275,590	6,286,764	2,671,039	4,592,505	(725,282)
Monitoring air quality	26,547,245	10,265,265	7,721,807	7,369,832	(1,190,341)
Timely review of permits	33,951,378	31,632,712	-	974,529	(1,344,137)
Policy support	1,028,495	699,123	245,089	-	(84,283)
Interest on long-term debt	3,605,251	-	-	-	(3,605,251)
Long-term emission reduction projects *	163,187,839	-	-	275,938,813	112,750,974
Total governmental activities	<u>\$ 327,515,357</u>	<u>\$ 101,804,325</u>	<u>\$ 26,106,160</u>	<u>\$ 295,516,665</u>	<u>\$ 95,911,793</u>
General Revenues **:					
Grants and subventions - not restricted to specific stationary source programs					2,864,992
Interest					1,976,414
Penalties/ settlement					7,196,194
Subscriptions					970
Other					1,422,223
Total general revenues and transfers					<u>13,460,793</u>
Change in net position					109,372,586
Net position - July 1, 2018					582,912,844
Net position - June 30, 2019					<u>\$ 692,285,430</u>

\* Long-term emission reduction projects consist of pass-through and/or one-time or limited duration funding sources that are restricted for specific programs such as Carl Moyer Program Fund, Clean Fuels Program Fund, Mobile Sources Air Pollution Reduction Fund and the Air Quality Investment Fund.

\*\* General Revenue and excess Stationary Source Fees are used to offset a portion of the Permit Processing shortfall.

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
BALANCE SHEET – GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	General Fund	Mobile Sources Air Pollution Reduction Fund	Community Air Protection AB 134 Revenue Fund	CMP AB 923 Fund	Prop 1B Goods Movement Fund	Other Governmental Funds	Total
Cash and cash equivalents	\$ 73,089,069	\$ 81,326,859	\$ 92,759,708	\$ 145,939,765	\$ 105,707,668	\$ 334,185,224	\$ 833,008,293
Investments	15,133,211	15,141,919	-	-	-	25,212,879	55,488,009
Interest receivable	351,548	473,858	532,100	732,611	568,590	1,791,498	4,450,205
Due from other governmental agencies	9,017,206	2,900,231	-	4,833,719	-	15,530,614	32,281,770
Due from other funds	13,667,593	-	-	-	-	6,683,723	20,351,316
Accounts receivable, net	2,087,390	-	1,000,000	-	-	3,988,068	7,075,458
Inventories	64,226	-	-	-	-	-	64,226
Total assets	<u>113,410,243</u>	<u>99,842,867</u>	<u>94,291,808</u>	<u>151,506,095</u>	<u>106,276,258</u>	<u>387,392,006</u>	<u>952,719,277</u>
<u>Deferred Outflow of Resources:</u>							
Deferred outflow of resources	-	-	-	-	-	-	-
Combined assets and deferred outflow of resources	<u>113,410,243</u>	<u>99,842,867</u>	<u>94,291,808</u>	<u>151,506,095</u>	<u>106,276,258</u>	<u>387,392,006</u>	<u>952,719,277</u>
<u>Liabilities, Deferred Inflow of Resources and Fund Balances</u>							
<u>Liabilities:</u>							
Accounts payable and accrued liabilities	\$ 6,689,666	\$ 800,144	\$ 2,553,833	\$ 12,515,708	\$ 1,400,000	\$ 15,624,110	\$ 39,583,461
Salaries and benefits payable	5,441,321	-	-	-	-	-	5,441,321
Due to other funds	57,328	-	1,281,960	415,581	949,653	17,646,794	20,351,316
Unearned revenue	30,197,610	-	-	-	-	5,832	30,203,442
Total liabilities	<u>42,385,925</u>	<u>800,144</u>	<u>3,835,793</u>	<u>12,931,289</u>	<u>2,349,653</u>	<u>33,276,736</u>	<u>95,579,540</u>
<u>Deferred Inflow of Resources:</u>							
Deferred inflow of resources	-	-	-	-	-	-	-
<u>Fund Balances:</u>							
Nonspendable	64,226	-	-	-	-	-	64,226
Restricted	-	99,042,723	90,456,015	138,574,806	103,926,605	100,966,150	532,966,299
Committed	12,295,440	-	-	-	-	67,570,416	79,865,856
Assigned	6,149,673	-	-	-	-	185,578,704	191,728,377
Unassigned	52,514,979	-	-	-	-	-	52,514,979
Total fund balances	<u>71,024,318</u>	<u>99,042,723</u>	<u>90,456,015</u>	<u>138,574,806</u>	<u>103,926,605</u>	<u>354,115,270</u>	<u>857,139,737</u>
Combined liabilities, deferred inflow of resources and fund balances	<u>\$ 113,410,243</u>	<u>\$ 99,842,867</u>	<u>\$ 94,291,808</u>	<u>\$ 151,506,095</u>	<u>\$ 106,276,258</u>	<u>\$ 387,392,006</u>	<u>\$ 952,719,277</u>

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
RECONCILIATION OF THE GOVERNMENTAL FUNDS BALANCE SHEET  
TO THE GOVERNMENT-WIDE STATEMENT OF NET POSITION  
June 30, 2019**

Total fund balances – total governmental funds \$ 857,139,737

Amounts reported for governmental activities in the Statement of Net Position are different because:

Capital assets used in governmental activities are not current financial resources and therefore are not reported in the Governmental Funds Balance Sheet. These capital assets net of accumulated depreciation are reported in the Statement of Net Position as capital assets of South Coast AQMD as a whole. 35,501,602

Deferred outflows of resources are not current financial resources and therefore are not reported in the Governmental Fund Balance Sheet. 88,783,555

Interest payable on long-term debt does not require current financial resources. Therefore, interest payable is not reported as a liability in Governmental Funds Balance Sheet. (2,767,832)

Long-term liabilities and deferred inflows are not due and payable in the current period and accordingly are not reported as fund liabilities and deferred inflows. All liabilities and deferred inflows of resources, both current and long-term, are reported in the Statement of Net Position.

Net pension liability	(218,228,092)
Net OPEB liability	(3,180,000)
General liability	(42,500)
Workers' compensation	(1,362,509)
Compensated absences	(13,686,379)
Pension obligation bonds	(19,323,964)
Deferred inflows of resources related to pension and OPEB	(30,548,188)

Net position of governmental activities \$ 692,285,430

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES**  
**GOVERNMENTAL FUNDS**  
**For the Year Ended June 30, 2019**

<u>Revenues:</u>	General Fund	Mobile Sources Air Pollution Reduction Fund	Community Air Protection AB 134 Fund	CMP AB 923 Fund	Prop 1B Goods Movement Fund	Other Governmental Funds	Total
Emission fees	\$ 19,542,168	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 19,542,168
Annual renewal fees	57,028,631	-	-	-	-	-	57,028,631
Area Sources	2,257,755	-	-	-	-	-	2,257,755
Permit processing fees	20,030,307	-	-	-	-	-	20,030,307
Mobile sources/clean fuels	22,221,268	16,668,783	-	27,365,725	-	9,815,914	76,071,690
Air Toxics "Hot Spots"	2,184,155	-	-	-	-	364	2,184,519
Transportation programs	977,223	-	-	-	-	-	977,223
State subvention	3,924,547	-	-	-	-	-	3,924,547
Federal grant	7,563,376	-	-	-	-	4,024,737	11,588,113
State grant	13,862,588	-	106,218,040	-	-	56,501,783	176,582,411
Interest revenue	1,976,414	2,169,260	1,539,304	3,149,718	2,316,428	6,908,202	18,059,326
Lease revenue	162,879	-	-	-	-	-	162,879
Source test/analysis fees	574,007	-	-	-	-	-	574,007
Hearing Board fees	187,308	-	-	-	-	-	187,308
Penalties and settlements	7,196,194	-	-	-	-	1,070,477	8,266,671
Subscriptions	970	-	-	-	-	-	970
Other revenues	1,259,342	-	2,000,000	-	-	36,190,078	39,449,420
Total revenues	<u>160,949,132</u>	<u>18,838,043</u>	<u>109,757,344</u>	<u>30,515,443</u>	<u>2,316,428</u>	<u>114,511,555</u>	<u>436,887,945</u>
<u>Expenditures:</u>							
Current:							
Salaries and employee benefits	124,376,220	-	-	-	-	-	124,376,220
Insurance	1,733,653	-	-	-	-	-	1,733,653
Rent	606,592	-	-	-	-	-	606,592
Supplies	3,779,066	-	-	-	-	-	3,779,066
Contract and special services	10,697,451	13,956,593	19,243,673	46,347,718	24,012,692	57,826,565	172,084,692
Maintenance	2,109,924	-	-	-	-	-	2,109,924
Travel and auto	1,141,882	-	-	-	-	-	1,141,882
Utilities	1,427,124	-	-	-	-	-	1,427,124
Communications	647,865	-	-	-	-	-	647,865
Uncollectible accounts	471,292	-	-	-	-	8,227	479,519
Other expenditures	1,318,302	782,986	-	-	-	9,385	2,110,673
Capital outlay	4,973,661	-	-	-	-	-	4,973,661
Debt service:							
Principal	2,553,110	-	-	-	-	1,000,000	3,553,110
Interest	3,637,290	-	-	-	-	-	3,637,290
Total expenditures	<u>159,473,432</u>	<u>14,739,579</u>	<u>19,243,673</u>	<u>46,347,718</u>	<u>24,012,692</u>	<u>58,844,177</u>	<u>322,661,271</u>
Excess (deficiency) of revenues over (under) expenditures before transfers	<u>1,475,700</u>	<u>4,098,464</u>	<u>90,513,671</u>	<u>(15,832,275)</u>	<u>(21,696,264)</u>	<u>55,667,378</u>	<u>114,226,674</u>
<u>Other Financing Sources (uses):</u>							
Transfers in	6,397,394	-	-	26,472	-	25,099,654	31,523,520
Transfers out	(2,904,582)	-	-	(5,000,000)	(949,653)	(22,669,285)	(31,523,520)
Total other financing sources (uses)	<u>3,492,812</u>	<u>-</u>	<u>-</u>	<u>(4,973,528)</u>	<u>(949,653)</u>	<u>2,430,369</u>	<u>-</u>
Net change in fund balance	<u>4,968,512</u>	<u>4,098,464</u>	<u>90,513,671</u>	<u>(20,805,803)</u>	<u>(22,645,917)</u>	<u>58,097,747</u>	<u>114,226,674</u>
Fund balances, July 1, 2018	<u>66,055,806</u>	<u>94,944,259</u>	<u>(57,656)</u>	<u>159,380,609</u>	<u>126,572,522</u>	<u>296,017,523</u>	<u>742,913,063</u>
Fund balances, June 30, 2019	<u>\$ 71,024,318</u>	<u>\$ 99,042,723</u>	<u>\$ 90,456,015</u>	<u>\$ 138,574,806</u>	<u>\$ 103,926,605</u>	<u>\$ 354,115,270</u>	<u>\$ 857,139,737</u>

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
RECONCILIATION OF THE GOVERNMENTAL FUNDS STATEMENT OF  
REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES TO THE  
GOVERNMENT-WIDE STATEMENT OF ACTIVITIES  
For the Year Ended June 30, 2019**

Net change in fund balances – total governmental funds	\$ 114,226,674
Amounts reported for governmental activities in the Statement of Activities are different because:	
Governmental funds report capital outlays as expenditures. However, in the Government-wide Statement of Activities and Changes in Net Position, the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount of capital outlays recorded in the current period.	4,973,661
Depreciation and miscellaneous expenses on capital assets are reported in the Government-wide Statement of Activities and Changes in Net Position, but they do not require the use of current financial resources and therefore, are not reported as expenditures in governmental funds.	(5,228,523)
Pension expense is reported in the Government-wide Statement of Activities and Changes in Net Position, but they do not require the use of current financial resources.	(37,741,245)
Pension contribution made by employer in current fiscal year reduce the net pension liability and do not require current resources.	30,295,487
OPEB expense is reported in the Government-wide Statement of Activities and Changes in Net Position, but they do not require the use of current financial resources.	(328,715)
OPEB contribution made by employer in current fiscal year reduce the net OPEB liability and do not require current resources.	230,900
Repayment of bond principal is an expenditure in the governmental funds. For South Coast AQMD as a whole, principal payments reduce the liabilities in the Government-wide Statement of Net Position and do not result in an expense in the Statement of Activities and Changes in Net Position.	3,553,110
Accrued interest expense on long-term debt is reported in the Government-wide Statement of Activities and Changes in Net Position, but it does not require the use of current financial resources. Therefore, accrued interest expense is not reported as an expenditure in governmental funds. The amount represents the change in accrued interest from the prior year.	32,039
Long-term compensated absences and general liability/workers' compensation claims are reported in the Government-wide Statement of Activities and Changes in Net Position, but they do not require the use of current financial resources. Therefore, they are not reported as expenditures in governmental funds. The following amounts represent the change from the prior year:	
Compensated absences	(330,793)
General and auto liability/workers' compensation claims	(310,009)
Change in net position of governmental activities	\$ 109,372,586

See accompanying notes to the basic financial statements.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATEMENT OF FIDUCIARY NET POSITION  
FIDUCIARY FUNDS  
June 30, 2019**

<u>Assets</u>	<u>Agency Funds</u>	<u>Retirement Benefit Trust Fund</u>
Cash and cash equivalents	\$ 112,946	\$ 56,737
Interest receivable	75	8,073
Total assets	<u>\$ 113,021</u>	<u>64,810</u>
<u>Liabilities</u>		
Liabilities:		
Accounts payable and accrued liabilities	\$ <u>113,021</u>	<u>-</u>
Total liabilities	<u>\$ 113,021</u>	<u>-</u>
<u>Net Position</u>		
Net position held in trust for retirement benefit		<u>64,810</u>
Total net position		<u>\$ 64,810</u>

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATEMENT OF CHANGES IN FIDUCIARY NET POSITION  
FIDUCIARY FUNDS  
For the Year Ended June 30, 2019**

	<u>Retirement Benefit Trust Fund</u>
<u>Additions:</u>	
Interest revenue	\$ 30,235
Total additions	<u>30,235</u>
 <u>Deductions:</u>	
Other expenditures	<u>-</u>
Total deductions	<u>-</u>
Change in net position	<u>30,235</u>
Net position held in trust for retirement benefits, July 1, 2018	<u>34,575</u>
Net position held in trust for retirement benefits, June 30, 2019	<u>\$ 64,810</u>

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**I. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**A. The Financial Reporting Entity**

The South Coast Air Quality Management District (South Coast AQMD) was established pursuant to the Lewis Air Quality Management Act on February 1, 1977, commencing at Section 40400 of the Health and Safety Code of the State of California. South Coast AQMD encompasses all of Orange County and parts of Los Angeles, San Bernardino, and Riverside Counties. South Coast AQMD operates a network of air monitoring stations, analyzes air quality data and establishes maximum emission levels for stationary, commercial, and industrial facilities that are enforced through South Coast AQMD's permit system.

As defined by generally accepted accounting principles (GAAP) in the United States of America that are established by the Governmental Accounting Standards Board (GASB), the financial reporting entity consists of the primary government and its component units, which are legally separate organizations. The financial statements of South Coast AQMD are prepared in accordance with GAAP.

The accompanying financial statements present the financial activities of South Coast AQMD (primary government) and its blended component unit, South Coast Air Quality Management District Building Corporation (Corporation), an entity for which South Coast AQMD is considered to be financially accountable. Legally separate from South Coast AQMD and as a tax-exempt entity, the Corporation is reported as a governmental fund.

The Corporation was incorporated as a nonprofit corporation under the laws of the State of California on September 21, 1978. The purpose of the Corporation is to finance the acquisition and improvement of a building complex/headquarters of South Coast AQMD. South Coast AQMD Governing Board approves the appointment of the Corporation's Board of Directors. South Coast AQMD has had significant transactions with the Corporation for the construction and improvement of South Coast AQMD's headquarters facility. It is legally separate from South Coast AQMD and a tax-exempt entity under Section 501(c)(4) of the Internal Revenue Code.

Separate financial statements for the Corporation may be obtained from South Coast AQMD's Finance Office located at 21865 Copley Drive, Diamond Bar, California 91765.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**B. Measurement Focus, Basis of Accounting, and Financial Statement Presentation**

The basic financial statements of South Coast AQMD are composed of the following:

- Government-wide financial statements
- Governmental fund financial statements
- Notes to the basic financial statements

**Government-wide Financial Statements**

The government-wide financial statements (Statement of Net Position and Statement of Activities) present summaries of governmental and business-type activities of South Coast AQMD as a whole, excluding fiduciary activities. These statements are presented using the economic resources measurement focus and the accrual basis of accounting. Accordingly, all of South Coast AQMD's assets and liabilities including capital assets and long-term liabilities are included in the accompanying Statement of Net Position. Revenues are recognized in the period in which they are earned while expenses are recognized in the period in which the liability is incurred, regardless of the timing of related cash flows.

Amounts paid to acquire capital assets are capitalized as assets in the government-wide financial statements rather than reporting them as expenditures. Proceeds of long-term debt are also recorded in the government-wide financial statements as a liability, rather than as another financing source. Amounts paid to reduce long-term indebtedness of the reporting government are reported as a reduction of the related liability, rather than as an expenditure.

The Statement of Activities demonstrates the degree to which the direct expenses of a given functional activity are offset by program revenues directly related to the functional activity. Direct expenses are those that are clearly identifiable with a specific functional activity.

The types of transactions reported as program revenues are reported in three categories: 1) fees and charges including stationary source fees from permitted facilities and mobile source fees from motor vehicle registrations; 2) operating grants and subventions that are in support of air pollution program activities; and 3) long-term emission reduction projects which include capital grants and contributions which are mostly restricted. Program expenses are subtracted from program revenues to present the net cost of each functional activity. Interest income and other miscellaneous items not properly included among program revenues are reported as general revenues.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

South Coast AQMD's functional activities are broken down into the following ten categories:

- Advance clean air technology
- Ensure compliance with clean air rules
- Customer service and business assistance
- Develop programs to achieve clean air
- Develop rules to achieve clean air
- Monitoring air quality
- Timely review of permits
- Policy support
- Interest on long-term debt, and
- Long-term emission reduction projects

When both restricted and unrestricted resources are available for use, it is South Coast AQMD's policy to use restricted resources first within the restricted activities, then use the unrestricted resources as they are needed.

Fund financial statements for the primary government's governmental and fiduciary funds are presented after the government-wide financial statements.

**Governmental Fund Financial Statements**

Governmental fund financial statements include a Balance Sheet and a Statement of Revenues, Expenditures, and Changes in Fund Balances for all major governmental funds and non-major funds aggregated. The funds designated as major funds are determined by a mathematical calculation consistent with GASB Statement No. 34.

South Coast AQMD has presented all major funds that met those qualifications. These major funds are Mobile Sources Air Pollution Reduction Fund, Community Air Protection AB 134 Fund, Carl Moyer Program (CMP) AB 923 Special Revenue Fund, and Prop 1B Goods Movement Fund, in addition to the General Fund.

A reconciliation of the Fund Financial Statements to the Government-wide Financial Statements is provided to explain the differences as a result of the integrated approach of GASB Statement No. 34 reporting.

All governmental funds are accounted for on a spending or current financial resources measurement focus and the modified accrual basis of accounting. Accordingly, only current assets and current liabilities are generally included in the Balance Sheets. The Statement of Revenues, Expenditures, and Changes in Fund Balances presents increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Revenues are recognized in the accounting period in which

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

they become measurable and available to finance expenditures of the current period. They are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, South Coast AQMD considers revenues to be available if they are collected generally within 90 days after year-end to be available to finance the expenditures accrued for the reporting period. The primary revenue sources which have been treated as susceptible to accrual by South Coast AQMD are as follows: emissions flat fees, permit fees, air toxics “Hot Spots” fees, and source test/analysis fees from stationary sources; clean fuels revenues from stationary sources; federal and state grants under grants and subventions and interest under general revenues. All other revenue items are recorded when received in cash. Expenditures are recognized in the accounting period in which the related fund liability is incurred, if measurable, except for debt service expenditures, as well as expenditures related to compensated absences, which are recognized when payment is due.

Amounts expended to acquire capital assets are recorded as capital outlay expenditures in the year that resources were expended rather than recording them as fund assets. The proceeds of long-term debt are recorded as other financing sources rather than as fund liability. Amounts paid to reduce long-term indebtedness are reported as debt service expenditures.

**Fiduciary Fund Financial Statements**

Fiduciary Fund financial statements include a Statement of Fiduciary Net Position and Statement of Changes in Fiduciary Net Position. These funds represent agency funds which are custodial in nature (assets equal liabilities) and do not involve the recording of revenues and expenses or the measurement of results of operations. The reporting focus is upon net position and changes in net position. Fiduciary funds also include the Retirement Benefits Trust Fund for LACERA OPEB (see fund type in Note 1C). These funds are accounted for in the accrual basis of accounting.

**C. Fund Types and Major Funds**

As noted earlier, the funds designated as major funds are determined in accordance with GASB Statement No. 34.

South Coast AQMD reports the following major governmental funds:

General Fund – This is the primary operating fund of South Coast AQMD and is used to record transactions relating to its general business operations. It is also used to account for all revenues and expenditures that are not required to be accounted for in another fund.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

Special Revenue Funds – These funds are used to record transactions applicable to specific revenue sources that are legally restricted to expenditures for specific purposes. The following are South Coast AQMD’s major special revenue funds:

- Mobile Sources Air Pollution Reduction Fund – Used to account for 30% of the revenue received by South Coast AQMD from the motor vehicle registration fees under the provisions of Sections 44243 and 44244 of the California Health and Safety Code. This money is used to provide grants to fund projects for the purpose of reducing air pollution from motor vehicles within the justification of the South Coast AQMD. Total projects to date amount to over \$441 million and over 14,100 tons of emissions reduced. This special fund was established in fiscal year 1992.
- Community Air Protection AB 134 Fund – Established in fiscal year 2018 to recognize the first allocation of AB 617 Community Air Protection incentive funds (AB 134 revenue) from CARB. This fund will also be used to recognize additional Community Air Protection incentive funds awarded and received by CARB. These funds are intended to implement projects that are identified in approved AB 617 Community Emissions Reduction Plans and in other communities that are disproportionately impacted by air pollution. Requirements for expenditure of these funds will be specified in the grant agreements provided by CARB.
- Carl Moyer Program (CMP) AB 923 Fund - Established in fiscal year 2008 to provide additional funding for the Carl Moyer Program using revenue received from new tire and DMV motor vehicle registration fees. AB 923 expanded the Carl Moyer incentive program to include agricultural sources of air pollution as well as cars and light-duty trucks. The program is intended to fund Moyer-eligible projects that will reduce nitrogen oxide, hydrocarbon, and particulate matter emissions. About \$4 million per year in AB 923 funds are used to meet the South Coast AQMD’s match requirement for the Carl Moyer Program.
- Prop 1B Goods Movement Fund - Established in fiscal year 2008 to account for voter approved transportation bond dollars. A portion of these funds (up to 55%) are targeted for the LA/Inland Empire trade corridor. CARB has awarded the South Coast AQMD with various grants under this program to implement eligible projects that will reduce NOx and PM emissions from the movement of freight or “goods” along the LA/Inland Empire and other trade.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

South Coast AQMD reports the following fiduciary fund types:

- Agency Funds - Used to account for funds due to others that are not accounted for in the other funds and acts as a temporary custodian.
- 1) Accounting Agency Fund - Used to account for unidentified payments that require additional research before final disposition.
- 2) 457 Plan Administration Revenue Sharing Fund - Used to account for funds that, the 457 plan administrator, transfers to South Coast AQMD as part of a revenue-sharing agreement. After applicable expenses are paid, residual funds are returned to the 457 plan administrator to be distributed among participants based on an approved formula.
- Retirement Benefit Trust Fund - Used to account for resources to be transferred to Los Angeles County Employees Retirement Association (LACERA) defined benefit Other Post Employment Benefit (OPEB) irrevocable trust. Note X contains more information about South Coast AQMD's OPEB plans.

**D. Assets, Liabilities and Deferred Outflows/Inflows of Resources, and Net Position/Fund Balance**

**1. Cash, Pooled Cash, and Investments**

Cash includes amounts to conduct daily operations of South Coast AQMD in demand deposits with the Los Angeles County Treasurer and various financial institutions. South Coast AQMD deposits virtually all of its cash with the Treasurer of the County of Los Angeles. South Coast AQMD's deposits, along with funds from other local agencies such as the county government, other school districts, and special districts, make up a pool, which the County Treasurer manages for investment purposes. Earnings from the pooled investments are allocated to participating funds based on average investments in the pool during the allocation period.

All South Coast AQMD-directed investments are to diversify South Coast AQMD's investments and are in compliance with South Coast AQMD's investment policy and Los Angeles County Treasury investment guidelines. The guidelines limit specific investments to United States Agency securities. The South Coast AQMD securities portfolio is held by the County Treasurer. Interest earned on investments is recorded as revenue of the fund from which the investment was made. All South Coast AQMD investments are stated at fair value based on quoted market prices.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**2. Capital Assets and Depreciation**

Under GASB Statement No. 34, all capital assets, whether owned by governmental activities or business-type activities are recorded and depreciated in the government-wide financial statements. No long-term capital assets or depreciation are shown in the governmental funds financial statements.

Capital assets, which include land, equipment, vehicles, furniture, buildings and improvements, software and other intangible assets are reported at cost unless obtained by donation in which case the assets are recorded at the acquisition value at the date of receipt. Capital asset purchases with values of at least \$5,000 and with an expected useful life of three years or more are capitalized.

The costs of normal maintenance and repairs that do not add to the value of the capital asset or materially extend capital assets lives are not capitalized. Major improvements are capitalized and depreciated over the remaining useful lives of the related capital assets. Assets disposed of or no longer required for its existing use are removed from the records at actual or estimated cost.

Depreciation is charged as an expense against operations, and accumulated depreciation is reported on the respective balance sheet. Property, plant, equipment, vehicles and furniture of South Coast AQMD are depreciated using the straight-line method over the following useful lives:

<u>Assets</u>	<u>Years</u>
Buildings and Improvements	15-30
Equipment, vehicles and furniture	5-7
Software and Systems	3-5

**3. Inventories**

Inventories as determined by annual physical counts are valued at cost using the first-in/first-out (FIFO) method. They consist principally of office, computer, cleaning and laboratory supplies. The cost is recorded as an expense as inventory items are consumed.

**4. Compensated Absences**

Regular full-time employees accumulate earned but unused vacation time, sick leave, compensatory time, and other leave time. Certain restrictions apply with respect to the accumulation of leave time and its payment at termination. All vacation, sick leave, compensatory time, and other leave time are accrued when incurred in the government-wide financial statements. A liability for these amounts is reported in governmental funds only if they have matured, for example, as a result of employee resignation and retirement.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**5. Self-Insurance**

South Coast AQMD is self-insured for general, automobile, and workers' compensation liabilities (See note VIII).

**6. Long-term Obligations**

In the government-wide financial statements, long-term debt and other long-term obligations are reported as liabilities in the statement of net position. Bond premiums and discounts, are deferred and amortized over the life of the bonds using the straight-line method. Bonds payable are reported net of applicable bond premium or discount.

In the fund financial statements, governmental fund types recognize bond premiums and discounts, as well as bond issuance costs, during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

**7. Deferred Outflows/Inflows of Resources**

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

**8. Pensions**

For purposes of measuring the net pension liability, deferred outflows of resources, deferred inflows of resources, and pension expense related to pensions, information about the fiduciary net position of the San Bernardino County Employees' Retirement Association (SBCERA) and Los Angeles County Employees' Retirement Association (LACERA) and additions to/deductions from SBCERA's fiduciary net position have been determined on the same basis as they are reported by SBCERA and LACERA. For this purpose, employer and employee contributions are recognized in the period the related salaries are earned and become measurable pursuant to formal commitments, statutory or contractual requirements, benefit payments (including refunds of employee contributions) are recognized

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

when due and payable in accordance with the benefit terms, and investments are reported at fair value.

**9. Other Postemployment Benefits (OPEB)**

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the fiduciary net position of the LACERA's plan (OPEB Plan) and additions to/deductions from the OPEB Plan's fiduciary net position have been determined on the same basis. For this purpose, benefit payments are recognized when currently due and payable in accordance with the benefit terms. Investments are reported at fair value, which are derived from quoted market prices.

**10. Net Position and Fund Balance Classifications**

Net position represents the difference between assets and deferred outflow of resources, and liabilities and deferred inflow of resources on the government-wide financial statements. Net position is classified in the following categories:

Net Investment in Capital Assets

This category groups all capital assets, including infrastructure and intangibles, into one component of net position. Accumulated depreciation and the outstanding balances of debt that are attributable to the acquisition, construction or improvement of these assets reduce this category.

Restricted Net Position

This category presents external restrictions imposed by creditors, grantors, contributors or laws or regulations of other governments and restrictions imposed by law through constitutional provisions enabling legislation.

Unrestricted Net Position

This category represents the residual net position of South Coast AQMD in excess of what can properly be classified in one of the other two categories mentioned above.

Fund Balance Classifications

The governmental fund financial statements present fund balances based on classifications that comprise hierarchy that is based primarily on the extent to which South Coast AQMD is bound to honor constraints on the specific purposes for which amounts can be spent.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

The fund balance classifications used in the governmental fund financial statements are as follows:

*Nonspendable* – amounts that cannot be spent either because they are not in spendable form or because they are legally or contractually required to be maintained intact.

*Restricted* – amounts that can be spent only for specific purposes because of constitutional provisions or enabling legislation or because of constraints that are externally imposed by creditors, grantors, contributors, or the laws or regulations of other governments.

*Committed* – amounts that can be spent only for specific purposes determined by a formal action of the government's highest level of decision-making authority. The Governing Board, as the highest level of decision-making authority, has the ability to commit fund balances through the adoption of a resolution. These committed amounts cannot be used for any other purpose unless the Governing Board removes or modifies the use through the adoption of a subsequent resolution.

*Assigned* – amounts that do not meet the criteria to be classified as restricted or committed but that are intended to be used for specific purposes. South Coast AQMD's adopted policy requires the Board to assign amounts to specific purposes.

*Unassigned* – this classification includes the residual fund balance for the General Fund. It also includes the negative residual fund balance of any other governmental fund that cannot be eliminated by offsetting assigned fund balance amounts.

When both restricted and unrestricted resources are available for use, it is South Coast AQMD's policy to use restricted resources first and then unrestricted resources as they are needed. When using unrestricted fund balance amounts, South Coast AQMD's Governing Board approved policy is to use committed amounts first, followed by assigned and then unassigned.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

The following schedule shows the details of the fund balances as of June 30, 2019:

**Major Governmental Funds**

<b>Fund Balance</b>	<b>General Fund</b>	<b>Mobile Sources Air Pollution Reduction Fund</b>	<b>Community Air Protection AB134 Revenue Fund</b>	<b>CMP AB923 Fund</b>	<b>Prop 1B Goods Movement Fund</b>	<b>Other Governmental Funds</b>	<b>Total</b>
<b>Nonspendable:</b>							
Inventory	\$ 64,226	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 64,226
Total nonspendable	<u>64,226</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>64,226</u>
<b>Restricted:</b>							
Long term emission reduction projects	-	99,042,723	90,456,015	138,574,806	103,926,605	100,966,150	532,966,299
Total restricted	<u>-</u>	<u>99,042,723</u>	<u>90,456,015</u>	<u>138,574,806</u>	<u>103,926,605</u>	<u>100,966,150</u>	<u>532,966,299</u>
<b>Committed:</b>							
Advance clean air technology	652,430	-	-	-	-	-	652,430
Ensure compliance with clean air rules	2,253,456	-	-	-	-	-	2,253,456
Customer service and business assistance	986,684	-	-	-	-	-	986,684
Develop programs to achieve clean air	847,003	-	-	-	-	-	847,003
Develop rules to achieve clean air	1,152,244	-	-	-	-	-	1,152,244
Monitoring air quality	4,495,140	-	-	-	-	-	4,495,140
Timely review of permits	1,283,191	-	-	-	-	-	1,283,191
Policy support	625,292	-	-	-	-	-	625,292
Long term emission reduction projects	-	-	-	-	-	67,570,416	67,570,416
Total committed	<u>12,295,440</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>67,570,416</u>	<u>79,865,856</u>
<b>Assigned:</b>							
Long term emission reduction projects	-	-	-	-	-	185,578,704	185,578,704
For self insurance	2,000,000	-	-	-	-	-	2,000,000
For unemployment claims	80,000	-	-	-	-	-	80,000
For permit streamlining	234,159	-	-	-	-	-	234,159
For enhanced compliance activity	883,018	-	-	-	-	-	883,018
For OPEB obligations	2,952,496	-	-	-	-	-	2,952,496
Total assigned	<u>6,149,673</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>185,578,704</u>	<u>191,728,377</u>
<b>Unassigned:</b>							
General Purpose	52,514,979	-	-	-	-	-	52,514,979
Long term emission reduction projects	-	-	-	-	-	-	-
Total unassigned	<u>52,514,979</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>52,514,979</u>
<b>Total fund balances</b>	<u>\$ 71,024,318</u>	<u>\$ 99,042,723</u>	<u>\$ 90,456,015</u>	<u>\$ 138,574,806</u>	<u>\$ 103,926,605</u>	<u>\$ 354,115,270</u>	<u>\$ 857,139,737</u>

See accompanying notes to the basic financial statements.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**E. Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the revenues and expenses during the reporting period. Actual results could differ from those estimates.

**F. Adoption of New GASB Pronouncements**

***GASB Statement No. 83, Certain Asset Retirement Obligations***

This Statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). The provisions of ARO apply when there is a legally enforceable liability associated with the retirement of a tangible capital asset (representing a permanent removal from service). A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. This Statement is effective for reporting periods beginning after June 15, 2018. This Statement did not have an impact on South Coast AQMD's financial statements.

***GASB Statement No. 88, Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements***

The objective of this Statement is to improve the information that is disclosed in notes to the government financial statements related to debt, including direct borrowings and direct placements, and requires additional essential information related to debt be disclosed in notes to financial statements. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018. South Coast AQMD adopted this statement in fiscal year 2019, which did not have an impact on the financial statements.

**II. CASH, POOLED CASH AND INVESTMENTS**

The following is a summary of the cash, pooled cash, and investments for the primary government (including fiduciary funds) at June 30, 2019:

	Primary Government
Cash on hand	\$ 821,427
Cash in bank	322,883
Pooled cash	832,033,666
Investments	55,488,009
Cash, pooled cash, and investments	\$ 888,665,985

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**CASH**

At June 30, 2019, the carrying amount of South Coast AQMD's bank deposits was \$322,883 and the bank balance was \$334,943. The entire amount was covered by Federal Deposit Insurance Corporation (FDIC). Management believes that South Coast AQMD is not exposed to any significant credit risk related to cash in bank. Cash on hand consists of cash and checks not deposited as of June 30, 2019.

**POOLED CASH**

South Coast AQMD's pooled cash and investments are held in the Los Angeles County Pooled Surplus Investment Fund Portfolio (PSI), the Los Angeles County Specific Purpose Investment Portfolio (SPI), and the State of California Local Agency Investment Fund (LAIF). Pooled cash and investments are held in accordance with California Government Code, South Coast AQMD Investment Policy, Los Angeles County Treasurer Investment Policy and LAIF Policies, Goals, and Objectives.

**Los Angeles County Pooled Surplus Investment Fund Portfolio (PSI)**

South Coast AQMD is a voluntary participant in the Los Angeles County Pooled Surplus Investment Fund Portfolio (PSI), an external investment pool managed by the Los Angeles County Treasurer who reports on a monthly basis to its Board of Supervisors. Its Treasury Oversight Committee reviews and monitors its investment policy. The investment policy is governed by applicable California Government Code. Investments held are stated at fair value. The fair value of pooled cash is determined monthly and is based on current market prices.

**Los Angeles County Specific Purpose Investment Portfolio (SPI)**

The Los Angeles County Specific Purpose Investment Portfolio (SPI) is managed by the Los Angeles County Treasurer and is used to purchase specific investments for South Coast AQMD. In accordance with California Government Code, South Coast AQMD adopts an investment policy annually that, among other things, authorizes types and concentrations of investments and maximum investment terms. On June 30, 2019, SPI are reported at fair value.

The South Coast AQMD Investment Policy authorizes South Coast AQMD to invest in:

- U.S. Treasuries
- Federal agencies and U.S. government sponsored enterprises
- Los Angeles County Pooled Surplus Investment Portfolio
- State of California Local Agency Investment Fund
- Obligation of State of California or any other local agency within the state - permitted obligations will include bonds payable solely out of revenues from a revenue producing property owned, controlled or operated by the state or any local

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

agency, or by a department, board, agency or authority of the state or local agency. Obligations of the State of California or other local agencies within the state must be rated in a rating category of “A” or its equivalent, or higher by a Nationally Recognized Statistical Rating Organizations (NRSRO).

- Shares of money market mutual funds – shall be limited to ratings of “AAA” by two (2) NRSROs or managed by an investment advisor registered with the Securities Exchange Commission with not less than five-years’ experience and with assets under management in excess of \$500 million and such investment may not represent more than 10% of the total assets in the money market fund.
- Bankers’ acceptances – with maximum maturities of 180 days must be issued by national or state-chartered banks or a state-licensed branch of a foreign bank. Eligible banker’s acceptance should have the highest rankings or the highest letter and number rating as provided for by the NRSRO.
- Negotiable certificates of deposit – with maximum maturities of five (5) years must be issued by national or state-chartered banks, a federal or state-licensed branch of a foreign bank, savings associations and state or federal credit unions. Negotiable CDs must be rated in a rating category of “A” or its equivalent by at least one (1) NRSRO.
- Commercial paper – Commercial paper of “prime” quality of the highest ranking or of the highest letter and number rating as provided for by a NRSRO. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph a or paragraph b; and may not represent more than 10% of the outstanding paper of the issuing corporation. Maximum maturities are 270 days.
  - a. The entity meets the following criteria:
    - i. Is organized and operating in the United States as a general corporation.
    - ii. Have total assets in excess of one billion dollars (\$1,000,000,000).
    - iii. Has debt other than commercial paper, if any, that is rated in a rating category of “A” or the equivalent by a NRSRO.
  - b. The entity meets the following criteria:
    - i. Is organized within the United States as a special purpose corporation, trust, or limited liability company.
    - ii. Has program-wide credit enhancements including, but not limited to, over collateralization, letters of credit, or surety bond.
    - iii. Has commercial paper that is rated in a rating category of “A-1”, or the equivalent or higher, by at least two (2) NRSROs.
- Medium term maturity corporate securities – with maximum maturities of five (5) years shall be rated in a rating category of “A” or its equivalent or higher by a NRSRO.
- Mortgage securities or asset-backed securities – with maximum maturities of five (5) years shall be rated “AA” or its equivalent or better by a nationally recognized



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

rating service and issued by an issuer having a rating in the category of “A” or its equivalent, or higher by a NRSRO for its long-term debt.

- Repurchase agreements – with maximum maturity of 30 days and must be collateralized by the U.S. Treasuries or Agencies with a market value of 102% for collateral marked to market daily, entered into with broker-dealer which is a recognized primary dealer and evidenced by a broker-dealer master purchase agreement signed by County Treasurer and approved by South Coast AQMD.
- Reverse purchase agreements – are not allowed except as part of investments in the County of Los Angeles Pooled Surplus Investment Portfolio and the State of California Local Agency Investment Fund.
- Variable and floating rate securities – with the maximum security of five (5) years are instruments that have a coupon or interest rate that is adjusted periodically due to changes in a base or benchmark rate. Investments in floating rate securities must utilize commercially available U.S. denominated indices such as U.S. Treasury bills or Federal Funds. Investments in floating rate securities whose reset is calculated using more than one of the above indices are not permitted, i.e. dual index notes. Variable and Floating Rate Securities that are priced based on a single common index are not considered derivative securities.
- Obligations of Supranational Institutions – permitted obligations will include U.S. dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by any of the supranational institutions identified in California Government Code Section 53601(q), which are eligible for purchase and sale within the U.S. Obligations of supranational institutions must be rated in a rating category of “AA” or its equivalent, or higher by a NRSRO.

**State of California Local Agency Investment Fund (LAIF)**

South Coast AQMD is a voluntary participant in the State of California Local Agency Investment Fund (LAIF), an external investment pool that is regulated by California Government Code Section 16429 under the oversight of the Treasurer of the State of California.

LAIF is part of the Pooled Money Investment Account (PMIA) and has oversight provided by the Pooled Money Investment Board (PMIB) and an in-house Investment Committee. The PMIB Board members are the State Treasurer, Director of Finance and the State Controller. Additionally, LAIF has oversight by the Local Investment Advisory Board, which consists of five members, as designated by statute. The Chairman is the State Treasurer, who appoints the other four members to two-year terms.

The fair value of South Coast AQMD’s investment in this pool is reported in the accompanying financial statements at amounts based upon South Coast AQMD’s pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records of LAIF, which are recorded on an amortized cost basis.

The following table summarizes South Coast AQMD's cash and pooled cash and maturities at June 30, 2019:

	Investment Maturities			
	Fair Value	<1 Year	1-2 Years	2-3 Years
Cash:				
On hand	\$ 821,427	\$ -	\$ -	\$ -
In bank	322,883	-	-	-
Total cash	<u>1,144,310</u>	<u>-</u>	<u>-</u>	<u>-</u>
Pooled cash:				
Los Angeles County				
Pooled Surplus Investment (PSI)	793,226,186	405,417,904	387,808,282	-
Local Agency				
Investment Fund (LAIF)	38,807,480	38,807,480	-	-
Total pooled cash	<u>832,033,666</u>	<u>444,225,384</u>	<u>387,808,282</u>	<u>-</u>
Total cash and pooled cash investments	<u>\$ 833,177,976</u>	<u>\$ 444,225,384</u>	<u>\$ 387,808,282</u>	<u>\$ -</u>

## INVESTMENTS

South Coast AQMD's investments are comprised of the following as of June 30, 2019:

	Level 1	Level 2	Level 3
Negotiable certificates of deposits	\$ 20,000,000	-	-
U.S. Treasury Bills	35,488,000	-	-
Total investments	<u>\$ 55,488,009</u>	<u>-</u>	<u>-</u>

South Coast AQMD categorized its fair value measurement within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the assets. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 is significant unobservable inputs.

South Coast AQMD has investments in Federal Farm Credit Banks (FFCB) in the Los Angeles County SPI which are classified as Level 1 as fair market value is determined by observables, unadjusted quoted market price in active or highly liquid and transparent market.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment is, the greater the sensitivity of its fair value to changes in interest rates. As a means of limiting its exposure to declines in fair value, the South Coast AQMD Investment Policy limits its investment portfolio of SPI with the County of Los Angeles to maturities of less than five years at time of purchase and the weighted average maturity of the SPI portfolio may not exceed three years.

**Credit Risk**

Credit risk is the risk of default or the inability of an issuer of an investment to fulfill its obligation to the holder of the investment. South Coast AQMD mitigates its credit risk in the SPI portfolio generally by following its three primary investment objectives, in order of safety, liquidity, and yield. South Coast AQMD's Investment Policy further requires only permitted investments with specific credit quality requirements. The Los Angeles County PSI the State of California LAIF, and the United States Treasury Securities are both unrated as to credit quality. The investments that are represented by SPI are held by the Los Angeles County Treasurer in South Coast AQMD's name and consist of negotiable certificates of deposits with credit ratings of A-1+ (Standard and Poors).

**Concentration of Credit Risk**

Concentration of credit risk is the risk of loss attributed to the magnitude of a investments in a single issuer. South Coast AQMD's Investment Policy mitigates concentration of credit risk through diversification requirements so that no one type of issuer or issue will have a disproportionate impact on the portfolio. The investments that are represented by SPI consist of negotiable certificates deposit.

**Custodial Credit Risk**

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, South Coast AQMD will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. Custodial credit risk for investments is the risk that South Coast AQMD will not be able to recover the value of its investment securities that are in the possession of an outside party. South Coast AQMD's deposits are fully insured by the FDIC, pooled cash with the Los Angeles County PSI and the State of California LAIF are not subject to custodial credit risk, and the investments that are represented by SPI are held by the Los Angeles County Treasurer in the name of South Coast AQMD.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**III. DUE FROM OTHER GOVERNMENT AGENCIES AND ACCOUNTS  
RECEIVABLE**

Due from other government agencies at June 30, 2019 consists of the following:

California Air Resources Board (CARB)	\$ 4,095,507
California Energy Commission (CEC)	2,763,076
Department of Energy	143,380
Department of Homeland Security (DHS)	449,754
Department of Motor Vehicles AB 2766, SB 1928, AB 923	16,906,539
Environmental Protection Agency (EPA)	
DERA Bus Administration	84,122
Section 105 Air Grant	5,292,071
STAR Grant	109,083
NEAR Road Monitoring	25,805
National Air Toxics Trend Station (NATTS)	226,208
Section 103 PM 2.5 Grant	797,199
Section 103 Community Scale Air Toxics Grant	101,776
TAS Grant Administration	<u>1,287,250</u>
Total	<u>\$ 32,281,770</u>

Accounts Receivable consists of the following at June 30, 2019:

Air Toxics "Hot Spots", Emission Fees, Permits, Annuals and Source Testing	\$ 4,036,732
Miscellaneous Receivables	<u>4,506,450</u>
Subtotal	8,543,182
Less: Allowance for Doubtful Accounts	<u>(1,467,724)</u>
Total	<u>\$ 7,075,458</u>

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**IV. INTERFUND RECEIVABLES, PAYABLES, AND TRANSFERS**

Due to/from other funds:

<u>Receivable Fund</u>	<u>Amount</u>	<u>Payable Fund</u>	<u>Amount</u>
General Fund	\$ 13,667,593	Air Toxics Fund	\$ 3,103,115
		Advanced Technology, Outreach & Education Fund	102,638
		Air Quality Investment Fund	478,623
		Clean Fuels Program Fund	4,731,200
		Carl Moyer Fund (old CM, Prop 40, SB1107)	1,625,708
		State BUG Program Fund	20,734
		Rule 1118 Mitigation Fund	233,819
		HEROS II Special Revenue Fund	450,696
		AB 1318 Mitigation Fees Fund	37,966
		GHG Reduction Projects Special Revenue Fund	209,944
		Air Filtration Fund	25,956
		Community Air Protection AB 134 Fund	1,281,960
		Carl Moyer Program AB 923 Special Revenue Fund	415,581
		Prop 1B Funding – Goods Movement	949,653
	<u>\$ 13,667,593</u>		<u>\$ 13,667,593</u>
Clean Fuels Program Fund	\$ 6,626,395	Advanced Technology, Outreach & Education Fund	\$ 500,000
		Advanced Technology Goods Movement Fund	1,688,895
		GHG Reduction Projects Special Revenue Fund	4,400,000
		Air Filtration Fund	37,500
	<u>\$ 6,626,395</u>		<u>\$ 6,626,395</u>
BP ARCO Settlement Projects Fund	\$ 57,328	General Fund	\$ 57,328
	<u>\$ 57,328</u>		<u>\$ 57,328</u>
Total Receivables	<u>\$ 20,351,316</u>	Total Payables	<u>\$ 20,351,316</u>

The outstanding balances between funds result mainly from the time lag between the date that: (1) interfund reimbursable expenditures occur, (2) transactions are recorded in the accounting system, and (3) payments between funds are made.

<u>Fund Transferred From</u>	<u>Fund Transferred To</u>			<u>Total</u>
	<u>General Fund</u>	<u>Carl Moyer Program AB 923</u>	<u>Other Governmental Funds</u>	
General Fund	\$ -	\$ -	\$ 2,904,582	\$ 2,904,582
Carl Moyer Program AB 923 Fund	-	-	5,000,000	5,000,000
Prop 1B Funding-Goods Movement	949,653	-	-	949,653
Other Governmental Fund	5,447,741	26,472	17,195,072	22,669,285
	<u>\$ 6,397,394</u>	<u>\$ 26,472</u>	<u>\$ 25,099,654</u>	<u>\$ 31,523,520</u>

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

South Coast AQMD's Governing Board approved the following:

- Transfer of \$2,904,582 from the General Fund to the Health Effects Research Fund to fund a number of research projects at local universities and research institutions.
- Transfer of \$5,000,000 from the Carl Moyer Program AB 923 Special Revenue Fund to the Voucher Incentive Program Fund to continue funding truck replacement projects on a first-come, first-served basis.
- Transfer of \$294,207 from the BP ARCO Settlement Project Fund to the General Fund for Purchase of Kids Making Sense Kits.
- Transfer of \$57,772 from the BP ARCO Settlement Projects Fund to the General Fund for up to 25 integrated filter-based samplers.
- Transfer of \$266,656 from the Rule 1180 Special Revenue Fund to the General Fund for Rule 1180 air monitoring planning and implementation.
- Transfer of \$4,000,000 from the Clean Fuels Program Fund to the GHG Reduction Projects Special Revenue Fund for the South Coast AQMD's project cost-share.
- Transfer of \$8,730,072 from the Clean Fuels Program Fund to the Advanced Technology Goods Movement Fund for South Coast AQMD's project cost-share.
- Transfer total of \$90,000 from the HEROS II Special Revenue Fund to the General Fund, \$65,000 for additional functionality for the in-house web-based application and \$25,000 for website maintenance for the Enhanced Fleet Modernization Program.
- Transfer of \$25,000 from the Clean Fuels Program Fund to the Natural Gas Vehicle Partnership Fund for memberships of California Natural Gas Vehicle Partnership.
- Transfer of \$165,248 from the Clean Fuels Program Fund to the General Fund to support the MATES V Program.
- Transfer of \$4,440,000 from the State Emissions Mitigation Fund to the Advanced Technology Goods Movement Fund to develop and demonstrate zero emission trucks and EV infrastructure.
- Transfer of \$1,559,790 from the Rule 1118 Mitigation Fund to the General Fund to support the MATES V program.
- Transfer of \$26,472 from Voucher Incentive Program Fund to the Carl Moyer Program AB923 Special Revenue Fund for administrative expenses.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**V. CAPITAL ASSETS**

In compliance with GASB Statement No. 34 reporting, South Coast AQMD has reported all capital assets in the Government-wide Statement of Net Position. Capital asset activities for the year ended June 30, 2019 were as follows:

	Balance June 30, 2018	Increase	Decrease	Balance June 30, 2019
Governmental Activities:				
Capital assets not being depreciated:				
Land	\$ 8,829,792	\$ -	\$ -	\$ 8,829,792
Total capital assets not being depreciated	<u>8,829,792</u>	<u>-</u>	<u>-</u>	<u>8,829,792</u>
Capital Assets being depreciated:				
Buildings and improvements	78,601,764	65,844	-	78,667,608
Intangibles (software)	7,801,298	2,072,870	-	9,874,168
Equipment, vehicles and furniture	31,094,535	2,834,946	(848,016)	33,081,465
Total capital assets being depreciated	<u>117,497,597</u>	<u>4,973,660</u>	<u>(848,016)</u>	<u>121,623,241</u>
Governmental Activities:				
Less Accumulated Depreciation for:				
Buildings and improvements	(65,728,196)	(2,638,378)	-	(68,366,574)
Intangibles (software)	(2,027,521)	(564,582)	-	(2,592,103)
Equipment, vehicles and furniture	(22,815,207)	(1,986,177)	808,630	(23,992,754)
Total accumulated depreciation	<u>(90,570,924)</u>	<u>(5,189,137)</u>	<u>808,630</u>	<u>(94,951,431)</u>
Net capital assets being depreciated	<u>26,926,673</u>	<u>(215,477)</u>	<u>(39,386)</u>	<u>26,671,810</u>
Net capital assets, governmental activities	<u>\$ 35,756,465</u>	<u>\$ (215,477)</u>	<u>\$ (39,386)</u>	<u>\$ 35,501,602</u>

For the year ended June 30, 2019, the depreciation expense of \$5,189,137 was charged to South Coast AQMD's functions/programs in the governmental activities as follows:

Advance clean air technology	\$ 242,415
Ensure compliance with clean air rules	1,620,429
Customer service and business assistance	380,802
Develop programs to achieve clean air	227,558
Develop rules to achieve clean air	276,314
Monitoring air quality	1,671,054
Timely review of permits	697,393
Policy support	<u>73,172</u>
Total depreciation expense	<u>\$5,189,137</u>

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**VI. DEFERRED OUTFLOWS/DEFERRED INFLOWS OF RESOURCES, PENSION, AND OPEB**

The following is a summary of deferred outflows of resources and deferred inflows of resources:

	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
Deferred outflows of resources – Pension (SBCERA) (see note IX for details)	\$ 88,519,655	\$ -
Deferred outflows of resources – Pension (LACERA) (see note IX for details)	33,000	-
Deferred inflows of resources – Pension (SBCERA) (see note IX for details)	-	29,738,188
Deferred outflows of resources – OPEB (LACERA) (see note X for details)	230,900	-
Deferred inflows of resources – OPEB (LACERA) (see note X for details)	-	810,000
<b>Total</b>	<b>\$ 88,783,555</b>	<b>\$ 30,548,188</b>

The following is a summary of pension and OPEB Balances:

	<b>SBCERA</b>	<b>LACERA</b>	<b>Total</b>
Pension:			
Net Pension liability	\$ 218,228,092	\$ -	\$ 218,228,092
Pension expense	37,732,945	8,300	37,741,245
Pension contributions made in fiscal year 2018-19	30,295,487	-	30,295,487
OPEB:			
Net OPEB liability	-	3,180,000	3,180,000
OPEB expense	-	328,715	328,715
OPEB contributions made in fiscal year 2018-19	-	230,900	230,900

**VII. LONG-TERM DEBT**

The following is a summary of long-term obligation transactions of South Coast AQMD for the year ended June 30, 2019:

	Balance <u>July 1, 2018</u>	<u>Addition</u>	<u>Reduction</u>	Balance <u>June 30, 2019</u>	Amounts Due Within <u>One Year</u>	Amounts Due in More Than <u>One Year</u>
<b>Governmental Activities:</b>						
Claims payable:						
General liability	\$ 135,000	\$ 22,500	\$ 115,000	\$ 42,500	\$ 42,500	\$ -
Workers' compensation	960,000	3,533,743	3,131,234	1,362,509	230,970	1,131,539
Compensated absences	13,355,586	1,771,924	1,441,131	13,686,379	1,490,072	12,196,307
Pension Obligation Bonds	<u>22,877,074</u>	-	<u>3,553,110</u>	<u>19,323,964</u>	<u>3,686,640</u>	<u>15,637,324</u>
Total	<u>\$ 37,327,660</u>	<u>\$ 5,328,167</u>	<u>\$ 8,240,475</u>	<u>\$ 34,415,352</u>	<u>\$ 5,450,182</u>	<u>\$ 28,965,170</u>



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

In prior years, claims payable and compensated absences have been liquidated primarily by the General Fund.

**1995 Pension Obligation Bonds**

On December 1, 1995, South Coast AQMD, jointly with the County of San Bernardino, issued bonds to retire the Unfunded Actuarial Accrued Liability (UAAL) due to San Bernardino County Employees' Retirement Association (SBCERA). South Coast AQMD issued a \$34,261,896 aggregate principal amount to refund its portion of the obligation to SBCERA. The interest rates range from 5.68% to 7.72% with maturity date of August 1, 2021. The purpose of this refunding was to lower the cost to South Coast AQMD through the issuance of bonds at rates that are lower than those assessed by SBCERA and to restructure its debt service from an ascending to a level-debt-service schedule. At the time of refunding these changes were expected to result in estimated total gross debt service savings of \$20,151,420 through June 30, 2022. During the fiscal year ended June 30, 2019, \$553,110 in principal and \$2,511,890 in interest were paid on the bonds. The principal balance outstanding at June 30, 2019 amounted to \$1,428,964.

The annual payment requirements under the 1995 pension bond obligation are as follows:

<b>Year Ending</b>				
<b><u>June 30</u></b>		<b><u>Principal</u></b>		<b><u>Interest</u></b>
2020	\$	511,640	\$	2,553,360
2021		475,443		2,589,557
2022		<u>441,881</u>		<u>2,623,119</u>
Total	\$	<u>1,428,964</u>	\$	<u>7,766,036</u>
			\$	<u>3,065,000</u>
				<u>3,065,000</u>
			\$	<u>9,195,000</u>

**Series 2004 Pension Obligation Bonds**

On June 29, 2004, South Coast AQMD issued and sold taxable pension obligation bonds to retire the Unfunded Actuarial Accrued Liability (UAAL) due to the SBCERA. At the time of issuance, it was estimated that the issuance and sale of \$47,030,000 was expected to result in estimated total gross debt service savings of \$22.4 million through August 1, 2023.

The Series 2004 Pension Obligation Bonds are payable on a parity with the 1995 Pension Obligation Bonds. South Coast AQMD may, from time to time, enter into supplemental indentures without the consent of the Bond Owners of the 1995 Bonds or Series 2004 Bonds for the purpose of providing for the issuance of additional series of Pension Obligation Bonds or to refund any other evidences of indebtedness of South Coast AQMD arising pursuant to the Retirement Law. The interest rates range from 4.75% to 5.93% with maturity date of August 1, 2023. During the fiscal

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

year ended June 30, 2019, \$3,000,000 in principal and \$1,125,400 in interest were paid on the bonds. The principal balance outstanding at June 30, 2019 amounted to \$17,895,000.

The annual payment requirements under pension bond obligation, Series 2004, are as follows:

<b>Year Ending</b>				
<b><u>June 30</u></b>		<b><u>Principal</u></b>		<b><u>Interest</u></b>
				<b><u>Total</u></b>
2020	\$	3,175,000	\$	950,622
2021		3,365,000		763,549
2022		3,565,000		563,242
2023		3,780,000		348,736
2024		<u>4,010,000</u>		<u>118,897</u>
Total	\$	<u>17,895,000</u>	\$	<u>2,745,046</u>

**Allocation of Interest Expenses**

Total interest expenses on long-term debt for the year ended June 30, 2019 amounted to \$3,605,251. These interest expenses on long-term debt are not meaningfully associated with individual functional activities. Hence, this is considered an indirect expense and should be reported in the Statement of Activities as a separate line.

**VIII. RISK MANAGEMENT**

South Coast AQMD's risk management program is responsible for purchasing insurance when prudent and cost-effective, self-insuring other exposures to loss when feasible.

South Coast AQMD carries \$200 million of all-risk property insurance, with limits of \$100 million on business interruption and \$25 million on earthquake and flood coverage. The limits of liability for general claims is \$10 million. This coverage is supplemented by excess liability policies for boilers & machinery to a limit of \$100 million, and bodily injury/property damage/public officials' errors and emissions/employment practices liability/personal injury to \$15 million. Self-insured retention levels for excess liability is \$250,000. South Coast AQMD maintains \$25 million excess workers' compensation insurance for losses over \$750,000. In addition, South Coast AQMD maintains \$1 million automobile liability/physical damage coverage for hybrid and alternate fuel vehicles used for purposes other than fleet services. South Coast AQMD also maintains policies to protect against some criminal conduct and cyber-attacks.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

As of June 30, 2019, \$42,500 and \$1,362,509, respectively, had been reserved for general liability claims and workers' compensation.

An appropriate amount has been recorded in the General Fund's financial statements to the extent that South Coast AQMD anticipates that these amounts will be paid from current resources. While the ultimate amount of losses incurred through June 30, 2019 is dependent on future development based upon information from the independent claims' administrator and others involved with the administration of the programs, South Coast AQMD management believes that the aggregate accrual is adequate to cover such losses.

No significant reduction in insurance coverage occurred during the last three fiscal years. Also, during this period, no claim settlement exceeded insurance coverage.

The following represents changes in the aggregate liabilities for claims of South Coast AQMD's general liability and workers' compensation for the years ended June 30, 2018 and 2019:

	General Liability	Workers' Compensation	Totals
Claims payable, July 1, 2017	\$ 208,571	\$ 1,594,870	\$ 1,803,441
Current year claims and changes in estimates	(68,871)	667,901	599,030
Claims payments	(4,700)	(1,302,771)	(1,307,471)
Claims payable, June 30, 2018	<u>\$ 135,000</u>	<u>\$ 960,000</u>	<u>\$ 1,095,000</u>
Claims payable, July 1, 2018	\$ 135,000	\$ 960,000	\$ 1,095,000
Current year claims and changes in estimates	22,500	3,533,743	3,556,243
Claims payments	(115,000)	(3,131,234)	(3,246,234)
Claims payable, June 30, 2019	<u>\$ 42,500</u>	<u>\$ 1,362,509</u>	<u>\$ 1,405,009</u>

**IX. DEFINED BENEFIT PENSION PLANS**

**San Bernardino County Employees' Retirement Association**

**Plan description**

South Coast AQMD participates in the San Bernardino County Employees' Retirement Association (SBCERA) pension plan - a cost-sharing multiple-employer defined benefit pension plan (the Plan). SBCERA administers the Plan which provides benefits for two membership classifications, General and Safety, and those benefits are tiered based upon date of SBCERA membership. South Coast AQMD only has general membership. Generally, those who become members prior to

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

January 1, 2013 are Tier 1 members. All other members are Tier 2. An employee who is appointed to a regular position, whose service is greater than fifty percent of the full standard of hours required are members of SBCERA, and are provided with pension benefits pursuant to Plan requirements.

The Plan operates under the provisions of the California County Employees' Retirement Law of 1937 (CERL), the California Public Employees' Pension Reform Act of 2013 (PEPRA), and the regulations, procedures and policies adopted by SBCERA's Board of Retirement (Board). The Plan's authority to establish and amend the benefit terms are set by the CERL and PEPRA, and may be amended by the California state legislature and in some cases require approval by the County of San Bernardino Board of Supervisors and/or the SBCERA Board. SBCERA is a tax qualified plan under Section 401(a) of the Internal Revenue Code.

SBCERA is a legally separate entity from South Coast AQMD, not a component unit, and there is no financial interdependency with the County of San Bernardino. For these reasons, the South Coast AQMD's comprehensive annual financial report excludes the SBCERA pension plan as of June 30, 2019. SBCERA publishes its own comprehensive annual financial report that includes its financial statements and required supplementary information, that can be obtained by writing SBCERA at, 348 W. Hospitality Lane, Third Floor, San Bernardino, CA 92415-0014 or visiting the website at: [www.SBCERA.org](http://www.SBCERA.org).

**Benefits Provided**

SBCERA provides retirement, disability, death and survivor benefits. The CERL and PEPRA establish benefit terms. Retirement benefits are calculated on the basis of age, average final compensation and service credit as follows:

	<b>General – Tier 1</b>	<b>General – Tier 2</b>
<b>Final Average Compensation</b>	Highest 12 months	Highest 36 months
<b>Normal Retirement Age</b>	Age 55	Age 55
<b>Early Retirement: Years of service required and/or age eligible for</b>	Age 70 any years	Age 70 any years
	10 years age 50	5 years age 52
	30 years any age	N/A
<b>Benefit percent per year of service for normal retirement age</b>	At normal retirement age, 2% per year of final average compensation for every year of service credit	At age 67, 2.5% per year of final average compensation for every year of service credit
<b>Benefit adjustments</b>	Reduced before age 55, increased after 55 up to age 65	Reduced before age 67
<b>Final Average Compensation Limitation</b>	Internal Revenue Code section 401(a)(17)	Government Code section 7522.10

An automatic cost of living adjustment is provided to benefit recipients based on changes in the local region Consumer Price Index (CPI) up to a maximum of 2% per

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

year. Any increase greater than 2% is banked and may be used in years where the CPI is less than 2%. There is a one-time 7% increase at retirement for members hired before August 19, 1975. The Plan also provides disability and death benefits to eligible members and their beneficiaries, respectively. For retired members, the death benefit is determined by the retirement benefit option chosen. For all other members, the beneficiary is entitled to benefits based on the members years of service or if the death was caused by employment. General members are also eligible for survivor benefits which are payable upon a member's death.

**Contributions**

Participating employers and active members are required by statute to contribute a percentage of covered salary to the Plan. This requirement is pursuant to Government Code sections 31453.5 and 31454, for participating employers and Government Code sections 31621.6, 31639.25 and 7522.30 for active members. The contribution requirements are established and may be amended by the SBCERA Board pursuant to Article 1 of the CERL, which is consistent with the Plan's actuarial funding policy. The contribution rates are adopted yearly, based on an annual actuarial valuation, conducted by an independent actuary, that considers mortality, service (including age at entry into the Plan, if applicable, and tier), and compensation experience of the members and beneficiaries, and also includes an evaluation of the Plan's assets and liabilities. Participating employers may pay a portion of the active members' contributions through negotiations and bargaining agreements.

Employee contribution rates for the fiscal year ended June 30, 2019 ranged between 9.13% and 15.50% for Tier 1 General members, 30 year General member are not required to pay any employee contribution. For Tier 2 General members, the contribution is 8.39%.

Employer contribution rates for the year ended June 30, 2019 are as follows:

	<u>Employer Contribution Rates</u>		<u>Paid by Employer for Employee</u>	
	<u>Tier 1 Members</u>	<u>Tier 2 Members</u>	<u>Tier 1 Members</u>	<u>Tier 2 Members</u>
<b>Actuarially Determined Required Contribution Percentages</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>
South Coast AQMD members	40.34%	36.89%	0.00%-5.00%	0.00%

The required employer contributions and the amount paid to SBCERA by the South Coast AQMD for the year ended June 30, 2019 were \$30,295,488. The South Coast AQMD's employer contributions were equal to the required employer contributions for the year ended June 30, 2019.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**Pension Liability**

At June 30, 2019, South Coast AQMD reported a net pension liability of \$218,228,092 for its proportionate share of the SBCERA's net pension liability. The net pension liability was measured as of June 30, 2018, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2018. The SBCERA's publicly available financial report provides details on the change in the net pension liability.

The South Coast AQMD's proportion of the net pension liability was based on the South Coast AQMD's contributions received by SBCERA during the measurement period for employer payroll paid dates from July 1, 2017 through June 30, 2018, relative to the total employer contributions received from all of SBCERA's participating employers. At June 30, 2018, the South Coast AQMD's proportion was 8.613%, which was an increase of 0.49% from its proportion measured as of June 30, 2017.

**Pension Expense and Deferred Outflows/Inflows of Resources**

For the fiscal year ended June 30, 2019, the South Coast AQMD recognized pension expense of \$37,732,945 for its proportionate share of SBCERA's pension expense. At June 30, 2019, the South Coast AQMD reported its proportionate share of deferred outflows of resources and deferred inflows of resources related to pensions, from the following sources:

	<u>Deferred Outflows of Resources*</u>	<u>Deferred Inflows of Resources*</u>
Changes in proportion and differences between South Coast AQMD contributions and proportionate share of contributions	\$ 12,538,745	\$ 10,296,984
Changes in actuarial assumptions	44,259,290	-
Net difference between projected and actual earnings on pension plan investments	-	3,973,146
Differences between expected and actual experience	1,426,133	15,468,058
South Coast AQMD contributions paid to SBCERA subsequent to the measurement date	<u>30,295,487</u>	<u>-</u>
<b>Total</b>	<u>\$ 88,519,655</u>	<u>\$ 29,738,188</u>

\*See note VI for summary

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

The \$30,295,487 reported as deferred outflows of resources related to pensions resulting from South Coast AQMD's contributions made to SBCERA subsequent to the measurement date but before the reporting period ended June 30, 2019. The contribution will be recognized as a reduction of the net pension liability in the subsequent fiscal year ended June 30, 2020. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to SBCERA pensions will be recognized in pension expense as follows:

<u>Year ended June 30:</u>	
2020	\$ 11,464,947
2021	10,468,283
2022	(2,430,801)
2023	6,409,359
2024	2,474,916
Thereafter	99,276

**Actuarial Assumptions and Methods**

The significant actuarial assumptions and methods used to measure the total pension liability are as follows:

Actuarial valuation date	June 30, 2018
Actuarial experience study	3-year period ending June 30, 2016
Actuarial cost method	Entry age actuarial cost method
Actuarial assumptions:	
Investment rate of return <sup>(1)</sup>	7.25%
Inflation	3.00%
Projected Salary increases <sup>(2)</sup>	General: 4.5% to 14.50%
Cost of living adjustments	Contingent upon consumer price index with a 2.00% maximum
Administrative Expenses	0.70% of payroll

<sup>(1)</sup> Includes inflation at 3.00% and is net of pension investment expenses.

<sup>(2)</sup> Includes inflation at 3.00% plus real across-the-board salary increase of 0.50% plus merit and promotional increases vary by service.

The actuarial assumptions used in the June 30, 2018 valuation were based on the results of an actuarial experience study for the three year period of July 1, 2013 – June 30, 2016. Same assumptions are used in the June 30, 2018 and 2017 actuarial valuation.

For General employees, mortality rate is based on the Headcount-Weighted RP 2014 Healthy Annuitant Mortality Table set forward one year for males, projected generationally with the two-dimensional mortality MP-2016 projection scale.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**Long-term Expected Rate of Return**

The long-term expected rate of return on pension plan investments is 7.25%. SBCERA’s actuary prepares an analysis of the long-term expected rate of return on a triennial basis using a building-block method in which expected future real rates of return (expected returns, net of inflation) are developed for each major asset class. These returns are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage, adding expected inflation and subtracting expected investment expenses and a risk margin. The target allocations (approved by the SBCERA Board) and projected arithmetic real rates of return for each major asset class, after deducting inflation, but before deducting investment expenses, used in the derivation of the long-term expected investment rate of return assumptions are summarized in the following table:

**SBCERA’s Long-Term Expected Real Rate of Return**

		As of June 30, 2018	
		Valuation Date	
Asset Class	Investment Classification	Target Allocation(1)	Long-Term Expected Real Rate of Return (Arithmetic)
Large Cap U.S. Equity	Domestic Common and Preferred Stock	8.00%	5.61%
Small Cap U.S. Equity	Domestic Common and Preferred Stock	2.00%	6.37%
Developed International Equity	Foreign Common and Preferred Stock	6.00%	6.96%
Emerging Market Equity	Foreign Common and Preferred Stock	6.00%	9.28%
U.S. Core Fixed Income	U.S. Government and Agency/Corporate Bonds	2.00%	1.06%
High Yield/Credit Strategies	Domestic Bonds/Foreign Bonds	13.00%	3.65%
Global Core Fixed Income	Foreign Bonds	1.00%	0.07%
Emerging Market Debt	Emerging Market Debt	6.00%	3.85%
Real Estate	Real Estate	9.00%	4.37%
International Credit	Foreign Alternatives	11.00%	6.75%
Absolute Return	Domestic Alternatives/Foreign Alternatives	13.00%	3.56%
Real Assets	Domestic Alternatives/Foreign Alternatives	5.00%	6.35%
Long/Short Equity	Domestic Alternatives/Foreign Alternatives	0.00%	0.00%
Private Equity	Domestic Alternatives/Foreign Alternative	16.00%	8.47%
Cash & Equivalents	Short-Term Cash Investment Funds	2.00%	(0.17)%
<b>Total</b>		<b><u>100.00%</u></b>	

(1) For actuarial purposes, target allocations only change once every three years based on the triennial actuarial experience study.

**Discount Rate**

The discount rate used to measure the total pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions will be made based on the actuarially determined rates based on the SBCERA Board’s funding policy, which establishes the contractually required rate based on statute. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity Analysis**

The following table presents the South Coast AQMD's proportionate share of the net pension liability calculated using the discount rate of 7.25%, as well as what the South Coast AQMD's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25%) or 1-percentage-point higher (8.25%) than the current rate.

**Sensitivity of Net Pension Liability to Changes in the Discount Rate  
As of June 30, 2019**

	<b>1% Decrease <u>(6.25%)</u></b>	<b>Current Discount Rate <u>(7.25%)</u></b>	<b>1% Increase <u>(8.25%)</u></b>
South Coast AQMD's proportionate share of the net pension liability	\$342,591,348	\$218,228,092	\$116,219,842

**Pension Plan Fiduciary Net Position**

Detailed information about the SBCERA's fiduciary net position is available in a separately issued SBCERA comprehensive annual financial report. That report may be obtained on the Internet at [www.SBCERA.org](http://www.SBCERA.org); by writing to SBCERA at 348 W. Hospitality Lane, Third Floor, San Bernardino, CA 92415; or by calling (909) 885-7980 or (877) 722-3721.

**Payables to the Pension Plan**

The amount payable to SBCERA at June 30, 2019 for the legally required contribution is \$2,877,721.

**Los Angeles County Employees' Retirement Association**

**Plan Description**

South Coast AQMD participates in the Los Angeles County Employees Retirement Association Pension Plan (the plan). (LACERA operates as a cost-sharing multiple-employer defined benefit plan.) As of June 30, 2019, South Coast AQMD had no active members in this plan. For South Coast AQMD, LACERA is a closed plan which means no new members will be added to the plan. The Los Angeles County Employees' Retirement Association (LACERA) was established on January 1, 1938. It is governed by the California Constitution; the County Employees Retirement Law of 1937 (CERL); and the regulations, procedures, and policies adopted by LACERA's Board of Retirement and Board of Investments. The Los Angeles County (County) Board of Supervisors may also adopt resolutions, as permitted by CERL, which may affect the benefits of LACERA members.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**Benefits Provided**

Vesting occurs when a member accumulates five years' creditable service under contributory plans or accumulates 10 years of creditable service under the general service non-contributory plan. Benefits are based upon 12 or 36 months' average compensation, depending on the plan, as well as age at retirement and length of service as of the retirement date, according to applicable statutory formula. Vested members who terminate employment before retirement age are considered terminated vested (deferred) members. Service-connected disability benefits may be granted regardless of length of service consideration. Five years of service are required for nonservice-connected disability eligibility according to applicable statutory formula. Members of the non-contributory plan, who are covered under separate long-term disability provisions not administered by LACERA, are not eligible for disability benefits provided by LACERA.

**Contributions**

Members and employers contribute to LACERA based on rates recommended by an independent consulting actuary and adopted by the Board of Investments and the Los Angeles County Board of Supervisors. Contributory plan members are required to contribute between approximately 5 percent and 13 percent of their annual covered salary. Member and employer contributions received from the outside districts are considered part of LACERA's pension plan as a whole.

Participating employers are required to contribute the remaining amounts necessary to finance the coverage of their employees (members) through monthly or annual prefunded contributions at actuarially determined rates. Rates for the contributory plan tiers for members who entered the Plan prior to January 1, 2013 are based upon age at entry to the Plan and plan type enrollment.

**Net Pension Liability**

At June 30, 2019, the proportionate share of South Coast AQMD's Net Pension Liability was 0%. Updated procedures were used to roll-forward the total pension liability to the measurement dates of June 30, 2018.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**Pension Expense and Deferred Outflows/Inflows of Resources**

For the fiscal year ended June 30, 2019, South Coast AQMD recognized pension expense of \$8,300 for its proportionate share of LACERA’s pension expense. At June 30, 2019, South Coast AQMD reported its proportionate share of deferred outflows of resources and deferred inflows of resources related to pensions, from the following sources:

	<b>Deferred Outflows of Resources*</b>	<b>Deferred Inflows of Resources*</b>
Changes in proportion and differences between South Coast AQMD contributions and proportionate share of contributions	\$ 33,000	\$ -
<b>Total</b>	\$ 33,000	\$ -

\*See note VI for summary

Amounts reported as deferred outflows of resources and deferred inflows of resources related to LACERA pensions will be recognized in pension expense as follows:

<b>Year ended June 30:</b>	
<b>2020</b>	\$8,000
<b>2021</b>	8,000
<b>2022</b>	5,000
<b>2023</b>	5,000
<b>2024</b>	1,000
<b>Thereafter</b>	6,000

**Actuarial Assumptions and Methods**

The actuarial assumptions used in the June 30, 2017 actuarial valuation were based on the results of the actuarial experience study for the period July 1, 2013 to June 30, 2016. LACERA’s actuary performs an experience study every three years.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

<u>Description</u>	<u>Method</u>
<b>Valuation Timing</b>	Actuarially determined contribution rates are calculated as of June 30, two years prior to the end of the fiscal year in which the contributions are reported.
<b>Actuarial Cost Method</b>	Individual Entry Age Normal
<b>Amortization Method</b>	
Level Percent or level dollar	Level percent
Closed, Open, or layered periods	Layered
Amortization Period for each layer	30 years
Amortization Growth Rate	3.25%
<b>Asset Valuation Method</b>	
Smoothing period	5 years
Recognition method	Non-asymptotic
Corridor	None
<b>Inflation</b>	2.75%
<b>Investment Rate of Return</b>	7.38%
<b>Cost of Living Adjustments</b>	As noted in the June 30, 2017 actuarial valuation, with one modification: STAR COLA benefits are assumed to be substantively automatic at the 80% purchasing power level until the STAR reserve is projected to be insufficient to pay further STAR benefits.

The allocation of investment assets within the LACERA Defined Benefit Pension Plan (Plan) investment portfolio is approved by the Board of Investments, as outlined in the LACERA Investment Policy statement. The following table displays the Board of Investments approved asset allocation targets for the fiscal year ended June 30, 2018.

**LACERA's Target Allocation and Long-Term Expected Rate of Return  
For the Year Ended June 30, 2018**

<u>Asset Class</u>	<u>Target Allocation</u>	<u>Weighted Average Long-Term Expected Rate of Return (Geometric)</u>
Global Equity	43.40%	5.70%
Fixed Income	26.60%	2.60%
Real Estate	11.00%	4.60%
Private Equity	10.00%	6.90%
Commodities	2.80%	1.60%
Hedge Funds	4.20%	3.10%
Other Opportunities	0.00%	4.50%
Cash	2.00%	-0.20%

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**Discount Rate**

The investment rate of return assumption used for actuarial funding was 7.25% for the fiscal year ended June 30, 2018.

GASB 67 requires determination that the Plan’s fiduciary net position is projected to be sufficient to make projected benefit payments. The discount rate used to measure the total pension liability was 7.38%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current contribution rate and that South Coast AQMD contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the Pension Plan’s Fiduciary Net Position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on Pension Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity Analysis**

The following presents the net pension liability, calculated using the discount rate of 7.38%, as well as South Coast AQMD’s proportionate share of what the net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.38%) or 1 percentage point higher (8.38%) than the current rate (7.38%):

**Sensitivity of Net Pension Liability to Changes in the Discount Rate  
As of June 30, 2019**

	<b>1.00% Decrease <u>(6.38%)</u></b>	<b>Current Discount Rate <u>(7.38%)</u></b>	<b>1.00% Increase <u>(8.38%)</u></b>
South Coast AQMD’s proportionate share of the net pension liability	\$0	\$0	\$0

**Pension Plan Fiduciary Net Position**

Detailed information about the LACERA's fiduciary net position is available in a separately issued LACERA comprehensive annual financial report. That report may be obtained on the Internet at [www.LACERA.com](http://www.LACERA.com); by writing to LACERA at 300 N. Lake Avenue, Suite 650, Pasadena, CA 91101; or by calling (626) 564-6000.

**Payables to the Pension Plan**

The amount payable to LACERA at June 30, 2019 for the legally required contribution amount is \$0.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**X. OTHER POST EMPLOYMENT BENEFITS (OPEB)**

**Plan Description**

SBCERA does not provide any post-employment benefits to South Coast AQMD retirees. LACERA, however, in addition to providing pension benefits, essentially provides a comprehensive health care benefits program to its retirees that include several medical, dental, vision, and death benefits. LACERA administers a cost-sharing multiple-employer defined benefit Other Post-Employment Benefits (OPEB) on behalf of Los Angeles County and its participating agencies. South Coast AQMD is one of the participating agencies.

South Coast AQMD is subject under the April 20, 1982 agreement between the Los Angeles County and LACERA (County Agreement). In April 1982, the Los Angeles County adopted an ordinance pursuant to the County Employees Retirement Law of 1937 (CERL) that provided for a retiree health insurance program and death/burial benefits for retired employees and their eligible dependents. In 1982, the Los Angeles County and LACERA entered into an agreement whereby LACERA would administer the program subject to the terms and conditions of the agreement. In 1994, the Los Angeles County amended the agreement to continue to support LACERA's retiree insurance benefits program, regardless of the status of the active member insurance. In 2018, this agreement was further updated to specify the sharing of expenses between South Coast AQMD and LA County for South Coast AQMD retirees who also had LA County service credit.

LACERA is a closed plan to employees who were hired after December 31, 1979. Currently, there are 48 retirees covered by the benefit terms under the OPEB.

LACERA is a legally separate entity from South Coast AQMD, not a component unit, and there is no financial interdependency with the Los Angeles County. For these reasons, the South Coast AQMD's comprehensive annual financial report excludes the LACERA OPEB as of June 30, 2018. LACERA publishes its own comprehensive annual financial report that includes its financial statements and required supplementary information, which can be obtained by writing LACERA at 300 N. Lake, Pasadena, CA 91101 or visiting the website at: [www.LACERA.com](http://www.LACERA.com).

**Benefits Provided**

LACERA OPEB program offers members choice of medical plan as well as dental /vision plans. Medical and dental/vision are provided through third-party insurance carriers with the participant's cost for medical and dental/vision insurance varying according to the years of retirement service credit, the plan selected, and the number of persons covered. There is a one-time lump-sum \$5,000 death/burial benefit payable to the designated beneficiary upon the death of a retiree.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**Contributions**

South Coast AQMD and/or Los Angeles County and each retired employee participating in the OPEB contributes a portion of the total cost per month of the premium for the plan in which the retiree is enrolled according to the terms of the Retiree Health Care Program under the County Agreement. The portion of the premium to be paid by South Coast AQMD and/or the Los Angeles County is calculated based on the years of retirement service credit under the terms of the County Agreement, as they may change from time to time. LACERA subsidizes the retiree's cost starting at 10 years of service credit and up to a maximum of 100% for a member with 25 years of service credit with the County. LACERA, at its own discretion, may increase the premium to cover additional expenses.

**Net OPEB Liability**

At June 30, 2019, the net OPEB liability for its proportionate share of the collective net OPEB liability amounted to \$3,180,000. South Coast AQMD's proportion of the collective total OPEB liability was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions and was projected forward to the measurement date. At June 30, 2018, the South Coast AQMD's proportion was 0.01286%, which was a decrease of 0.00049% from its proportion of 0.01335% measured at June 30, 2017.

**OPEB Expense and Deferred Outflows/Inflows of Resources**

For the fiscal year ended June 30, 2019, the South Coast AQMD recognized OPEB expense of \$328,715. As of June 30, 2019, South Coast AQMD's reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	<u>Deferred Outflows of Resources*</u>	<u>Deferred Inflows of Resources*</u>
Differences between projected and actual plan investment earnings	\$ -	\$ 7,000
Differences between expected and actual economic experience	-	158,000
Changes of assumptions	-	395,000
Changes in proportion	-	250,000
South Coast AQMD contributions paid to LACERA subsequent to the measurement date	<u>230,900</u>	<u>-</u>
Total	<u>\$ 230,900</u>	<u>\$ 810,000</u>

\*See note VI for summary

The \$230,900 reported as deferred outflows of resources related to OPEB resulting from South Coast AQMD's contributions made to LACERA subsequent to the measurement date but before the reporting period ended June 30, 2019. The contribution will be recognized as a reduction of the net OPEB liability in the

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

subsequent fiscal year ended June 30, 2020. Other amounts reported as deferred inflows of resources related to OPEB will be recognized in the OPEB expense as follows:

<u>Year ended June 30:</u>	
2020	\$(107,000)
2021	(107,000)
2022	(107,000)
2023	(106,000)
2024	(105,000)
Thereafter	(276,000)

**Actuarial Assumptions and Methods**

The significant actuarial assumptions and methods used to measure the total OPEB's liability are as follows:

Actuarial Valuation Date	June 30, 2017
Measurement Date	June 30, 2018
Actuarial Cost Method	Entry age normal, level percent of pay
Inflation	2.75%
Salary Increases	3.25%
Investment Rate of Return	6.30%, net of OPEB plan investment expense, including inflation

Mortality rates were based on the RP-2014 Healthy and Disabled Annuitant mortality tables, and including projection for expected future mortality improvement using the MP-2014 Ultimate Projection Scale.

**Healthcare Cost Trend Rates:**

	FY 2018 to <u>FY 2019</u>	FY 2019 to <u>FY 2020</u>	<u>Ultimate</u>
LACERA Medical Under 65	5.80%	6.30%	4.50%
LACERA Medical Over 65	6.00%	6.00%	4.50%
Part B Premiums	9.25%	1.85%	4.35%
Dental/Vision	0.00%	3.00%	3.70%
Weighted-average Trend	5.85%	5.42%	4.47%

The OPEB liability figures include the Excise Tax. This is based on the requirements of the Affordable Care Act (ACA) and the Consolidated Appropriations Act of 2016.

The actuarial assumptions used in the June 30, 2017 valuation were based on the results of an actuarial experience study for the period from July 1, 2013 to June 30, 2016.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**Long-term Expected Rate of Return**

The long-term expected rate of return on OPEB plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target of asset allocation percentage and by adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table. The asset class return assumptions are presented on a real basis, after the effects of inflation, and all assumptions incorporate a base inflation rate assumption of 2.75%. The Expected Geometric Nominal Return (30 years) as of June 30, 2018 was 6.3%.

Asset Class	Target Allocations	Weighted Average Long-Term Expected Real Rate of Return (After Expected 2.75% Inflation Rate) (Geometric)
Growth – Global Equity	50.0%	4.7%
Credit – High Yield Bonds	6.0%	2.6%
Credit – Bank Loans	10.0%	2.2%
Credit – EM Local Currency Bonds	4.0%	2.6%
Risk Reduction & Mitigation – Cash Equivalents	2.0%	0.1%
Risk Reduction & Mitigation – Investment Grade Bonds	8.0%	0.8%
Inflation Hedges – TIPS	6.0%	0.5%
Inflation Hedges – Real Estate (REITs)	10.0%	3.9%
Inflation Hedges – Commodities	4.0%	1.8%

**Discount Rate**

The discount rate used to measure the total OPEB liability was 5.11%. The discount rate was developed using a depletion date projection, which included the following assumptions:

- The employers contribute the amount necessary to pay the current year benefits and the planned contribution amounts to the OPEB Trust from the Los Angeles County June 22, 2015 plan.
- Benefit payments are projected based on the actuarial assumptions and the current plan provisions.
- Members are assumed to terminate, retire, become disabled, and so forth according to the actuarial assumptions used for the July 1, 2017 OPEB valuation.
- All cash flows are assumed to occur on average halfway through the year.
- The long-term expected rate of return on plan investment is 6.30 percent as of June 30, 2018.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

- The 20-year tax-exempt municipal bond index rate is 3.87 percent as of June 30, 2018.
- The funding policy used to determine actuarially determined contributions did not change. GASB 74 report includes the ACA Excise Tax in the liabilities. The funding policy includes Excise Tax for the purposes of these GASB 74 calculations.
- The plan provisions do not change except if any material future changes have been agreed upon as of the measurement date.

**Sensitivity of the South Coast AQMD’s Proportionate Share of the Net OPEB Liability to Changes in the Discount Rate**

The following presents the South Coast AQMD’s proportionate share of the net OPEB liability as well as what the South Coast AQMD’s proportionate share of the net OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (4.11%) or 1-percentage-point higher (6.11%) than the current rate:

	<u>1% Decrease (4.11%)</u>	<u>Current Discount Rate (5.11%)</u>	<u>1% Increase (6.11%)</u>
South Coast AQMD’s proportionate share of net OPEB liability	\$3,810,000	\$3,180,000	\$2,683,000

**Sensitivity of the South Coast AQMD’s Proportionate Share of the Net OPEB Liability to Changes in Healthcare Cost Trend Rates**

The following presents the South Coast AQMD’s proportionate share of the net OPEB liability, calculated using the healthcare cost trend rates as reported on the July 1, 2017 OPEB Actuarial Valuation Health Cost Trend Assumptions with Excise Tax table, as well as what the net OPEB liability would be if it were calculated using the healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current rates:

	<u>1% Decrease</u>	<u>Current Healthcare Cost Trend Rates</u>	<u>1% Increase</u>
South Coast AQMD’s proportionate share of net OPEB liability	\$2,593,000	\$3,180,000	\$3,959,000

**OPEB Plan Fiduciary Net Position**

Detail information about the LACERA’s fiduciary net position is available is a separately issue LACERA comprehensive annual financial report. That report may be obtained on the internet at [www.LACERA.com](http://www.LACERA.com); by writing to LACERA at 300 N. Lake, Pasadena, CA 91101; or by calling (626) 564-6000.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO THE BASIC FINANCIAL STATEMENTS**  
**June 30, 2019**

**Payable to the OPEB Plan**

At June 30, 2019, the amount payable to LACERA for the legally required contribution is \$18,867.

**XI. DEFERRED COMPENSATION PLAN**

South Coast AQMD offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The plan permits them to defer a portion of their salary until future years. These funds are not available to employees until termination, retirement, death or unforeseen emergency.

The deferred compensation plan monies are invested in various investment funds as selected by the participating employees. All amounts of compensation deferred under the plan and all income attributed to those amounts are held in trust for the exclusive benefit of plan participants and their beneficiaries.

Effective January 1, 1999, federal legislation requires the Section 457 plan assets to be placed in trust for the exclusive use of the plan participants and their beneficiaries. South Coast AQMD's deferred compensation administrator, Hartford Life Insurance Co., qualifies as the plan trustee to meet the federal requirements. In accordance with GASB Statement No. 32, South Coast AQMD no longer reports the plan assets and liabilities in its financial statements. As of June 30, 2019, investments with a fair value of \$185,646,422 are held in a trust.

**XII. HEALTH REIMBURSEMENT ARRANGEMENT PLAN**

On December 4, 2009, South Coast AQMD's Governing Board approved the establishment of a Health Reimbursement Arrangement (HRA) plan for South Coast AQMD employees. This allows active employees to save on a tax-free basis for their future post-retirement health care costs. The Hartford serves as South Coast AQMD's HRA service provider. Currently, both South Coast AQMD and the SBCERA do not offer a health reimbursement program nor post-retirement health care to help the employees afford health care in retirement.

Initially, the program was made available to non-represented employees with the understanding that it could be expanded to cover represented employees, based on their approval. In compliance with the rules establishing the HRA, each defined group covered by the plan is required to establish its own criteria on what earnings would be contributed. As of June 30, 2019, Executive Officer, General Counsel and Designated Deputies were the eligible employee classifications that were set up and approved by South Coast AQMD. Contributions are 100% vacation and sick leave payouts at termination and/or compensation payout at termination per existing leave payment policy. Eligibility shall commence upon termination of employment on account of retirement (whether through disability or service).

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**XIII. COMMITMENTS**

**Guaranteed Loans**

The Air Quality Assistance Fund (AQAF) was originally established to comply with state legislation which required South Coast AQMD to allocate a portion of the funds it receives as penalties and settlements from violators of air pollution regulations and to provide financing assistance to small businesses that require financing in order to comply with South Coast AQMD requirements. This legislation was repealed on January 1, 1999. In June 2000, the Governing Board authorized staff to continue to use the funds to assist small businesses with an improved program for greater participation. Financing assistance includes guaranteeing or otherwise reducing the financial risks of lenders in providing financial assistance to small businesses. The funds are not used for direct loans to small businesses.

In June 2001, South Coast AQMD entered into an agreement with the California Pollution Control Financing Authority (CPCFA) to be an “independent contributor” to the California Capital Access Program (CalCAP). South Coast AQMD transferred \$100,000 to the CPCFA to cover borrower fees on any qualified small business CalCAP loans for air quality-related equipment or processes.

In October 2007, the Governing Board authorized the transfer of \$1 million to the Dry Cleaners Financial Incentives Grant Program to supplement the existing incentive grant programs. This incentive program assists dry cleaners in making early transitions from perchloroethylene (perc) to alternative cleaning technologies. AQAF’s fund balance amounted to \$1,646,942 at fiscal year ended June 30, 2019.

**Operating Leases**

Rental expense for non-cancelable operating leases was \$323,344 for the year ended June 30, 2019. Future minimum lease payments under non-cancelable operating leases of South Coast AQMD total as follows:

<b>Year Ending June 30:</b>	<b><u>Amount</u></b>
2020	\$266,594
2021	235,321
2022	<u>93,489</u>
Total	<u>\$595,404</u>

The lease for the office equipment expires in December 2021 while the lease of the South Bay satellite office expires in September 2021.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO THE BASIC FINANCIAL STATEMENTS  
June 30, 2019**

**XIV. PENDING LITIGATION**

A number of other lawsuits and claims are pending against South Coast AQMD for alleged damages to persons and property and for other alleged liabilities arising out of its normal operations. South Coast AQMD's management believes that any liability that may arise from the ultimate resolution of such legal actions will not have a material adverse impact on the financial position as of June 30, 2019.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
GENERAL FUND - BUDGET AND ACTUAL  
(NON-GAAP BUDGETARY BASIS) SCHEDULE  
For the Year Ended June 30, 2019**

	Budgeted Amounts		Actual Amounts Budgetary Basis	Variance with Final Budget Positive (Negative)
	Original	Final		
<b>Revenues:</b>				
Emission fees	\$ 19,729,280	\$ 19,729,280	\$ 19,542,162	\$ (187,118)
Annual renewal fees	58,470,930	58,470,930	57,028,631	(1,442,299)
Area Sources	2,274,800	2,274,800	2,257,755	(17,045)
Permit processing fees	19,856,640	19,856,640	19,986,603	129,963
Mobile sources/clean fuels	30,625,320	30,630,044	25,128,935	(5,501,109)
Air toxics "Hot Spots"	2,849,590	2,849,590	2,184,155	(665,435)
Transportation programs	951,280	951,280	977,223	25,943
State subvention	3,939,080	3,939,080	3,924,547	(14,533)
Federal grant	4,874,450	6,812,885	7,563,375	750,490
Interest revenue	1,116,070	1,116,070	1,976,414	860,344
Lease revenue	166,980	166,980	162,879	(4,101)
Source test/analysis fees	781,700	781,700	574,007	(207,693)
Hearing Board fees	258,500	258,500	187,308	(71,192)
Penalties and settlements	5,000,000	5,000,000	7,196,194	2,196,194
Other revenues	8,919,231	12,994,361	12,258,935	(735,426)
Total revenues	\$ 159,813,851	\$ 165,832,140	\$ 160,949,123	\$ (4,883,017)
<b>Expenditures:</b>				
Current:				
Salaries and employee benefits	\$ 132,868,320	\$ 134,591,535	\$ 124,376,218	\$ 10,215,317
Insurance	1,317,400	1,768,773	1,717,991	50,782
Rent	761,071	1,083,196	600,179	483,017
Supplies	1,901,399	3,588,958	3,044,491	544,467
Contract and special services	10,523,187	14,030,168	12,672,248	1,357,920
Maintenance	2,367,143	3,302,727	1,924,046	1,378,681
Travel and auto	940,445	1,294,239	1,141,882	152,357
Utilities	1,959,620	1,633,915	1,413,921	219,994
Communications	717,800	790,862	632,568	158,294
Uncollectible accounts	-	-	471,292	(471,292)
Other expenditures	1,996,016	2,941,500	2,330,993	610,507
Capital outlay	1,088,300	6,310,825	4,669,722	1,641,103
Debt service:				
Principal	2,553,110	2,553,110	2,553,110	-
Interest	3,637,290	3,637,290	3,637,290	-
Total expenditures	\$ 162,631,101	\$ 177,527,098	\$ 161,185,951	\$ 16,341,147
Excess (deficiency) of revenues over (under) expenditures	\$ (2,817,250)	\$ (11,694,958)	\$ (236,828)	\$ 11,458,130
<b>Other Financing Sources (Uses)</b>				
Transfers in	\$ 2,817,250	\$ 4,890,420	\$ 6,397,393	\$ 1,506,973
Transfers out	-	2,904,582	2,904,582	-
Total other financing sources	\$ 2,817,250	\$ 1,985,838	\$ 3,492,811	\$ 1,506,973
Net change in budgetary fund balances	\$ -	\$ (9,709,120)	\$ 3,255,983	\$ 12,965,103

See accompanying notes to required supplementary information and independent auditor's report.

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### Schedule of South Coast AQMD's Proportionate Share of the Net Pension Liability Last 10 Fiscal Years\*

	Measurement Date**					
	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
<b><u>SBCERA Pension Plan</u></b>						
South Coast AQMD's proportion of the net pension liability	8.61%	8.12%	8.09%	7.79%	6.45%	7.88%
South Coast AQMD's proportionate share of the net pension liability	\$ 218,228,092	\$ 214,076,570	\$ 199,589,723	\$ 151,441,343	\$ 109,655,281	\$ 156,371,863
South Coast AQMD's covered payroll	\$ 73,329,109	\$ 71,657,793	\$ 71,247,083	\$ 68,088,547	\$ 75,623,191	\$ 77,748,408
South Coast AQMD's proportionate share of the net pension liability as a percentage of its covered payroll	297.60%	298.75%	280.14%	222.42%	145.00%	201.13%
SBCERA's fiduciary net position as a percentage of the total pension liability	75.85%	74.94%	74.10%	79.33%	83.74%	76.28%

	Measurement Date**					
	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014	June 30, 2013
<b><u>LACERA Pension Plan</u></b>						
South Coast AQMD's proportion of the net pension liability	0%	0%	0%	0%	0%	0%
South Coast AQMD's proportionate share of the net pension liability	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
South Coast AQMD's covered payroll	\$ 48,839	\$ 60,610	\$ 59,557	\$ 59,193	\$ 57,884	\$ 58,597
South Coast AQMD's proportionate share of the net pension liability as a percentage of its covered payroll	0%	0%	0%	0%	0%	0%
LACERA's fiduciary net position as a percentage of the total pension liability	0%	0%	0%	0%	0%	0%

\* Data for FY's ended June 30, 2009 through 2012 is not available in comparable format.

\*\* GASB Statement No. 68 requires this information to be presented as of the measurement date of the net pension liability, which is not the current fiscal year end.

See accompanying notes to required supplementary information and independent auditor's report.

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### Schedule of South Coast AQMD's Contributions - Pensions Last 10 Fiscal Years\*

	Reporting Date**					
	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
<b><u>SBCERA Pension Plan</u></b>						
Contractually required contribution	\$ 30,295,487	\$ 25,332,734	\$ 23,319,256	\$ 21,089,956	\$ 19,384,858	\$ 18,060,910
Contributions in relation to the contractually required contributions	30,295,487	25,332,734	23,319,256	21,089,956	19,384,858	18,060,910
Contributions deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
South Coast AQMD's covered payroll***	\$ 76,475,127	\$ 73,329,109	\$ 71,657,793	\$ 71,247,083	\$ 68,088,547	\$ 75,623,191
Contributions as a percentage of covered payroll	39.61%	34.55%	32.54%	29.60%	28.47%	23.89%

	Reporting Date**					
	June 30, 2019	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2015	June 30, 2014
<b><u>LACERA Pension Plan</u></b>						
Contractually required contribution	\$ -	\$ 8,300	\$ 11,000	\$ 13,000	\$ 14,000	\$ 14,000
Contributions in relation to the contractually required contributions	-	8,300	11,000	13,000	14,000	14,000
Contributions deficiency (excess)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
South Coast AQMD's covered payroll***	\$ -	\$ 48,839	\$ 60,610	\$ 59,557	\$ 59,193	\$ 57,844
Contributions as a percentage of covered payroll	0.00%	16.99%	18.15%	21.83%	23.65%	24.20%

\* Data for FY's ended June 30, 2010 through 2013 is not available in comparable format.

\*\* GASB Statement No. 68 requires this information to be presented as of the most recent fiscal year end.

\*\*\* Covered payroll is different from that shown in previously issued reports due to updated information.

See accompanying notes to required supplementary information and independent auditor's report.



## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### Schedule of South Coast AQMD's Proportionate Share of the Net OPEB Liability Last 10 Fiscal Years\*

	Measurement Date**		
	June 30, 2018	June 30, 2017	June 30, 2016
<b><u>LACERA OPEB Plan</u></b>			
South Coast AQMD's proportion of the collective net OPEB liability	0.01286%	0.01335%	0.01396%
South Coast AQMD's proportionate share of the collective net OPEB liability	\$3,180,000	\$3,534,000	\$3,721,000
South Coast AQMD's covered-employee payroll	\$48,839	\$60,610	\$59,557
South Coast AQMD's proportionate share of the collective net OPEB liability as a percentage of its covered payroll	6511.19%	5830.72%	6247.80%
LACERA's fiduciary net position as a percentage of the total OPEB liability	0%	0%	0%

\* Historical information is required only for measurement periods for which GASB 75 is applicable. Future year's information will be displayed up to 10 years as information becomes available.

\*\* GASB Statement No. 75 requires this information to be presented as of the measurement date of the net OPEB liability, which is not the current fiscal year end.

## SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

### Schedule of South Coast AQMD's Contributions - OPEB Last 10 Fiscal Years\*

<b><u>LACERA OPEB Plan</u></b>	<b>Reporting Date**</b>		
	<b>June 30, 2019</b>	<b>June 30, 2018</b>	<b>June 30, 2017</b>
Contractually required contribution	\$ 229,019	\$ 232,715	\$ 234,967
Contributions in relation to the contractually required contributions	(229,019)	(232,715)	(234,967)
Contributions deficiency (excess)	\$ -	\$ -	\$ -
South Coast AQMD's covered employee payroll	\$ -	\$ 48,839	\$ 60,610
Contributions as a percentage of covered payroll	0.00%	476.49%	387.67%

\* Historical information is required only for measurement periods for which GASB 75 is applicable. Future year's information will be displayed up to 10 years as information becomes available.

\*\* GASB Statement No. 75 requires this information to be presented as of the most recent fiscal year-end.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION  
June 30, 2019**

**NOTE 1 – BUDGETS AND BUDGETARY ACCOUNTING**

South Coast AQMD has a comprehensive annual budget process which establishes goals and objectives and monitors expenditures associated with meeting those goals and objectives.

Up to and including the budget adoption hearing by South Coast AQMD's Governing Board, the public and the business community have several opportunities to participate in the budget process. These opportunities include: Budget Advisory Committee meetings made up of business and environmental representatives, a public workshop, a Governing Board workshop and a public hearing.

Following input from the public, Budget Advisory Committee, and Governing Board, the draft budget for fiscal year 2018-19 was prepared and subsequently adopted at the May 2018 meeting of the Governing Board. The fiscal year 2018-19 Adopted Budget and the final fee schedules became effective on July 1, 2018.

South Coast AQMD's annual budget is adopted for the General Fund at the Major Object levels of Salaries and Employee Benefits, Services and Supplies, Capital Outlays, and Building Remodeling. The Governing Board has delegated expenditure authority to the Executive Officer for all budgeted expenditures of \$75,000 or less within a major object. All appropriations to the budget and transfers between major objects must be approved by the Governing Board. Transfers within a major object are delegated to the Executive Officer. Monthly expenditure reports are issued to each Office. The Governing Board receives a General Fund Budget status report on a quarterly basis.

South Coast AQMD presents a comparison of annual budget to actual results for the General Fund. The budgeted expenditure amounts represent the adopted budget adjusted for Governing Board approved supplemental appropriations. The budgeted revenue amounts represent the adopted budget modified for Governing Board approved adjustments which were based upon new or additional revenue sources. Supplemental expenditure appropriations of \$17,800,579 and revenue adjustments of \$8,091,459 were approved by the Governing Board in fiscal year 2018-19.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
NOTES TO REQUIRED SUPPLEMENTARY INFORMATION  
June 30, 2019**

**NOTE 2 – GENERAL FUND BUDGETARY BASIS RECONCILIATION**

The General Fund Budgetary Basis under Required Supplementary Information presents comparisons of the legally adopted budget with actual data on a budgetary basis. Accounting principles applied for purposes of developing expenditures data on a budgetary basis differ from those used to present financial statements in conformity with Generally Accepted Accounting Principles (GAAP). The basis of budgeting that differs from GAAP is modified accrual basis plus encumbrances. The following is a reconciliation of differences for the fiscal year ended June 30, 2019:

Expenditures and encumbrances (budgetary basis) June 30, 2019	\$161,185,951
Add: payments on encumbrances open at July 1, 2018	6,720,504
Less: encumbrances open at June 30, 2019	<u>(8,433,023)</u>
Expenditures (GAAP basis), June 30, 2019	<u>\$159,473,432</u>

A reconciliation of revenue is not presented since budgetary practices and GAAP do not differ with respect to revenue.

**NOTE 3 – USE OF BUDGETARY FUND BALANCE**

When the fiscal year 2018-19 budget was adopted the Governing Board approved a budget that was balance. Mid-year adjustments appropriated \$1,079,226 from Assigned Fund Balance and a net of \$8,629,894 from Unassigned Fund Balance which resulted in a negative net change in budgetary fund balance of \$9,709,120.

**NOTE 4 – FACTORS AFFECTING PENSION TRENDS SOUTH COAST AQMD’S PROPORTION**

As of the June 30, 2018 measurement date, South Coast AQMD’s proportionate share of SBCERA’s total net pension liability increased from 8.12% to 8.61%. The increase is primarily due to an increase in South Coast AQMD’s staffing levels and associated SBCERA-eligible compensation (“pensionable compensation” and “compensation earnable”) as compared against the net increase in total SBCERA-eligible compensation from all other SBCERA employers, resulting in an increase in proportionate share of net pension liability.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
OTHER SUPPLEMENTARY INFORMATION  
June 30, 2019**

**Non-major Governmental Funds**

Special Revenue Funds:

- Air Toxics Fund - Used to account for fees received from industrial toxic air emitters. These funds are spent on planning and performing health risk evaluations for the purpose of developing a toxic emissions inventory for the South Coast Air Basin.
- Advanced Technology, Outreach and Education Fund - Used to account for monies contributed by companies in lieu of paying fines for violating South Coast AQMD rules. Contributed amounts must be used to pay costs associated with South Coast AQMD-sponsored research and development in cleaner burning fuels and other advanced technologies and public outreach and education related to advanced technology and air pollution and its impacts.
- Air Quality Assistance Fund - Used to account for funds set aside for the purpose of underwriting, guaranteeing, or otherwise participating in the provision of financial assistance to small businesses as required by Section 40448.7 of the California Health and Safety Code. (This legislation was repealed by its own terms January 1, 1999). In June 2000, the Governing Board authorized staff to revise the program to increase participation of small businesses. Certain revisions, including participation in the California Capital Access Program (CalCAP) to assist small businesses, were implemented in June 2001.
- Air Quality Improvement Fund - Used to account for 40% of the revenue received by the South Coast AQMD from motor vehicle registration fees under the provisions of Sections 44243 and 44244 of the California Health and Safety Code. This money is distributed on a quarterly basis to cities and counties within the South Coast Air Basin to implement programs to reduce air pollution from motor vehicles.
- Air Quality Investment Fund – To account for revenue from employers with 250 or more employees at a worksite who are subject to Rule 2202. This revenue is used to purchase emissions reductions credits to meet the required target. To date, \$47.9 million in projects have been awarded to purchase over 34,071 tons of emission reductions. Starting April 2017, this fund was used to process rebates for South Coast AQMD’s Residential Electric Lawn Mower Rebate Program. By the end of 2018, \$182,050 rebates were processed. As of June 30, 2019, a total of 1,113 lawn mowers were exchanged with total emission reductions of 2.69 tons & \$233,950 total fund spent.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**OTHER SUPPLEMENTARY INFORMATION**  
**June 30, 2019**

- RECLAIM AQIP - Established in fiscal year 2001 to separately account for the generation of NO<sub>x</sub> (Oxides of Nitrogen) credits at stationary and mobile sources for use by certain small or new RECLAIM (Regional Clean Air Incentives Market) participants. AQIP stands for Air Quality Investment Program.
- RECLAIM and Executive Order Mitigation - Established in fiscal year 2001 to account for mitigation fee payments made by power generators in lieu of emission offsets. Proceeds are used to generate RECLAIM Trading Credits (RTCs) to offset excess emissions.
- Rule 1121 Mitigation Fee Program - Established in fiscal year 2004 to issue program announcements for projects under the Rule 1121 Mitigation Fee Program. Under Rule 1121 - Control of Nitrogen Oxides (NO<sub>x</sub>) from Residential Type, Natural Gas Fired Water Heaters, emission mitigation fees are collected from water heater manufacturers to fund stationary and mobile source emission reduction projects targeted at offsetting NO<sub>x</sub> emission.
- Clean Fuels Program Fund - Established as a special revenue fund in fiscal year 2000 to account for contract activities and revenues of the Clean Fuels Program. These are activities associated with implementing Clean Fuels stationary source and mobile source research, development, demonstration and deployment projects approved by the Governing Board. Since 1988, the Clean Fuels Program has provided funds for 1,414 projects totaling \$230 million.
- Carl Moyer Program Fund – Established in fiscal year 1999 to account for activities related to the administration of state funds set aside for the replacement of diesel-powered vehicles with cleaner-technology vehicles. It has funded over 6,708 vehicles totaling over \$467 million. It provides incentive funds for the replacement or repower of older diesel engines in on- and off-road vehicles such as refuse haulers, heavy duty trucks, transit and school buses, construction equipment, and marine vessels.
- Lower-Emission School Bus Fund – Established in fiscal year 2001 to administer state funds set aside in the South Coast Air Basin for the replacement and retrofit of high-emitting diesel-fueled school buses. Between fiscal years 2000 and 2017, \$280 million of Lower Emissions School Bus funds were spent on the replacement of school buses, and the retrofit of newer diesel buses with PM traps. In total, nearly 1600 old buses were replaced by brand new, primarily CNG school buses, and nearly 3,400 newer diesel school buses were retrofitted with PM traps.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**OTHER SUPPLEMENTARY INFORMATION**  
**June 30, 2019**

- Zero Emission Vehicle Incentive Program - Established in fiscal year 2001 to administer the State funds set aside for the implementation of the Zero Emission Vehicle (ZEV) Incentive Program.
- AES Settlement Projects Fund - Established in fiscal year 2001 for the purpose of accounting for the one-time penalty settlement with AES Corporation for air pollution violations.
- Rule 1309.1 Priority Reserve Fund - Established in fiscal year 2001 to account for mitigation fees paid for Particulate Matter  $\leq 10$  microns (PM<sub>10</sub>) credits. Due to the state energy crisis in 2001, Rule 1309.1 was amended to allow new electric generating facilities temporary access to South Coast AQMD's Priority Reserve Account to offset their PM<sub>10</sub> emission increases provided that they meet specific criteria and pay appropriate mitigation fees.
- CARB ERC Bank Fund - Established in fiscal year 2001 to account for the proceeds from the issuance of the Emission Reduction Credits (ERCs) to natural gas turbine power plant peaker units. CARB established the ERC Bank for peaker power plants that need emission offsets to add new or expanded capacity. Proceeds from the issuance of these ERCs will fund emission reduction programs where the new or expanded facility is located.
- LADWP Settlement Fund - Established in fiscal year 2001 for the purpose of accounting for the monies received from the Los Angeles Department of Water and Power as part of the settlement agreement.
- State-Emissions Mitigation Fund - Established during fiscal year 2002 to account for the funds received from California Air Resources Board (CARB) to fund CARB selected projects on emission reductions within the South Coast Air Basin. This is in response to the Governor's statewide program to mitigate excess emissions from peaker power generation units to alleviate the power crisis in California.
- Natural Gas Vehicle Partnership Fund - Established during fiscal year 2002 for creation of the Natural Gas Vehicle Partnership to facilitate the advancement of natural gas vehicle technology and deployment. The contributions received from participating members are accounted for in this fund as well as the expenditures for activities and projects selected by the Partnership.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**OTHER SUPPLEMENTARY INFORMATION**  
**June 30, 2019**

- State Backup Generators (BUG) Program Fund - Established in fiscal year 2003 to account for the funds received from CARB's Diesel-Fueled Electrical Backup Generator Emissions Mitigation Program. This program funds emission related projects as part of an ongoing effort to expeditiously reduce public exposure to air toxics and other pollutants.
- Dry Cleaners Financial Incentives Grant Program - Established in fiscal year 2003 to provide financial incentives to dry cleaners to purchase non-toxic alternative dry cleaning equipment.
- Rule 1173 Mitigation Fee Fund - Established in fiscal year 2004 to account for Rule 1173 mitigation fee payments to be used in funding air quality projects which directly benefit the community surrounding the facility. Amendments in December 2002 to Rule 1173 for Refineries and Chemical Plants established a mitigation fee payment provision relating to the release of Volatile Organic Compound (VOC) from an atmospheric Pressure Relief Device (PRD).
- Communities for Better Environment (CBE)/Our Children's Earth (OCE) Settlement Agreement Fund - Established in FY 2004 as part of the settlement agreement to fund PM<sub>10</sub> (Particulate Matter ≤ 10 microns) and/or NO<sub>x</sub> (Oxides of Nitrogen) reduction projects in disproportionately impacted areas.
- BP ARCO Settlement Projects Fund - Established in fiscal year 2005 to account for the \$25 million civil penalties received in 2005 as part of the settlement with BP ARCO for air pollution violations.
- Health Effects Research Fund - The Health Effects Research Fund was established in fiscal year 2008 to receive 20% of all penalty/settlement monies in excess of \$4 million recognized annually in South Coast AQMD's General Fund beginning in fiscal year 2009, subject to annual Board approval.
- CEQA Green House Gas Mitigation Fund - This fund was established in fiscal year 2009 under Rule 2702 for Green House Gas (GHG) emission reductions. It received \$1.5 million from Chevron Products Company to offset Green House Gas emission as part of its Product Reliability and Optimization (PRO+) Project Mitigation Monitoring Plan.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
OTHER SUPPLEMENTARY INFORMATION  
June 30, 2019**

- TraPac School Air Filtration Fund - This fund was established in fiscal year 2011 and received \$6,000,000 from City of Los Angeles towards installation and maintenance of air filtration systems for schools in the Wilmington area that were impacted by the expansion of the TraPac Container Terminal Project.
- Emission Reduction and Outreach Fund - This fund was established in fiscal year 2010 due to a \$1,000,000 Supplemental Environmental Project Settlement. These funds are used to enhance compliance of emission reduction policies by providing source education and consumer education.
- Rule 1118 Mitigation Fund - Established in fiscal year 2010 to account for mitigation fees from petroleum refineries that exceed sulfur dioxide emission thresholds from flares and future Rule 1118 mitigation fees and to track the projects funded through these fees.
- HEROS II Fund - Established in fiscal year 2011, this fund is used to track funds received and expenditures for South Coast AQMD's vehicle scrap and replacement program. This voluntary program reduces emissions from high-emitting light and medium-duty vehicles in South Coast AQMD.
- EL Monte Park Project Settlement Fund - Established in fiscal year 2011 for the purpose of accounting for the monies received from Gregg Industries bankruptcy estate as part of a settlement agreement to finance the construction of park improvements in the City of El Monte.
- AB 1318 Mitigation Fees Fund - Created in fiscal year 2011 to account for revenue of \$53.3 million from a mitigation fee payment for the transfer of emission credits under AB 1318.
- Voucher Incentive Program (VIP) Fund - Established in fiscal year 2012 due to transfer of funds from the Carl Moyer Multidistrict funds originally recorded in Carl Moyer Program Fund, to separately administer the On-Road Heavy-Duty Vehicle Voucher Incentive Program.
- Advanced Technology Goods Movement Fund - Established in fiscal year 2012 to administer funds received through an agreement with Port of Los Angeles and Port of Long Beach to fund projects consistent with the development and demonstration of zero emissions goods movement technologies, including the demonstration of Linear Synchronous Motor (LSM) technology to move cargo containers and the development of two discrete hybrid electric drive systems for heavy-duty vehicles.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**OTHER SUPPLEMENTARY INFORMATION**  
**June 30, 2019**

- Rule 1470 Risk Reduction Fund – Established in fiscal year 2012 to help fund control equipment costs for public agencies, such as cities, counties, and schools, required to install control equipment on new emergency standby engines in order to comply with Rule 1470.
- Hydrogen Fueling Infrastructure Network Fund – Established in fiscal year 2014 to receive state and federal grant revenue earmarked for hydrogen infrastructure upgrades to support the expected role out of fuel cell cars in the next few years. In fiscal year 2014, the South Coast AQMD received an award for \$6.69 million from the California Energy Commission (CEC) to upgrade and refurbish existing hydrogen stations in the South Coast Air Basin. Three stations in Burbank, LAX and Torrance were funded for upgrade through this grant. Work on the Torrance station was completed in August 2017 and work on the LAX station was completed in December 2018. Construction on the Burbank station was completed in January 2019, with some remaining work for the station to transition to open retail status.
- Rule 1420.1 Special Revenue Fund – Established in fiscal year 2014 to account for monies received from Exide Technologies and Quemetco to finance the Multi-Metals continuous emission monitoring system (CEMS) and continuous Multi-Metals Ambient Air Monitoring Demonstration Programs.
- BP/South Coast AQMD Public Benefits Oversight Fund – Established to receive remaining unspent \$177,802 from the 2005 BP Settlement Agreement public benefits payments. Funds will continue to be expended through the approval of the BP/South Coast AQMD Public Benefits Oversight Committee.
- Rule 1304.1 Special Revenue Fund – Established in fiscal year 2016 to track the deposit of fees paid and the withdrawal of funds for approved projects, pursuant to Rule 1304.1 – Electrical Generating Facility Fee for Use of Offset Exemption.
- Green House Gas (GHG) Reduction Projects Special Revenue Fund – Established in fiscal year 2016 to account for the projects funded by CARB’s Low Carbon Transportation Green House Gas Reduction Fund Investments.
- ExxonMobil Settlement Projects Special Revenue Fund – Established in fiscal year 2016 for the purpose of accounting for the monies received pursuant to a settlement agreement with ExxonMobil for Supplemental Environmental Project (SEP).

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
OTHER SUPPLEMENTARY INFORMATION  
June 30, 2019**

- LADWP Variance Special Revenue Fund – Established in fiscal year 2017 to receive environmental fees from the Los Angeles Department of Water and Power as part of an South Coast AQMD Hearing Board variance. The variance allowed LADWP to burn diesel to 1) recommission and test the turbines, and 2) subsequently to operate them on diesel fuel, only if the natural gas supply to LADWP was curtailed by SoCal Gas.
- Air Filtration Special Revenue Fund – Established in fiscal year 2017, a Supplemental Environmental Project (SEP) agreement was executed between CARB and the Burlington Northern Santa Fe Railway Company (BANSF) to install air filtration systems at schools in an Environmental Justice community in the South Coast region.
- SoCal Gas Settlement Special Revenue Fund – Established in fiscal year 2017 to execute a contract with KORE Infrastructure Inc in an amount not to exceed \$1 million from the SoCal Gas Settlement Special Revenue Fund to cost-share the commercial field test project.
- Rule 1180 Special Revenue Fund – Established in fiscal year 2018 to account for the Rule 1180 initial and final payments for implementation of the community air monitoring stations near petroleum refineries.

Capital Projects Fund

- Infrastructure Improvement Fund – Established in fiscal year 2013 to separately account for large-scale and/or multi-year infrastructure improvement projects.

Debt Service Fund - Established in 2009 to replace the terminated Guaranteed Investment Contract with the Municipal Bond Insurance Association (MBIA, Inc.) due to changes in financial markets. This is used for the defeasance of a portion of South Coast AQMD's debt service on Pension Obligation Bonds.

Component Unit – South Coast AQMD Building Corporation – Established in fiscal year 1978 for the acquisition and improvement of South Coast AQMD headquarters. The South Coast AQMD Building Corporation is a legally separate entity, but for financial statement purposes, it is shown as a blended component unit in the governmental funds.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	Special Revenue				
	Air Toxics Fund	Advanced Technology Outreach & Education Fund	Air Quality Assistance Fund	Air Quality Improvement Fund	Air Quality Investment Fund
Cash and cash equivalents	\$ 5,030,383	\$ 1,272,381	\$ 1,637,752	\$ 2,112,252	\$ 62,416,173
Investments	-	-	-	-	20,141,919
Interest receivable	22,768	6,696	9,190	13,926	359,356
Due from other governmental agencies	-	204,851	-	3,866,975	-
Due from other funds	-	-	-	-	-
Accounts receivable, net	784,216	-	-	-	5,102
Total assets	\$ 5,837,367	\$ 1,483,928	\$ 1,646,942	\$ 5,993,153	\$ 82,922,550
<u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ 405,182	\$ 194,375	\$ -	\$ 5,922,134	\$ 47,904
Due to other funds	3,103,115	602,638	-	-	478,623
Unearned revenue	785	-	-	-	5,047
Total liabilities	3,509,082	797,013	-	5,922,134	531,574
Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	-	686,915	-	71,019	-
Committed	464,500	-	-	-	6,733,425
Assigned	1,863,785	-	1,646,942	-	75,657,551
Unassigned	-	-	-	-	-
Total fund balances	2,328,285	686,915	1,646,942	71,019	82,390,976
Total liabilities and fund balances	\$ 5,837,367	\$ 1,483,928	\$ 1,646,942	\$ 5,993,153	\$ 82,922,550

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	Special Revenue				
	Clean Fuels Program Fund	Carl Moyer Program Fund	Lower-Emission School Bus Fund	Zero Emission Vehicle Incentive Fund	AES Settlement Projects Fund
Cash and cash equivalents	\$ 53,766,956	\$ 66,018,054	\$ 8,778,472	\$ 690,518	\$ 900,675
Investments	-	-	-	-	-
Interest receivable	235,568	365,291	47,713	3,683	4,804
Due from other governmental agencies	6,667,902	-	52,000	-	-
Due from other funds	6,626,395	-	-	-	-
Accounts receivable, net	143,750	-	-	-	-
<b>Total assets</b>	<b>\$ 67,440,571</b>	<b>\$ 66,383,345</b>	<b>\$ 8,878,185</b>	<b>\$ 694,201</b>	<b>\$ 905,479</b>
 <u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ 2,921,142	\$ 2,376,635	\$ -	\$ -	\$ 10,000
Due to other funds	4,731,200	1,625,708	-	-	-
Unearned revenue	-	-	-	-	-
<b>Total liabilities</b>	<b>7,652,342</b>	<b>4,002,343</b>	<b>-</b>	<b>-</b>	<b>10,000</b>
 Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	-	62,381,002	8,878,185	694,201	-
Committed	21,935,844	-	-	-	1,200
Assigned	37,852,385	-	-	-	894,279
Unassigned	-	-	-	-	-
<b>Total fund balances</b>	<b>59,788,229</b>	<b>62,381,002</b>	<b>8,878,185</b>	<b>694,201</b>	<b>895,479</b>
<b>Total liabilities and fund balances</b>	<b>\$ 67,440,571</b>	<b>\$ 66,383,345</b>	<b>\$ 8,878,185</b>	<b>\$ 694,201</b>	<b>\$ 905,479</b>

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	Special Revenue				
	Rule 1309.1 Priority Reserve Fund	CARB ERC Bank Fund	LADWP Settlement Fund	State-Emissions Mitigation Fund	Natural Gas Vehicle Partner Fund
Cash and cash equivalents	\$ 5,188,612	\$ 615,144	\$ 409,929	\$ 106,374	\$ 404,419
Investments	-	-	-	-	-
Interest receivable	30,030	3,281	2,186	605	2,184
Due from other governmental agencies	-	-	-	-	-
Due from other funds	-	-	-	-	-
Accounts receivable, net	-	-	-	-	55,000
Total assets	\$ 5,218,642	\$ 618,425	\$ 412,115	\$ 106,979	\$ 461,603
<u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ -	\$ -	\$ -	\$ -	-
Due to other funds	-	-	-	-	-
Unearned revenue	-	-	-	-	-
Total liabilities	-	-	-	-	-
Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	-	-	-	106,979	-
Committed	662,490	-	-	-	-
Assigned	4,556,152	618,425	412,115	-	461,603
Unassigned	-	-	-	-	-
Total fund balances	5,218,642	618,425	412,115	106,979	461,603
Total liabilities and fund balances	\$ 5,218,642	\$ 618,425	\$ 412,115	\$ 106,979	\$ 461,603

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	<u>Special Revenue</u>				
	<u>State BUG Program Fund</u>	<u>Dry Cleaners Financial Incentives Grant Program Fund</u>	<u>Rule 1173 Mitigation Fee Fund</u>	<u>CBE / OCE Settlement Agreement Fund</u>	<u>BP ARCO Settlements Project Fund</u>
Cash and cash equivalents	\$ 365,894	\$ 473,861	\$ 2,853,263	\$ 223,320	\$ 10,983,578
Investments	-	-	-	-	-
Interest receivable	1,951	2,531	15,216	-	59,779
Due from other governmental agencies	-	-	-	-	-
Due from other funds	-	-	-	-	57,328
Accounts receivable, net	-	-	-	-	-
<b>Total assets</b>	<b>\$ 367,845</b>	<b>\$ 476,392</b>	<b>\$ 2,868,479</b>	<b>\$ 223,320</b>	<b>\$ 11,100,685</b>
 <u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ -	\$ -	\$ -	\$ -	\$ 83,246
Due to other funds	20,734	-	-	-	-
Unearned revenue	-	-	-	-	-
<b>Total liabilities</b>	<b>20,734</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>83,246</b>
 Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	347,111	-	-	-	-
Committed	-	-	-	-	942,941
Assigned	-	476,392	2,868,479	223,320	10,074,498
Unassigned	-	-	-	-	-
<b>Total fund balances</b>	<b>347,111</b>	<b>476,392</b>	<b>2,868,479</b>	<b>223,320</b>	<b>11,017,439</b>
<b>Total liabilities and fund balances</b>	<b>\$ 367,845</b>	<b>\$ 476,392</b>	<b>\$ 2,868,479</b>	<b>\$ 223,320</b>	<b>\$ 11,100,685</b>

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	<u>Special Revenue</u>				
	<u>Health Effects Research Fund</u>	<u>CEQA Green House Gas Mitigation Fund</u>	<u>TraPac School Air Filtration Fund</u>	<u>Emission Reduction and Outreach Fund</u>	<u>Rule 1118 Mitigation Fund</u>
Cash and cash equivalents	\$ 3,849,097	\$ 129,129	\$ 1,382,526	\$ 932	\$ 22,700,106
Investments	-	-	-	-	-
Interest receivable	16,821	689	7,373	5	117,945
Due from other governmental agencies	-	-	-	-	-
Due from other funds	-	-	-	-	-
Accounts receivable, net	-	-	-	-	-
<b>Total assets</b>	<b>\$ 3,865,918</b>	<b>\$ 129,818</b>	<b>\$ 1,389,899</b>	<b>\$ 937</b>	<b>\$ 22,818,051</b>
 <u>Liabilities and Fund Balances</u>					
<b>Liabilities:</b>					
Accounts payable and accrued liabilities	\$ -	\$ -	\$ -	\$ -	-
Due to other funds	-	-	-	-	233,819
Unearned revenue	-	-	-	-	-
<b>Total liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>233,819</b>
 <b>Fund Balances:</b>					
Nonspendable	-	-	-	-	-
Restricted	-	-	1,389,899	-	-
Committed	-	-	-	-	-
Assigned	3,865,918	129,818	-	937	22,584,232
Unassigned	-	-	-	-	-
<b>Total fund balances</b>	<b>3,865,918</b>	<b>129,818</b>	<b>1,389,899</b>	<b>937</b>	<b>22,584,232</b>
<b>Total liabilities and fund balances</b>	<b>\$ 3,865,918</b>	<b>\$ 129,818</b>	<b>\$ 1,389,899</b>	<b>\$ 937</b>	<b>\$ 22,818,051</b>

See independent auditor's report.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	Special Revenue				
	HEROS II Fund	El Monte Park Project Settlement Fund	AB 1318 Mitigation Fees Fund	Voucher Incentive Program (VIP) Fund	Advanced Technology Good Movement Fund
Cash and cash equivalents	\$ 4,761,047	\$ 905,279	\$ 13,618,694	\$ 4,087,438	\$ 18,429,612
Investments	-	-	5,070,960	-	-
Interest receivable	36,691	4,855	73,847	20,139	100,940
Due from other governmental agencies	-	-	-	-	643,380
Due from other funds	-	-	-	-	-
Accounts receivable, net	-	-	-	-	3,000,000
Total assets	\$ 4,797,738	\$ 910,134	\$ 18,763,501	\$ 4,107,577	\$ 22,173,932
<u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ 1,059,629	\$ -	\$ -	\$ 110,000	\$ 659,219
Due to other funds	450,696	-	37,966	-	1,688,895
Unearned revenue	-	-	-	-	-
Total liabilities	1,510,325	-	37,966	110,000	2,348,114
Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	3,287,413	-	-	3,997,577	-
Committed	-	896,569	15,555,091	-	14,017,330
Assigned	-	13,565	3,170,444	-	5,808,488
Unassigned	-	-	-	-	-
Total fund balances	3,287,413	910,134	18,725,535	3,997,577	19,825,818
Total liabilities and fund balances	\$ 4,797,738	\$ 910,134	\$ 18,763,501	\$ 4,107,577	\$ 22,173,932

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	Special Revenue				
	Rule 1470 Risk Reduction Fund	Hydrogen Fueling Infrastructure Fund	Rule 1420.1 Special Revenue Fund	BP/SCAQMD Public Benefits Oversight Fund	Rule 1304.1 Special Revenue Fund
	Fund	Fund	Fund	Fund	Fund
Cash and cash equivalents	\$ 2,478,432	\$ 288,666	\$ 92,953	\$ 149,080	\$ 7,676,430
Investments	-	-	-	-	-
Interest receivable	13,262	14,118	496	795	40,939
Due from other governmental agencies	-	-	-	-	-
Due from other funds	-	-	-	-	-
Accounts receivable, net	-	-	-	-	-
Total assets	\$ 2,491,694	\$ 302,784	\$ 93,449	\$ 149,875	\$ 7,717,369
<u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ -	\$ -	\$ -	\$ -	\$ -
Due to other funds	-	-	-	-	-
Unearned revenue	-	-	-	-	-
Total liabilities	-	-	-	-	-
Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	-	302,784	93,449	149,875	7,717,369
Committed	-	-	-	-	-
Assigned	2,491,694	-	-	-	-
Unassigned	-	-	-	-	-
Total fund balances	2,491,694	302,784	93,449	149,875	7,717,369
Total liabilities and fund balances	\$ 2,491,694	\$ 302,784	\$ 93,449	\$ 149,875	\$ 7,717,369

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	Special Revenue				
	GHG Reduction Projects Special Revenue Fund	ExxonMobil Settlement Projects Special Revenue Fund	LADWP Variance Special Revenue Fund	Air Filtration Fund	SoCal Gas Settlement Special Revenue Fund
Cash and cash equivalents	\$ 10,280,985	\$ 2,557,773	\$ 1,557,057	\$ 1,767,575	\$ 1,212,057
Investments	-	-	-	-	-
Interest receivable	53,738	13,766	8,304	12,133	6,464
Due from other governmental agencies	4,095,506	-	-	-	-
Due from other funds	-	-	-	-	-
Accounts receivable, net	-	-	-	-	-
Total assets	\$ 14,430,229	\$ 2,571,539	\$ 1,565,361	\$ 1,779,708	\$ 1,218,521
<u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ 1,830,284	\$ -	\$ -	\$ -	-
Due to other funds	4,609,944	-	-	63,456	-
Unearned revenue	-	-	-	-	-
Total liabilities	6,440,228	-	-	63,456	-
Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	7,990,001	-	-	-	-
Committed	-	2,442,050	-	1,450,331	175,000
Assigned	-	129,489	1,565,361	265,921	1,043,521
Unassigned	-	-	-	-	-
Total fund balances	7,990,001	2,571,539	1,565,361	1,716,252	1,218,521
Total liabilities and fund balances	\$ 14,430,229	\$ 2,571,539	\$ 1,565,361	\$ 1,779,708	\$ 1,218,521

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING BALANCE SHEET  
NON-MAJOR GOVERNMENTAL FUNDS  
June 30, 2019**

<u>Assets</u>	<u>Special Revenue</u>		<u>Capital Project</u>		<u>Total</u>
	Rule 1180 Special Revenue Fund	Infrastructure Improvement Fund	Debt Service Fund	SCAQMD Building Corporation	
Cash and cash equivalents	\$ 6,933,132	\$ 3,739,294	\$ 1,149,919	\$ 190,001	\$ 334,185,224
Investments	-	-	-	-	25,212,879
Interest receivable	35,275	20,005	6,140	-	1,791,498
Due from other governmental agencies	-	-	-	-	15,530,614
Due from other funds	-	-	-	-	6,683,723
Accounts receivable, net	-	-	-	-	3,988,068
<b>Total assets</b>	<b>\$ 6,968,407</b>	<b>\$ 3,759,299</b>	<b>\$ 1,156,059</b>	<b>\$ 190,001</b>	<b>\$ 387,392,006</b>
 <u>Liabilities and Fund Balances</u>					
Liabilities:					
Accounts payable and accrued liabilities	\$ -	\$ -	\$ -	\$ 4,360	\$ 15,624,110
Due to other funds	-	-	-	-	17,646,794
Unearned revenue	-	-	-	-	5,832
<b>Total liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>4,360</b>	<b>33,276,736</b>
 Fund Balances:					
Nonspendable	-	-	-	-	-
Restricted	1,716,312	-	1,156,059	-	100,966,150
Committed	-	2,293,645	-	-	67,570,416
Assigned	5,252,095	1,465,654	-	185,641	185,578,704
Unassigned	-	-	-	-	-
<b>Total fund balances</b>	<b>6,968,407</b>	<b>3,759,299</b>	<b>1,156,059</b>	<b>185,641</b>	<b>354,115,270</b>
<b>Total liabilities and fund balances</b>	<b>\$ 6,968,407</b>	<b>\$ 3,759,299</b>	<b>\$ 1,156,059</b>	<b>\$ 190,001</b>	<b>\$ 387,392,006</b>

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 COMBINING STATEMENT OF REVENUES, EXPENDITURES, AND  
 CHANGES IN FUND BALANCE  
 NON-MAJOR GOVERNMENTAL FUNDS  
 For the Year Ended June 30, 2019**

	Special Revenue				
	Air Toxics Fund	Advanced Technology Outreach & Education Fund	Air Quality Assistance Fund	Air Quality Improvement Fund	Air Quality Investment Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	364	-	-	-	-
Federal grant	-	356,526	-	-	-
State grant	-	-	-	-	-
Interest revenue	70,829	24,669	34,631	55,723	1,442,944
Penalties and settlements	-	-	-	-	-
Other revenues	-	-	-	-	23,862,982
<b>Total revenues</b>	<b>71,193</b>	<b>381,195</b>	<b>34,631</b>	<b>55,723</b>	<b>25,305,926</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	19,688	356,526	-	-	415,144
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	8,227	-	-	-	-
Other expenditures	5,019	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>32,934</b>	<b>356,526</b>	<b>-</b>	<b>-</b>	<b>415,144</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	38,259	24,669	34,631	55,723	24,890,782
Other financing sources (uses)					
Transfers in	-	-	-	-	-
Transfers out	(918,743)	-	-	-	(490,373)
<b>Total other financing sources (uses)</b>	<b>(918,743)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(490,373)</b>
<b>Net change in fund balances</b>	<b>(880,484)</b>	<b>24,669</b>	<b>34,631</b>	<b>55,723</b>	<b>24,400,409</b>
Fund balances, July 1, 2018	3,208,769	662,246	1,612,311	15,296	57,990,567
Fund balances, June 30, 2019	\$ 2,328,285	\$ 686,915	\$ 1,646,942	\$ 71,019	\$ 82,390,976

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	Special Revenue				
	Clean Fuels Program Fund	Carl Moyer Program Fund	Lower-Emission School Bus Fund	Zero Emission Vehicle Incentive Fund	AES Settlement Projects Fund
	Fund	Fund	Fund	Fund	Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	9,815,914	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	2,696,444	-	52,000	-	-
State grant	3,177,612	33,513,072	-	-	-
Interest revenue	1,078,145	1,151,372	181,194	13,971	18,286
Penalties and settlements	-	-	-	-	-
Other revenues	414,107	-	-	-	-
<b>Total revenues</b>	<b>17,182,222</b>	<b>34,664,444</b>	<b>233,194</b>	<b>13,971</b>	<b>18,286</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	9,523,583	15,345,599	180,040	-	10,000
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	-	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>9,523,583</b>	<b>15,345,599</b>	<b>180,040</b>	<b>-</b>	<b>10,000</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	7,658,639	19,318,845	53,154	13,971	8,286
Other financing sources (uses)					
Transfers in	-	-	-	-	-
Transfers out	(13,222,732)	-	-	-	-
<b>Total other financing sources (uses)</b>	<b>(13,222,732)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net change in fund balances</b>	<b>(5,564,093)</b>	<b>19,318,845</b>	<b>53,154</b>	<b>13,971</b>	<b>8,286</b>
Fund balances, July 1, 2018	65,352,322	43,062,157	8,825,031	680,230	887,193
Fund balances, June 30, 2019	\$ 59,788,229	\$ 62,381,002	\$ 8,878,185	\$ 694,201	\$ 895,479

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	Special Revenue				
	Rule 1309.1 Priority Reserve Fund	CARB ERC Bank Fund	LADWP Settlement Fund	State-Emissions Mitigation Fund	Natural Gas Vehicle Partner Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	-	-	-	-	-
State grant	-	-	-	-	-
Interest revenue	118,098	12,446	8,294	7,783	8,666
Penalties and settlements	-	-	-	-	-
Other revenues	-	-	-	-	57,500
<b>Total revenues</b>	<b>118,098</b>	<b>12,446</b>	<b>8,294</b>	<b>7,783</b>	<b>66,166</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	871,717	-	-	-	76,500
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	-	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>871,717</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>76,500</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	<u>(753,619)</u>	<u>12,446</u>	<u>8,294</u>	<u>7,783</u>	<u>(10,334)</u>
Other financing sources (uses)					
Transfers in	-	-	-	-	25,000
Transfers out	-	-	-	(4,440,000)	-
<b>Total other financing sources (uses)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(4,440,000)</b>	<b>25,000</b>
<b>Net change in fund balances</b>	<b>(753,619)</b>	<b>12,446</b>	<b>8,294</b>	<b>(4,432,217)</b>	<b>14,666</b>
Fund balances, July 1, 2018	<u>5,972,261</u>	<u>605,979</u>	<u>403,821</u>	<u>4,539,196</u>	<u>446,937</u>
Fund balances, June 30, 2019	<u>\$ 5,218,642</u>	<u>\$ 618,425</u>	<u>\$ 412,115</u>	<u>\$ 106,979</u>	<u>\$ 461,603</u>

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	Special Revenue				
	State BUG Program Fund	Dry Cleaners Financial Incentives Grant Program Fund	Rule 1173 Mitigation Fee Fund	CBE/OCE Settlement Agreement Fund	BP ARCO Settlements Project Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	-	-	-	-	-
State grant	-	-	-	-	-
Interest revenue	7,403	9,805	57,728	-	234,799
Penalties and settlements	-	-	-	-	-
Other revenues	-	-	-	-	17,700
<b>Total revenues</b>	<b>7,403</b>	<b>9,805</b>	<b>57,728</b>	<b>-</b>	<b>252,499</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	-	10,000	-	-	734,642
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	-	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>-</b>	<b>10,000</b>	<b>-</b>	<b>-</b>	<b>734,642</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	7,403	(195)	57,728	-	(482,143)
Other financing sources (uses)					
Transfers in	-	-	-	-	-
Transfers out	(20,734)	-	-	-	(351,979)
<b>Total other financing sources (uses)</b>	<b>(20,734)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(351,979)</b>
<b>Net change in fund balances</b>	<b>(13,331)</b>	<b>(195)</b>	<b>57,728</b>	<b>-</b>	<b>(834,122)</b>
Fund balances, July 1, 2018	360,442	476,587	2,810,751	223,320	11,851,561
Fund balances, June 30, 2019	\$ 347,111	\$ 476,392	\$ 2,868,479	\$ 223,320	\$ 11,017,439

See independent auditor's report.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	Special Revenue				
	Health Effects Research Fund	CEQA Green House Gas Mitigation Fund	TraPac School Air Filtration Fund	Emission Reduction and Outreach Fund	Rule 1118 Mitigation Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	-	-	-	-	-
State grant	-	-	-	-	-
Interest revenue	39,581	2,613	27,973	15	438,723
Penalties and settlements	-	-	-	-	-
Other revenues	-	-	-	-	2,579,370
<b>Total revenues</b>	<b>39,581</b>	<b>2,613</b>	<b>27,973</b>	<b>15</b>	<b>3,018,093</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	-	-	-	-	-
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	-	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	39,581	2,613	27,973	15	3,018,093
Other financing sources (uses)					
Transfers in	2,904,582	-	-	-	-
Transfers out	-	-	-	-	(1,559,790)
<b>Total other financing sources (uses)</b>	<b>2,904,582</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(1,559,790)</b>
<b>Net change in fund balances</b>	<b>2,944,163</b>	<b>2,613</b>	<b>27,973</b>	<b>15</b>	<b>1,458,303</b>
Fund balances, July 1, 2018	921,755	127,205	1,361,926	922	21,125,929
Fund balances, June 30, 2019	<u>\$ 3,865,918</u>	<u>\$ 129,818</u>	<u>\$ 1,389,899</u>	<u>\$ 937</u>	<u>\$ 22,584,232</u>

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	Special Revenue				
	HEROS II Fund	El Monte Park Project Settlement Fund	AB 1318 Mitigation Fees Fund	Voucher Incentive Program (VIP) Fund	Advanced Technology Goods Movement Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	-	-	-	-	919,767
State grant	12,250,000	-	-	-	1,435,594
Interest revenue	145,553	18,491	490,442	44,790	373,054
Penalties and settlements	-	-	-	-	-
Other revenues	218,875	-	71,064	-	2,283,495
<b>Total revenues</b>	<b>12,614,428</b>	<b>18,491</b>	<b>561,506</b>	<b>44,790</b>	<b>5,011,910</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	15,730,990	8,237	1,035,379	2,765,000	1,661,713
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	6	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>15,730,996</b>	<b>8,237</b>	<b>1,035,379</b>	<b>2,765,000</b>	<b>1,661,713</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	(3,116,568)	10,254	(473,873)	(2,720,210)	3,350,197
Other financing sources (uses)					
Transfers in	-	-	-	5,000,000	13,170,072
Transfers out	(1,097,940)	-	(37,966)	(26,472)	-
<b>Total other financing sources (uses)</b>	<b>(1,097,940)</b>	<b>-</b>	<b>(37,966)</b>	<b>4,973,528</b>	<b>13,170,072</b>
<b>Net change in fund balances</b>	<b>(4,214,508)</b>	<b>10,254</b>	<b>(511,839)</b>	<b>2,253,318</b>	<b>16,520,269</b>
Fund balances, July 1, 2018	7,501,921	899,880	19,237,374	1,744,259	3,305,549
Fund balances, June 30, 2019	\$ 3,287,413	\$ 910,134	\$ 18,725,535	\$ 3,997,577	\$ 19,825,818

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
 CHANGES IN FUND BALANCE  
 NON-MAJOR GOVERNMENTAL FUNDS  
 For the Year Ended June 30, 2019**

	Special Revenue				
	Rule 1470	Hydrogen Fueling	Rule 1420.1	BP/SCAQMD	Rule 1304.1
	Risk Reduction Fund	Infrastructure Fund	Special Revenue Fund	Public Benefits Oversight Fund	Special Revenue Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	-	-	-	-	-
State grant	-	-	-	-	-
Interest revenue	50,947	67,703	1,881	3,014	155,318
Penalties and settlements	-	-	-	-	-
Other revenues	-	-	-	-	-
<b>Total revenues</b>	<b>50,947</b>	<b>67,703</b>	<b>1,881</b>	<b>3,014</b>	<b>155,318</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	54,701	2,669,000	-	-	-
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	-	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>54,701</b>	<b>2,669,000</b>	<b>-</b>	<b>-</b>	<b>-</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	(3,754)	(2,601,297)	1,881	3,014	155,318
Other financing sources (uses)					
Transfers in	-	-	-	-	-
Transfers out	-	-	-	-	-
<b>Total other financing sources (uses)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Net change in fund balances</b>	<b>(3,754)</b>	<b>(2,601,297)</b>	<b>1,881</b>	<b>3,014</b>	<b>155,318</b>
Fund balances, July 1, 2018	2,495,448	2,904,081	91,568	146,861	7,562,051
Fund balances, June 30, 2019	\$ 2,491,694	\$ 302,784	\$ 93,449	\$ 149,875	\$ 7,717,369

Continued

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	Special Revenue				
	GHG Reduction Projects Special Revenue Fund	ExxonMobil Settlement Projects Special Revenue Fund	LADWP Variance Special Revenue Fund	Air Filtration Fund	SoCal Gas Settlement Special Revenue Fund
Revenues:					
Emission fees	\$ -	\$ -	\$ -	\$ -	\$ -
Mobile sources/clean fuels	-	-	-	-	-
Air Toxics "Hot Spots"	-	-	-	-	-
Federal grant	-	-	-	-	-
State grant	6,125,505	-	-	-	-
Interest revenue	165,586	55,711	31,503	46,749	24,524
Penalties and settlements	-	-	-	1,070,477	-
Other revenues	1,250,000	-	-	-	-
<b>Total revenues</b>	<b>7,541,091</b>	<b>55,711</b>	<b>31,503</b>	<b>1,117,226</b>	<b>24,524</b>
Expenditures:					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	5,012,918	328,950	-	984,588	-
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	-
Other expenditures	-	-	-	-	-
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>5,012,918</b>	<b>328,950</b>	<b>-</b>	<b>984,588</b>	<b>-</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	2,528,173	(273,239)	31,503	132,638	24,524
Other financing sources (uses)					
Transfers in	4,000,000	-	-	-	-
Transfers out	(209,944)	-	-	(25,956)	-
<b>Total other financing sources (uses)</b>	<b>3,790,056</b>	<b>-</b>	<b>-</b>	<b>(25,956)</b>	<b>-</b>
<b>Net change in fund balances</b>	<b>6,318,229</b>	<b>(273,239)</b>	<b>31,503</b>	<b>106,682</b>	<b>24,524</b>
Fund balances, July 1, 2018	1,671,772	2,844,778	1,533,858	1,609,570	1,193,997
Fund balances, June 30, 2019	\$ 7,990,001	\$ 2,571,539	\$ 1,565,361	\$ 1,716,252	\$ 1,218,521

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND  
CHANGES IN FUND BALANCE  
NON-MAJOR GOVERNMENTAL FUNDS  
For the Year Ended June 30, 2019**

	<u>Special Revenue</u>	<u>Capital Project</u>			
	Rule 1180 Special Revenue Fund	Infrastructure Improvement Fund	Debt Service Fund	SCAQMD Building Corporation	Total
<b>Revenues:</b>					
Emission fees	\$ -	\$ -	\$ -	\$ -	-
Mobile sources/clean fuels	-	-	-	-	9,815,914
Air Toxics "Hot Spots"	-	-	-	-	364
Federal grant	-	-	-	-	4,024,737
State grant	-	-	-	-	56,501,783
Interest revenue	83,766	76,191	24,176	3,112	6,908,202
Penalties and settlements	-	-	-	-	1,070,477
Other revenues	5,434,985	-	-	-	36,190,078
<b>Total revenues</b>	<b>5,518,751</b>	<b>76,191</b>	<b>24,176</b>	<b>3,112</b>	<b>114,511,555</b>
<b>Expenditures:</b>					
Salaries and employee benefits	-	-	-	-	-
Insurance	-	-	-	-	-
Rent	-	-	-	-	-
Supplies	-	-	-	-	-
Contract and special services	-	31,650	-	-	57,826,565
Maintenance	-	-	-	-	-
Travel and auto	-	-	-	-	-
Utilities	-	-	-	-	-
Communications	-	-	-	-	-
Uncollectible accounts	-	-	-	-	8,227
Other expenditures	-	-	-	4,360	9,385
Capital outlay	-	-	-	-	-
Debt Service					
Principal	-	-	1,000,000	-	1,000,000
Interest	-	-	-	-	-
<b>Total expenditures</b>	<b>-</b>	<b>31,650</b>	<b>1,000,000</b>	<b>4,360</b>	<b>58,844,177</b>
Excess (deficiency) of revenues over (under) expenditures before transfers	5,518,751	44,541	(975,824)	(1,248)	55,667,378
<b>Other financing sources (uses)</b>					
Transfers in	-	-	-	-	25,099,654
Transfers out	(266,656)	-	-	-	(22,669,285)
<b>Total other financing sources (uses)</b>	<b>(266,656)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,430,369</b>
<b>Net change in fund balances</b>	<b>5,252,095</b>	<b>44,541</b>	<b>(975,824)</b>	<b>(1,248)</b>	<b>58,097,747</b>
Fund balances, July 1, 2018	1,716,312	3,714,758	2,131,883	186,889	296,017,523
Fund balances, June 30, 2019	\$ 6,968,407	\$ 3,759,299	\$ 1,156,059	\$ 185,641	\$ 354,115,270

See independent auditor's report.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**COMBINING STATEMENT OF CHANGES IN ASSETS AND LIABILITIES**  
**AGENCY FUNDS**  
**For the Year Ended June 30, 2019**

	<u>Balance</u> <u>July 1, 2018</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance</u> <u>June 30, 2019</u>
<u>Accounting agency fund</u>				
<u>Assets</u>				
Cash and cash equivalents	\$ 138,352	\$ 673,481	\$ 705,643	\$ 106,190
Total assets	<u>\$ 138,352</u>	<u>\$ 673,481</u>	<u>\$ 705,643</u>	<u>\$ 106,190</u>
<u>Liabilities</u>				
Accounts payable and accrued liabilities	\$ 138,352	\$ 673,481	\$ 705,643	\$ 106,190
Total liabilities	<u>\$ 138,352</u>	<u>\$ 673,481</u>	<u>\$ 705,643</u>	<u>\$ 106,190</u>
 <u>457 Plan Admin Revenue Sharing Fund</u>				
<u>Assets</u>				
Cash and cash equivalents	\$ 15,071	\$ 29,185	\$ 37,500	\$ 6,756
Interest receivable	221	75	221	75
Total assets	<u>\$ 15,292</u>	<u>\$ 29,260</u>	<u>\$ 37,721</u>	<u>\$ 6,831</u>
<u>Liabilities</u>				
Accounts payable and accrued liabilities	15,292	\$ 29,039	\$ 37,500	\$ 6,831
Total liabilities	<u>\$ 15,292</u>	<u>\$ 29,039</u>	<u>\$ 37,500</u>	<u>\$ 6,831</u>
 <u>Total all agency funds</u>				
<u>Assets</u>				
Cash and cash equivalents	\$ 153,423	\$ 702,666	\$ 743,143	\$ 112,946
Interest receivable	221	75	221	75
Total assets	<u>\$ 153,644</u>	<u>\$ 702,741</u>	<u>\$ 743,364</u>	<u>\$ 113,021</u>
<u>Liabilities</u>				
Accounts payable and accrued liabilities	\$ 153,644	\$ 702,520	\$ 743,143	\$ 113,021
Total liabilities	<u>\$ 153,644</u>	<u>\$ 702,520</u>	<u>\$ 743,143</u>	<u>\$ 113,021</u>

See independent auditor's report.

# STATISTICAL SECTION

This part of South Coast AQMD's comprehensive annual financial report represents detailed information as a context for understanding what the information in the financial statements, note disclosure, and required supplementary information says about South Coast AQMD's overall financial health.

## **Contents**

### Financial Trends

Four schedules contain information to help the reader understand how the government's financial performance and well-being have changed over time.

### Revenue Capacity

These schedules contain information to help the reader understand the concentration of South Coast AQMD's largest emission-based fee payers.

### Debt Capacity

This schedule presents information to help the reader assess the affordability of South Coast AQMD's current levels of outstanding debt. Please see footnote under Schedule 7.

### Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which South Coast AQMD's financial activities take place.

### Operating Information

These schedules contain data to help the reader understand how the information in South Coast AQMD's financial report relates to the services South Coast AQMD provides and the activities it performs.

Source: Unless otherwise noted, the information in these schedules was derived from South Coast AQMD's comprehensive annual financial reports for the relevant year.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 1**  
**Net Position by Component**  
**Last Ten Fiscal Years**  
**(accrual basis of accounting)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Governmental Activities:</b>										
Net investment in capital assets	\$ 19,695,092	\$ 22,777,709	\$ 25,696,728	\$ 39,667,137	\$ 38,509,847	\$ 36,957,165	\$ 36,178,389	\$ 36,127,300	\$ 35,756,464	\$ 35,501,602
Restricted for pension assets	-	-	1,361,315	3,031,890	4,437,818	-	-	-	-	-
Restricted for debt service	-	-	-	-	-	-	-	-	-	-
Restricted for long-term emission-reduction projects	411,358,339	465,789,699	527,549,463	530,540,932	536,617,440	468,946,402	498,119,549	607,438,908	676,857,257	785,722,419
Unrestricted	50,318,195	34,536,706	29,529,812	21,554,913	29,264,960	(157,555,673)	(152,854,184)	(141,541,447)	(129,700,877)	(128,938,591)
Total governmental activities net position	<u>\$ 481,371,626</u>	<u>\$ 523,104,114</u>	<u>\$ 584,137,318</u>	<u>\$ 594,794,872</u>	<u>\$ 608,830,065</u>	<u>\$ 348,347,894</u>	<u>\$ 381,443,754</u>	<u>\$ 502,024,761</u>	<u>\$ 582,912,844</u>	<u>\$ 692,285,430</u>
<b>Business-type Activities:</b>										
Net investment in capital assets	\$ 4,052	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unrestricted	242,921	370,087	525,078	746,994	875,849	1,123,954	1,235,284	1,253,178	-	-
Total business-type activities net position	<u>\$ 246,973</u>	<u>\$ 370,087</u>	<u>\$ 525,078</u>	<u>\$ 746,994</u>	<u>\$ 875,849</u>	<u>\$ 1,123,954</u>	<u>\$ 1,235,284</u>	<u>\$ 1,253,178</u>	<u>\$ -</u>	<u>\$ -</u>
<b>Primary Government:</b>										
Net investment in capital assets	\$ 19,699,144	\$ 22,777,709	\$ 25,696,728	\$ 39,667,137	\$ 38,509,847	\$ 36,957,165	\$ 36,178,389	\$ 36,127,300	\$ 35,756,464	\$ 35,501,602
Restricted for pension asset	-	-	1,361,315	3,031,890	4,437,818	-	-	-	-	-
Restricted for debt service	-	-	-	-	-	-	-	-	-	-
Restricted for long-term emission-reduction projects	411,358,339	465,789,699	527,549,463	530,540,932	536,617,440	468,946,402	498,119,549	607,438,908	676,857,257	785,722,419
Unrestricted	50,561,116	34,906,793	30,054,890	22,301,907	30,140,809	(156,431,719)	(151,618,900)	(140,288,269)	(129,700,877)	(128,938,591)
Total primary government net position	<u>\$ 481,618,599</u>	<u>\$ 523,474,201</u>	<u>\$ 584,662,396</u>	<u>\$ 595,541,866</u>	<u>\$ 609,705,914</u>	<u>\$ 349,471,848</u>	<u>\$ 382,679,038</u>	<u>\$ 503,277,939</u>	<u>\$ 582,912,844</u>	<u>\$ 692,285,430</u>



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 2**  
**Changes in Net Position – Last Ten Fiscal Years**  
**(accrual basis of accounting)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Expenses</b>										
<b>Governmental Activities:</b>										
Advance clean air technology	\$ 6,512,144	\$ 6,398,859	\$ 6,672,977	\$ 6,857,959	\$ 6,212,087	\$ 5,539,607	\$ 7,119,417	\$ 7,825,599	\$ 9,271,026	\$ 11,520,547
Ensure compliance with clean air rules	46,154,574	46,877,017	47,026,449	47,417,956	48,813,991	43,252,162	45,622,680	49,316,129	50,528,522	52,353,479
Customer service and business assistance	7,682,897	7,578,813	7,729,015	8,169,587	8,332,770	6,124,811	8,337,319	9,260,504	9,743,294	11,637,664
Develop programs to achieve clean air	10,861,040	11,780,948	12,130,832	12,317,470	11,147,303	9,727,624	10,444,147	11,335,498	8,636,784	9,407,869
Develop rules to achieve clean air	8,436,415	8,826,846	7,286,149	7,269,414	7,514,210	7,161,179	7,566,089	7,604,041	10,013,098	14,275,590
Monitoring air quality	14,239,509	15,093,093	15,930,225	14,265,601	14,969,083	13,197,801	16,028,394	17,856,869	20,822,380	26,547,245
Timely review of permits	28,530,507	28,045,891	27,241,449	28,621,527	27,821,032	24,431,059	27,891,070	31,520,083	33,301,565	33,951,378
Policy support	1,760,038	1,792,208	1,483,613	1,306,054	1,204,588	331,652	511,705	885,773	667,046	1,028,495
Interest on long-term debt	3,871,465	3,277,933	4,691,658	4,605,963	4,102,888	4,031,178	3,884,990	3,906,955	3,731,589	3,605,251
Long-term emission reduction projects	150,362,508	161,904,680	137,800,260	155,998,253	154,939,035	210,229,182	87,079,799	101,008,426	101,304,229	163,187,839
Total government'l activities expenses	<u>\$ 278,411,097</u>	<u>\$ 291,576,288</u>	<u>\$ 267,992,627</u>	<u>\$ 286,829,784</u>	<u>\$ 285,056,987</u>	<u>\$ 324,026,255</u>	<u>\$ 214,485,609</u>	<u>\$ 240,519,877</u>	<u>\$ 248,019,533</u>	<u>\$ 327,515,357</u>
<b>Business-type Activities:</b>										
CNG fueling station	\$ 165,557	\$ 150,418	\$ 135,805	\$ 189,518	\$ 264,221	\$ 168,769	\$ 117,675	\$ 128	\$ 31	\$ -
Total business-type activities expenses	<u>165,557</u>	<u>150,418</u>	<u>135,805</u>	<u>189,518</u>	<u>264,221</u>	<u>168,769</u>	<u>117,675</u>	<u>128</u>	<u>31</u>	<u>-</u>
Total primary government expenses	<u>\$ 278,576,654</u>	<u>\$ 291,726,706</u>	<u>\$ 268,128,432</u>	<u>\$ 287,019,302</u>	<u>\$ 285,321,208</u>	<u>\$ 324,195,024</u>	<u>\$ 214,603,284</u>	<u>\$ 240,520,005</u>	<u>\$ 248,019,564</u>	<u>\$ 327,515,357</u>
<b>Program Revenues</b>										
<b>Governmental Activities:</b>										
<b>Fees and Charges</b>										
Stationary sources	\$ 81,097,647	\$ 81,291,028	\$ 82,624,489	\$ 85,439,616	\$ 87,160,484	\$ 88,120,829	\$ 89,264,511	\$ 94,279,518	\$ 100,354,910	\$ 101,804,325
Mobile sources	23,728,238	22,512,790	23,384,894	23,535,070	24,307,527	24,526,008	25,743,988	28,087,131	26,026,673	26,106,160
Operating grants and subventions	<u>252,182,003</u>	<u>216,422,579</u>	<u>213,332,401</u>	<u>173,309,732</u>	<u>164,053,936</u>	<u>149,766,034</u>	<u>122,424,397</u>	<u>222,070,040</u>	<u>185,367,622</u>	<u>295,516,665</u>
Total governmental activities prog. revenues	<u>\$ 357,007,888</u>	<u>\$ 320,226,397</u>	<u>\$ 319,341,784</u>	<u>\$ 282,284,418</u>	<u>\$ 275,521,947</u>	<u>\$ 262,412,871</u>	<u>\$ 237,432,896</u>	<u>\$ 344,436,689</u>	<u>\$ 311,749,205</u>	<u>\$ 423,427,150</u>

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Schedule 2

Changes in Net Position – Last Ten Fiscal Years  
(accrual basis of accounting) (continued)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Business-type Activities:										
CNG fueling station	\$ 169,510	\$ 273,531	\$ 290,796	\$ 411,434	\$ 393,076	\$ 416,874	\$ 229,005	\$ 18,022	\$ -	\$ -
Total business-type activities prog. revenues	<u>169,510</u>	<u>273,531</u>	<u>290,796</u>	<u>411,434</u>	<u>393,076</u>	<u>416,874</u>	<u>229,005</u>	<u>18,022</u>	<u>-</u>	<u>-</u>
Total primary government prog. revenues	<u>\$ 357,177,398</u>	<u>\$ 320,499,928</u>	<u>\$ 319,632,580</u>	<u>\$ 282,695,852</u>	<u>\$ 275,915,023</u>	<u>\$ 262,829,745</u>	<u>\$ 237,661,901</u>	<u>\$ 344,454,711</u>	<u>\$ 311,749,205</u>	<u>\$ 423,427,150</u>
Net (Expense) Revenue										
Governmental activities	\$ 78,596,791	\$ 28,650,109	\$ 51,349,157	\$ (4,545,366)	\$ (9,535,040)	\$ (61,613,384)	\$ 22,947,287	\$ 103,916,812	\$ 63,729,672	\$ 95,911,793
Business-type activities	<u>3,953</u>	<u>123,113</u>	<u>154,991</u>	<u>221,916</u>	<u>128,855</u>	<u>248,105</u>	<u>111,330</u>	<u>17,894</u>	<u>(31)</u>	<u>-</u>
Total primary govnt net (expenses) revenue	<u>\$ 78,600,744</u>	<u>\$ 28,773,222</u>	<u>\$ 51,504,148</u>	<u>\$ (4,323,450)</u>	<u>\$ (9,406,185)</u>	<u>\$ (61,365,279)</u>	<u>\$ 23,058,617</u>	<u>\$ 103,934,706</u>	<u>\$ 63,729,641</u>	<u>\$ 95,911,793</u>
General Revenues and Other Changes in Net Position										
Governmental Activities:										
Grants and subventions not restricted to specific stationary source programs	\$ 2,926,440	\$ 2,918,779	\$ 2,890,117	\$ 2,889,099	\$ 2,889,884	\$ 2,887,831	\$ 2,885,047	\$ 2,885,535	\$ 2,879,520	\$ 2,864,992
Interest	976,434	832,444	529,031	343,206	461,444	339,005	435,773	644,574	1,041,333	1,976,414
Lease revenue	371,104	-	-	-	-	-	-	-	-	-
Penalties/settlement	10,346,122	7,348,657	4,906,391	11,562,529	17,959,410	8,733,773	5,704,685	11,511,570	14,316,145	7,196,194
Subscriptions	10,363	7,760	6,095	1,630	3,498	2,136	2,842	1,097	436	970
Other	298,683	1,631,518	1,352,418	406,456	2,255,997	2,080,950	1,120,226	1,621,419	1,153,863	1,422,223
Transfers	-	-	-	-	-	-	-	-	1,253,147	-
Total governmental activities	<u>\$ 14,929,145</u>	<u>\$ 12,739,158</u>	<u>\$ 9,684,052</u>	<u>\$ 15,202,920</u>	<u>\$ 23,570,233</u>	<u>\$ 14,043,695</u>	<u>\$ 10,148,573</u>	<u>\$ 16,664,195</u>	<u>\$ 20,644,444</u>	<u>\$ 13,460,793</u>
Business-type Activities										
Interest	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Transfers	-	-	-	-	-	-	-	-	-	-
Total business-type activities	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Total primary government revenue	<u>\$ 14,929,145</u>	<u>\$ 12,739,158</u>	<u>\$ 9,684,052</u>	<u>\$ 15,202,920</u>	<u>\$ 23,570,233</u>	<u>\$ 14,043,695</u>	<u>\$ 10,148,573</u>	<u>\$ 16,664,195</u>	<u>\$ 20,644,444</u>	<u>\$ 13,460,793</u>
Change in Net Position										
Governmental activities	\$ 93,525,936	\$ 41,389,267	\$ 61,033,209	\$ 10,657,554	\$ 14,035,193	\$ (47,569,689)	\$ 33,095,860	\$ 120,581,007	\$ 84,374,116	\$ 109,372,586
Business-type activities	<u>3,953</u>	<u>123,113</u>	<u>154,991</u>	<u>221,916</u>	<u>128,855</u>	<u>248,105</u>	<u>111,330</u>	<u>17,894</u>	<u>(1,253,178)</u>	<u>-</u>
Total primary government	<u>\$ 93,529,889</u>	<u>\$ 41,512,380</u>	<u>\$ 61,188,200</u>	<u>\$ 10,879,470</u>	<u>\$ 14,164,048</u>	<u>\$ (47,321,584)</u>	<u>\$ 33,207,190</u>	<u>\$ 120,598,901</u>	<u>\$ 83,120,938</u>	<u>\$ 109,372,586</u>

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
Schedule 3  
Fund Balances of Governmental Funds  
Last Ten Fiscal Years  
(modified accrual basis of accounting)

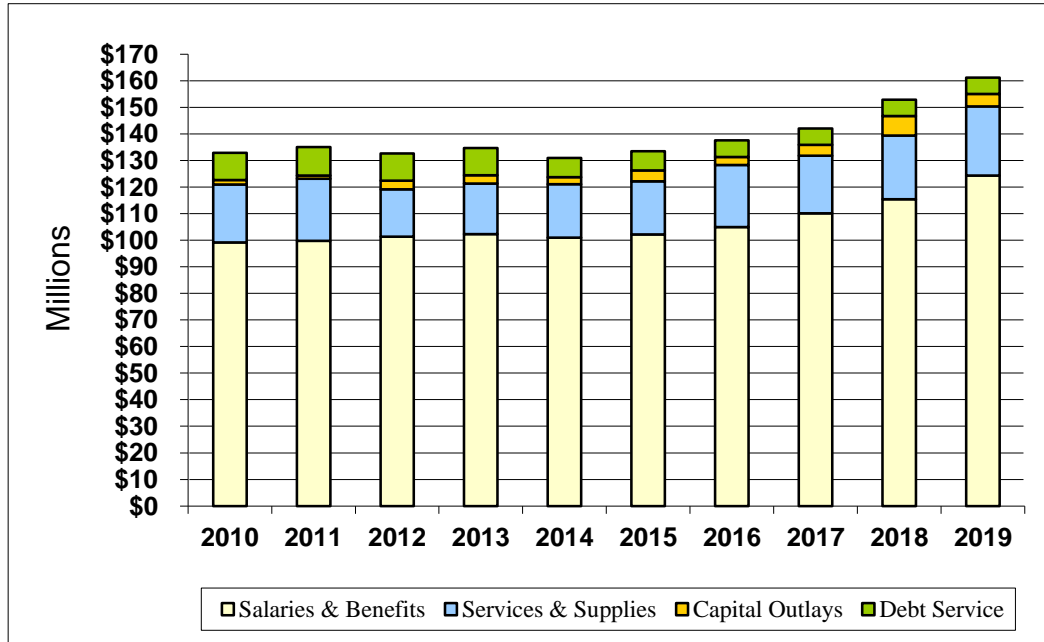
	2010	2011*	2012	2013	2014	2015	2016	2017	2018	2019
General Fund										
Reserved	\$ 7,575,462	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Unreserved	52,814,783	-	-	-	-	-	-	-	-	-
Nonspendable	-	50,315	73,043	71,968	66,703	73,463	65,731	63,688	56,684	64,226
Committed	-	8,928,629	6,594,167	6,552,287	5,845,485	6,533,505	6,917,075	7,382,453	11,237,530	12,295,440
Assigned	-	17,763,384	15,390,753	12,194,651	12,194,650	6,803,899	6,203,899	6,303,899	7,228,892	6,149,673
Unassigned	-	25,858,045	24,689,814	19,774,006	27,672,310	34,353,647	31,006,208	38,741,459	47,532,700	52,514,979
Total general fund	<u>\$ 60,390,245</u>	<u>\$ 52,600,373</u>	<u>\$ 46,747,777</u>	<u>\$ 38,592,912</u>	<u>\$ 45,779,148</u>	<u>\$ 47,764,514</u>	<u>\$ 44,192,913</u>	<u>\$ 52,491,499</u>	<u>\$ 66,055,806</u>	<u>\$ 71,024,318</u>
All Other Governmental Funds										
Reserved for encumbrances	\$ 186,009,142	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Reserved for debt service	-	-	-	-	-	-	-	-	-	-
Unreserved, reported in:										
Special revenue funds	237,563,798	-	-	-	-	-	-	-	-	-
Restricted	-	26,138,656	191,730,455	331,962,118	335,633,672	283,454,187	311,026,727	412,358,550	464,158,310	532,966,299
Committed	-	174,297,108	127,200,107	29,141,240	65,757,643	59,667,932	63,076,528	54,549,958	51,447,457	67,570,416
Assigned	-	272,132,633	210,588,937	169,437,574	135,253,835	126,111,461	125,654,185	142,085,357	161,309,146	185,578,704
Unassigned	-	(6,778,697)	(1,970,036)	-	(27,710)	(287,178)	(3,518,332)	(1,554,957)	(57,656)	-
Total all other governmental funds	<u>\$ 423,572,940</u>	<u>\$ 465,789,700</u>	<u>\$ 527,549,463</u>	<u>\$ 530,540,932</u>	<u>\$ 536,617,440</u>	<u>\$ 468,946,402</u>	<u>\$ 496,239,108</u>	<u>\$ 607,438,908</u>	<u>\$ 676,857,257</u>	<u>\$ 786,115,419</u>

\*Effective fiscal year 2010-11, fund balances are presented to conform with GASB No. 54.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 4**  
**Changes in Fund Balances of Governmental Funds**  
**Last Ten Fiscal Years**  
**(modified accrual basis of accounting)**

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
<b>Revenues:</b>										
Emission fees	\$ 19,663,671	\$ 21,371,061	\$ 19,714,882	\$ 20,540,391	\$ 20,472,379	\$ 19,838,979	\$ 18,984,919	\$ 18,964,371	\$ 22,786,661	\$ 19,542,168
Annual renewal fees	41,191,933	41,342,340	42,189,557	43,056,220	44,260,635	45,759,738	47,592,793	48,930,776	52,182,769	57,028,631
Area Sources	1,445,715	2,503,791	2,808,927	2,132,263	2,819,001	2,573,959	2,226,172	2,090,207	2,293,947	2,257,755
Permit processing fees	16,316,076	16,007,058	15,658,916	17,210,640	16,945,777	16,668,485	17,239,759	20,729,207	19,538,295	20,030,307
Mobile sources / Clean fuels	65,843,960	63,704,363	69,689,913	67,441,546	69,688,940	70,953,981	73,011,225	75,104,035	74,450,510	76,071,690
Air Toxics "Hot Spots"	1,977,074	1,824,327	1,833,488	1,917,252	1,954,650	2,039,612	2,373,579	2,645,644	2,538,246	2,184,519
Transportation program	836,557	885,263	848,829	927,824	877,816	845,236	891,991	840,322	845,718	977,223
State subvention	3,986,029	3,978,200	3,949,672	3,948,646	3,949,439	3,947,386	3,944,602	3,945,090	3,939,075	3,924,547
Federal grant	13,620,752	15,543,549	27,508,859	19,468,654	23,713,303	32,939,310	11,521,785	15,399,372	11,887,333	11,588,113
State grant	165,001,635	87,403,616	128,099,308	101,432,241	80,762,239	60,717,715	38,050,172	125,988,646	83,101,876	176,582,411
Interest revenue	6,224,115	6,556,895	4,962,021	3,677,620	3,824,484	3,766,327	4,100,302	6,296,761	10,739,589	18,059,326
Lease revenue	371,104	380,431	281,284	140,739	133,916	141,878	141,195	156,204	147,660	162,879
Source test/analysis fees	486,075	636,822	759,784	790,824	697,133	746,399	683,328	734,258	663,011	574,007
Hearing Board fees	327,344	201,864	221,709	277,544	342,508	531,879	163,960	187,733	351,979	187,308
Penalties and settlements	11,346,122	7,348,657	6,006,391	11,642,529	17,959,410	8,733,773	8,475,935	11,511,570	15,801,455	8,266,671
Subscriptions	10,363	7,760	6,095	1,630	3,498	2,136	2,842	1,097	436	970
Other revenues	23,288,416	63,269,554	4,486,199	2,880,775	10,687,052	6,249,773	18,176,910	27,575,590	29,871,943	39,449,420
Total revenues	\$ 371,936,941	\$ 332,965,551	\$ 329,025,834	\$ 297,487,338	\$ 299,092,180	\$ 276,456,566	\$ 247,581,469	\$ 361,100,883	\$ 331,140,503	\$ 436,887,945
<b>Expenditures:</b>										
Salaries and employee benefits	\$ 99,192,010	\$ 99,773,382	\$ 101,364,885	\$ 102,289,888	\$ 101,023,768	\$ 102,127,845	\$ 104,908,690	\$ 110,040,224	\$ 115,342,430	\$ 124,376,220
Insurance	1,024,939	1,039,020	882,871	1,078,546	1,258,577	1,202,650	1,148,390	1,131,980	1,503,440	1,733,653
Rent	535,733	589,248	532,089	620,723	527,991	556,323	509,395	540,386	550,641	606,592
Supplies	2,997,815	2,600,630	2,371,901	2,894,275	2,647,163	2,588,866	2,519,673	3,035,619	3,375,314	3,779,066
Contract and special services	160,153,501	171,344,881	145,316,505	162,672,155	159,679,349	219,251,382	95,288,291	108,413,444	109,427,946	172,084,692
Maintenance	1,152,411	1,273,060	1,183,238	1,425,557	1,445,271	1,270,417	1,712,754	1,287,341	1,787,868	2,109,924
Travel and auto	694,696	707,050	791,042	753,860	739,784	783,720	703,392	877,137	1,107,393	1,141,882
Utilities	1,483,855	1,495,435	1,342,945	1,405,249	1,637,327	1,809,594	1,717,980	1,411,075	1,520,114	1,427,124
Communications	598,674	598,958	587,930	580,569	629,542	635,977	679,666	577,753	614,018	647,865
Uncollectible accounts	753,072	891,794	953,792	454,094	1,116,103	7,982	444,485	400,929	412,184	479,519
Other expenditures	1,303,225	2,767,725	2,544,090	2,179,367	4,578,992	1,665,715	3,004,689	2,023,075	1,996,218	2,110,673
Capital outlay	2,835,795	2,170,102	2,051,740	3,261,458	3,351,887	3,050,388	4,032,806	4,669,042	4,583,914	4,973,661
Debt service:										
Principal	9,165,000	10,090,000	10,250,000	18,177,007	3,099,025	3,159,384	3,235,598	3,331,010	3,432,798	3,553,110
Interest	4,073,116	3,540,602	2,945,639	4,857,985	4,094,658	4,031,995	3,954,555	3,863,482	3,756,716	3,637,290
Total expenditures	\$ 285,963,843	\$ 298,881,886	\$ 273,118,666	\$ 302,650,733	\$ 285,829,437	\$ 342,142,238	\$ 223,860,364	\$ 241,602,497	\$ 249,410,994	\$ 322,661,271
Excess (deficiency) of revenues over (under) expenditures	85,973,097	34,083,665	55,907,168	(5,163,395)	13,262,743	(65,685,672)	23,721,105	119,498,386	81,729,509	114,226,674
<b>Other financing sources (uses):</b>										
Transfer in	4,362,357	17,056,936	8,670,107	38,364,134	19,653,981	9,768,512	10,777,488	8,540,141	10,713,791	31,523,520
Transfer out	(4,362,357)	(17,056,936)	(8,670,107)	(38,364,134)	(19,653,981)	(9,768,512)	(10,777,488)	(8,540,141)	(9,460,644)	(31,523,520)
Total other financing sources (uses)	-	-	-	-	-	-	-	-	1,253,147	-
Net change in fund balances	\$ 85,973,097	\$ 34,083,665	\$ 55,907,168	\$ (5,163,395)	\$ 13,262,743	\$ (65,685,672)	\$ 23,721,105	\$ 119,498,386	\$ 82,982,656	\$ 114,226,674
Debt service as a percentage of noncapital expenditures	4.7%	4.6%	4.9%	7.7%	2.5%	2.1%	3.3%	3.0%	2.9%	2.3%

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 Schedule 5  
 Expenditures by Major Object  
 General Fund (Budgetary Basis)  
 Last Ten Fiscal Years



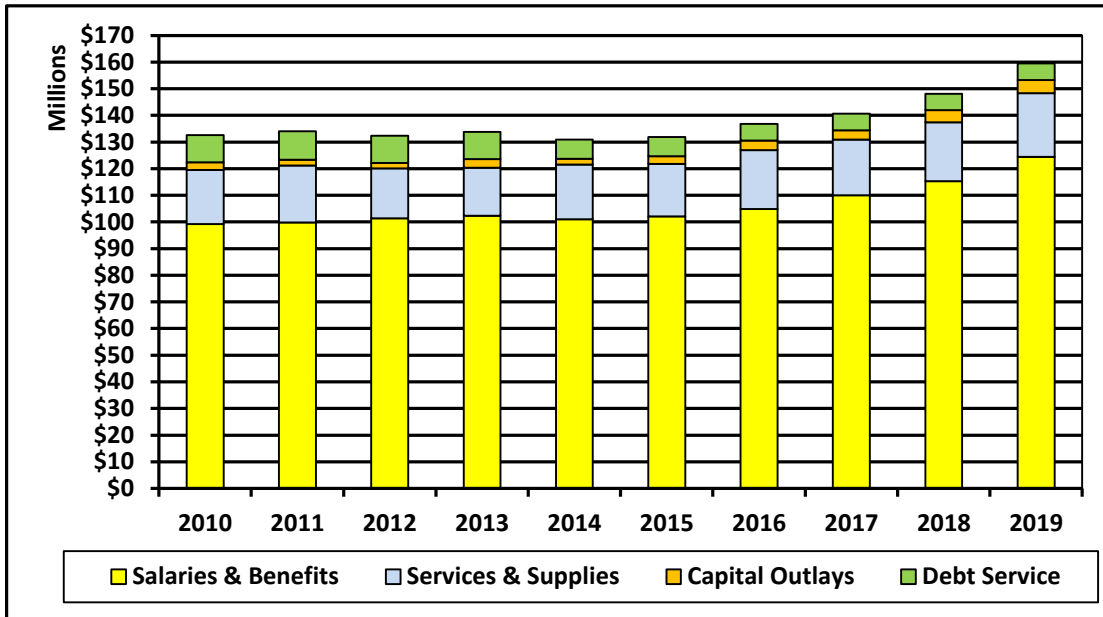
Year	Salaries & Benefits	Services & Supplies	Capital Outlays	Debt Service	Total Expenditures
2010	99,192,009	21,806,505	1,592,415	10,238,116	132,829,044
2011	99,773,382	23,397,710	1,198,178	10,630,602	134,999,872
2012	101,364,885	17,799,716	3,261,876	10,195,639	132,622,116
2013	102,289,888	19,052,813	3,053,754	10,219,978	134,616,433
2014	101,023,768	19,989,096	2,695,286	7,193,683	130,901,833
2015	102,127,842	20,074,713	4,031,026	7,191,379	133,424,960
2016	104,908,689	23,338,580	3,074,374	6,190,153	137,511,796
2017	110,077,989	21,757,613	4,037,890	6,194,492	142,067,984
2018	115,425,019	23,951,490	7,301,002	6,189,514	152,867,025
2019	124,376,218	25,949,611	4,669,722	6,190,400	161,185,951

See Notes Associated with Financial Charts page 116

Source:

South Coast Air Quality Management District Audited Financial Statements

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 Schedule 6  
 Expenditures by Major Object  
 General Fund (GAAP Basis)  
 Last Ten Fiscal Years



Year	Salaries & Benefits	Services & Supplies	Capital Outlays	Debt Service	Total Expenditures
2010	99,192,009	20,335,515	2,835,795	10,238,116	132,601,435
2011	99,773,382	21,403,118	2,170,102	10,630,602	133,977,204
2012	101,364,885	18,706,143	2,051,740	10,195,639	132,318,407
2013	102,289,888	18,066,145	3,261,458	10,219,978	133,837,469
2014	101,023,768	20,469,780	2,203,171	7,193,683	130,890,402
2015	102,127,845	19,683,561	2,910,271	7,191,379	131,913,056
2016	104,908,690	22,007,495	3,674,227	6,190,153	136,780,565
2017	110,040,224	20,903,669	3,455,686	6,194,492	140,594,071
2018	115,342,430	21,995,126	4,579,695	6,189,514	148,106,765
2019	124,376,220	23,933,151	4,973,661	6,190,400	159,473,432

See Notes Associated with Financial Charts page 116

Source:

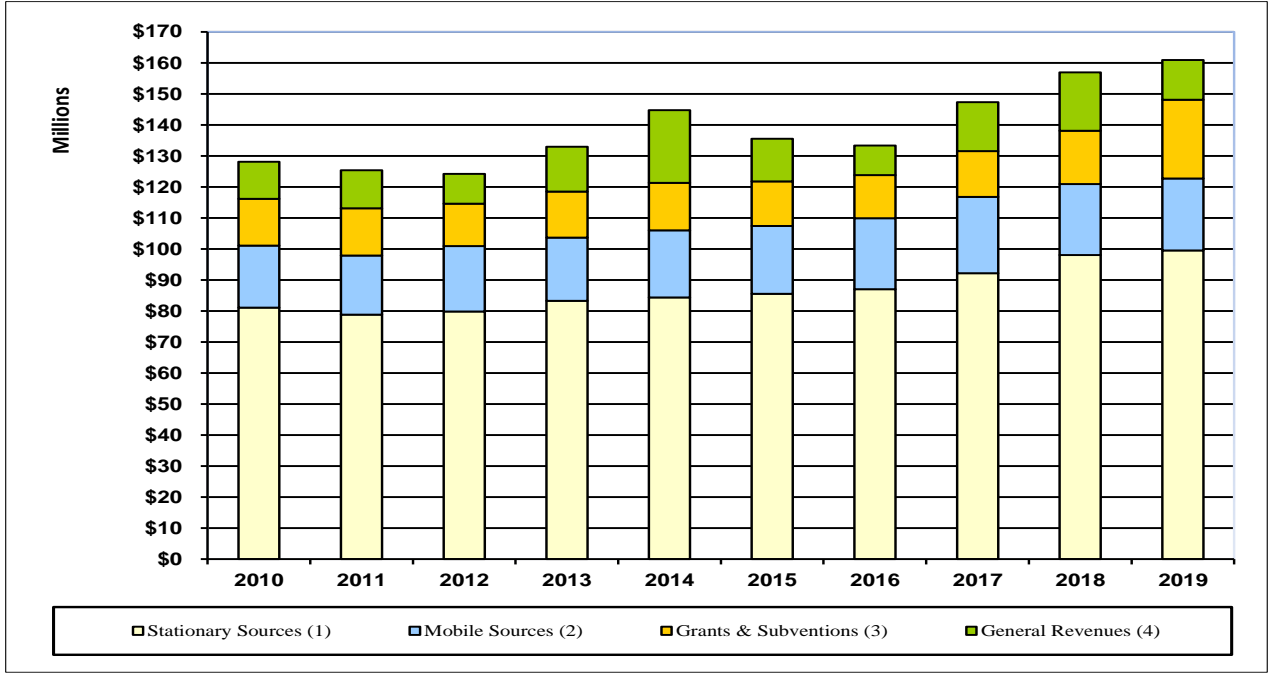
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
Schedule 7  
Debt Capacity  
Ratios of Outstanding Debt by Type  
Last Ten Fiscal Years  
(amounts expressed in thousands)

Fiscal Year	Governmental Activities		Total Primary Government	Percentage of Total Revenues (*)	Number of Customers	Per Customer
	Installment Sale Revenue Bonds	Pension Obligation Bonds				
2010	25,745	51,907	77,652	60.60%	28	3
2011	20,370	47,192	67,562	53.87%	28	2
2012	15,130	42,182	57,312	46.15%	28	2
2013	-	39,135	39,135	29.48%	28	1
2014	-	36,036	36,036	24.89%	27	1
2015	-	32,876	32,876	24.26%	27	1
2016	-	29,641	29,641	22.23%	27	1
2017	-	26,310	26,310	17.86%	26	1
2018	-	22,877	22,877	14.58%	27	1
2019	-	19,324	19,324	12.04%	27	1

The South Coast Air Quality Management District is a regional government and is not authorized to issue long-term debt (General Obligation Bonds). The Pension Obligation Bonds are refunding bonds of outstanding debt owed the San Bernardino County Employees' Retirement Association. The South Coast Air Quality Management District has no long-term debt limits.

(\*) These percentages are calculated using Total Revenues, Schedule 8.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 Schedule 8  
 Revenues by Major Source  
 General Fund  
 Last Ten Fiscal Years



Year	Stationary Sources (1)	Mobile Sources (2)	Grants & Subventions (3)	General Revenues (4)	Total Revenues
2010	81,097,647	19,994,596	15,039,879	12,002,573	128,134,695
2011	78,787,371	19,109,043	15,189,462	12,324,164	125,410,040
2012	79,815,562	21,149,810	13,611,764	9,602,853	124,179,989
2013	83,307,359	20,324,940	14,853,666	14,446,084	132,932,049
2014	84,341,483	21,654,072	15,285,284	23,499,350	144,780,189
2015	85,546,869	21,833,199	14,399,753	13,729,825	135,509,646
2016	87,038,338	22,859,620	13,934,946	9,489,698	133,322,602
2017	92,189,311	24,574,498	14,768,699	15,810,131	147,342,639
2018	98,060,961	22,861,428	17,207,484	18,805,726	156,935,599
2019	99,546,576	23,198,491	25,350,511	12,853,554	160,949,132

(1) Includes Emissions, Annual Operating, Permit, Air Toxics "Hot Spots," Source Test/Analysis, and Hearing Board fees

(2) Includes AB2766 Mobile Source, Clean Fuels, and Transportation Programs revenues

(3) Includes State Subventions, State Grants and Federal Grants

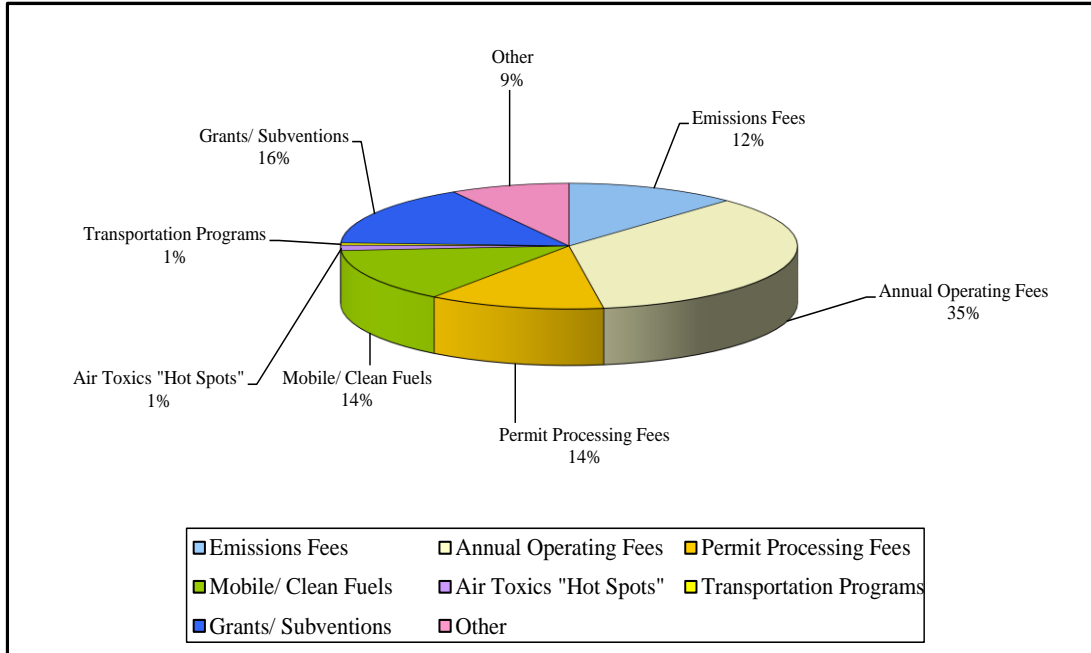
(4) Includes Area Sources, Penalties & Settlements, Interest, Lease Revenue, Other Revenue and Subscriptions

See Notes Associated with Financial Charts page 117

Source: South Coast Air Quality Management District Audited Financial Statements



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 9**  
**Revenues by Fee Source**  
**General Fund**  
**Last Ten Fiscal Years**



Fee Source Revenue									
Year	Emissions Fees	Annual Operating Fees	Permit Processing Fees	Mobile/ Clean Fuels	Air Toxics "Hot Spots"	Transportation Programs	Grants/ Subventions	Other	Total
2010	19,663,671	41,191,933	16,316,076	19,158,039	1,666,699	836,557	15,039,879	14,261,841	128,134,695
2011	19,246,061	41,342,340	16,007,058	18,223,780	1,353,226	885,263	15,189,462	13,162,850	125,410,040
2012	19,714,882	42,189,557	15,658,916	20,300,981	1,270,714	848,829	13,611,764	10,584,346	124,179,989
2013	20,540,391	43,056,220	17,210,640	19,397,116	1,431,740	927,824	14,853,666	15,514,452	132,932,049
2014	20,472,379	44,260,635	16,945,777	20,776,256	1,623,051	877,816	15,285,284	24,538,991	144,780,189
2015	19,838,979	45,759,738	16,668,485	20,987,963	2,001,389	845,236	14,399,753	15,008,103	135,509,646
2016	18,984,919	47,592,793	17,239,759	21,967,629	2,373,579	891,991	13,934,946	10,336,986	133,322,602
2017	18,964,371	48,930,776	20,729,207	23,734,176	2,642,966	840,322	14,768,699	16,732,122	147,342,639
2018	22,786,661	52,182,769	19,538,295	22,015,710	2,538,246	845,718	17,207,484	19,820,716	156,935,599
2019	19,542,168	57,028,631	20,030,307	22,221,268	2,184,155	977,223	25,350,511	13,614,869	160,949,132

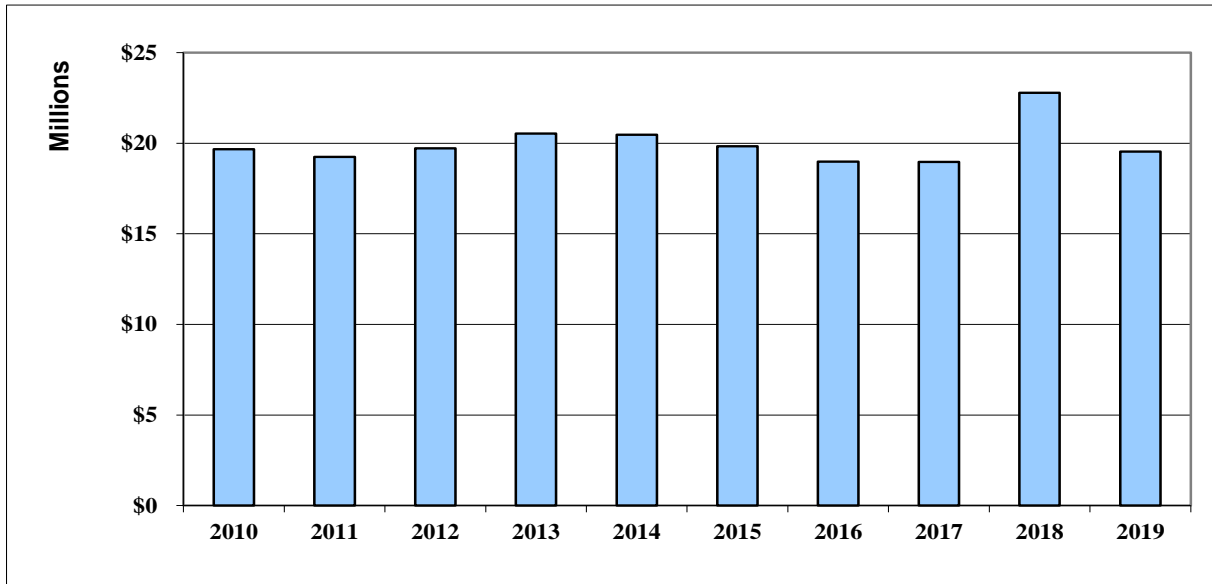
\* Other includes Area Sources, Penalties and Settlements, Interest, Source Test/Analysis Fees, Lease Revenue, Hearing Board, Other Revenue and Subscriptions.

See Notes Associated with Financial Charts page 117

Source:

South Coast Air Quality Management District Audited Financial Statements

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 Schedule 10  
 Emission Fee Revenues  
 Last Ten Fiscal Years



Year	Emission Fees
2010	19,663,671
2011	19,246,061
2012	19,714,882
2013	20,540,391
2014	20,472,379
2015	19,838,979
2016	18,984,919
2017	18,964,371
2018	22,786,661
2019	19,542,168

See Notes Associated with Financial Charts page 118

Source: South Coast Air Quality Management District Audited Financial Statements

## Notes Associated with Financial Charts

### **Schedule 5 - Expenditures by Major Object (General Fund Budgetary Basis)**

- The increase is due to adding 47 positions for the Community Air Protection Program (CAPP) and the costs associated with the three year labor agreement that went into effect in the third quarter of FY 2017-18. There is also an increase in Retirement Expenditure based on the contribution rates provided from the San Bernardino County Retirement Association (SBCERA).
- The increase in 2018 expenditures from 2017 is mainly due to the adding positions for the AB 617 and AB 134 programs and the costs associated with the three year labor agreement and with State Disability Insurance, employer share of unemployment insurance, Social Security and Medicare.
- The increase in 2017 expenditures from 2016 is mainly due to the hiring of some grant funded positions and the contribution rates provided from the San Bernardino County Retirement Association (SBCERA).
- The increase in 2016 expenditures from 2015 includes the costs associated with the three year labor agreement. The rents and leases for equipment also increased. In addition, the professional and special services increased due to new or additional projects for outside building consultants, community outreach, and planning and rule development activities.
- In 2015 the increase in Capital Outlays of approximately \$1.3M is mainly due to large purchases of vehicles and replacements of operational systems.
- The decrease in 2014 expenditures from 2013 is mainly due to a significant reduction in debt. As of June 2013, the 2002 Series Installment Sale Bonds were legally defeased.
- The increase in 2013 expenditures from 2012 is mainly due to the rising retirement and medical insurance costs.
- The decrease in 2012 expenditures is due to a significant reduction in Services and Supplies.
- The increase in 2011 expenditures from 2010 is mainly due to the increase in expenditures for Contract and Special Services.
- The increase in 2010 Salaries & Benefits expenditures from 2009 is mainly due to the hiring of vacant FTEs and rising retirement costs.

### **Schedule 6 - Expenditures by Major Object (General Fund GAAP Basis)**

- The increase is due to adding 47 positions for the CAPP and the costs associated with the three year labor agreement that went into effect in the third quarter of FY 2017-18. There is also an increase in Retirement expenditure based on the contribution rates provided from the San Bernardino County Retirement Association (SBCERA).
- The increase in 2018 expenditures from 2017 is mainly due to the adding positions for the AB 617 and AB 134 programs and the costs associated with the three year labor agreement and with State Disability Insurance, employer share of unemployment insurance, Social Security and Medicare. Also, the increase in Capital Outlays reflects anticipated needs.
- The increase in 2017 expenditures from 2016 is mainly due to the hiring of some grant funded positions and the contribution rates provided from the San Bernardino County Retirement Association (SBCERA).
- The increase in 2016 expenditures from 2015 includes the costs associated with the three year labor agreement. The rents and leases for equipment also increased. In addition, the professional and special services increased due to new or additional projects for outside building consultants, community outreach, and planning and rule development activities.
- The small increase in 2015 expenditures from 2014 is mainly due to the rise in the contribution cost for retirement and purchases of vehicles.

- The decrease in 2014 expenditures from 2013 is mainly due to a significant reduction in debt. As of June 2013, the 2002 Series Installment Sale Bonds were legally defeased.
- The increase in 2013 expenditures from 2012 is mainly due to the rising retirement and medical insurance costs. In addition, Capital Outlays expenditures increased due to the large purchase of CNG vehicles and the replacement of some boilers and associated equipment.
- The decrease in 2012 expenditures is due to a significant reduction in Services and Supplies.
- The increase in 2011 expenditures from 2010 is mainly due to the increase in Contract and Special Services.

#### **Schedule 8 - Revenues by Major Source (General Fund)**

- The increase in 2019 revenue is mainly due to the increase in State Grants related to the new funding for the implementation portion of CAPP.
- The increase in 2018 revenue reflects emission fees increase under the stationary sources and large penalties/settlements from facilities that were found not to be in compliance with South Coast AQMD rules and regulations under the General Revenue category.
- The large increase in 2017 revenue reflects large penalties/settlements from facilities that were found not to be in compliance with South Coast AQMD rules and regulations, which increased the General Revenue category.
- The decrease in 2016 revenue from 2015 is mainly due to the decrease in Penalties & Settlements in the General Revenues category.
- The large decrease in 2015 revenues is mainly due to the decrease in Penalties & Settlements for violations of permit conditions, South Coast AQMD Rules, or state law.
- Revenues increased significantly in 2014 because the South Coast AQMD received several large penalties/settlements from facilities that were found to be not in compliance with South Coast AQMD rules and regulations.
- Revenues increased significantly in 2013 because the South Coast AQMD received several large penalties/settlements from facilities that were found to be not in compliance with South Coast AQMD rules and regulations.
- The decrease in 2012 revenue is due to the decrease in Penalties & Settlements in General Revenues, and the reduction in Grants & Subventions.
- In 2011 the decrease in the Stationary Sources and Mobile Sources revenues are mainly due to the decrease in all the fee source revenues.
- The decrease in 2010 revenue is attributable to the economic downturn and declining emissions; however, the overall decline is mitigated by several large, unanticipated one time penalties/settlements.

#### **Schedule 9 - Revenues by Fee Source (General Fund)**

- The increase in 2019 revenue is mainly due to the 3.4% CPI increase. Also included was 4% increase on non-Title V annual operating permit renewal fees and 10.66% increase for Title V permits.
- The increase in 2018 revenue from 2017 is mainly due to the increase of emission fees. Other revenues increased because the South Coast AQMD received large penalties/settlements from facilities that were found not to be in compliance with South Coast AQMD rules and regulations, which increased the General Revenue category.
- Other revenues increased significantly in 2017 because the South Coast AQMD received large penalties/settlements from facilities that were found not to be in compliance with South Coast AQMD rules and regulations, which increased the General Revenue category.
- The decrease in 2016 revenue from 2015 is mainly due to the decrease in Penalties & Settlements in the Other Revenues category.

- The large decrease in 2015 revenues is mainly due to the decrease in Penalties & Settlements for violations of permit conditions, South Coast AQMD Rules, or state law.
- Revenues increased significantly in 2014 because the South Coast AQMD received several large penalties/settlements from facilities that were found to be not in compliance with South Coast AQMD rules and regulations.
- Other revenues increased significantly in 2013 because the South Coast AQMD received several large penalties/settlements from facilities that were found to be not in compliance with South Coast AQMD rules and regulations.
- The decrease in 2012 revenue is due to the decrease in Penalties & Settlements in General Revenues, and the reduction in Grants & Subventions.
- The decrease in 2011 revenue from 2010 is mainly due to the decreases in Mobile Source revenue and Penalties and Settlements revenue.
- In 2010, all fee source revenues declined. The increase in Grants/Subventions revenue is attributable to a full year of administrative cost reimbursement for Prop 1B.

#### **Schedule 10 – Emission Fee Revenues**

- 2019 emission fees revenue was lower than 2018 because of an emissions audit conducted and additional emission fees were collected in 2018.
- There was an increase in emission fees revenue in 2018 related to fee increase.
- There was a small decrease in emission fees revenue in 2017 due to gradually decreasing emissions.
- There was a small decrease in emission fees revenue in 2016 due to gradually decreasing emissions.
- There was a small decrease in emission fees revenue in 2015. Emission fees vary with the non-RECLAIM and RECLAIM emissions, and the flat emission fees of active facilities.
- The small increase in 2013 is due to a fee increase that was effective July 1, 2012.
- In 2010, emission fees decreased as a result of reduced emissions at major refineries and large facilities.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
Schedule 11  
Revenue Capacity  
Largest Payers of Emission-Based Fees at a Single Location  
Current Year and Ten Years Ago

119

	Payment	Rank	% of Total Emission Fee	Payment	Rank	% of Total Emission Fee
Torrance Refinery Co LLC (Formerly Exxon Mobil Corporation)	\$2,227,973	1	11.4%	\$2,092,048	2	8.4%
Tesoro Refining and Marketing *	2,120,142	2	10.8%	-	-	-
Chevron Products	1,868,950	3	9.6%	1,868,908	4	7.5%
Tesoro Refining and Marketing (Formerly Equilon)	1,255,052	4	6.4%	1,467,571	5	5.9%
Phillips 66 Company (Formerly Conoco and formerly Tosco Refining Co)*	863,141	5	4.4%	2,012,357	3	8.1%
Ultramar Incorporated	741,896	6	3.8%	646,805	6	2.6%
Phillips 66 Company (Formerly Conoco and formerly Tosco Refining Co)*	736,213	7	3.8%	-	-	-
Tesoro Refining and Marketing (formerly BP ARCO West Coast Products)*	448,206	8	2.3%	2,165,954	1	8.7%
City of Long Beach, SERRF Project	207,374	9	1.1%	326,332	9	1.3%
Tamco	184,297	10	0.9%	-	-	-
Dart Container Corp of California	178,483	11	0.9%	212,749	14	0.9%
Cal Portland Cement Company	176,845	12	0.9%	513,388	7	2.1%
Desert View Power	172,696	13	0.9%	-	-	-
New Indy Ontario LLC	134,545	14	0.7%	-	-	-
Metal Container Corp	134,269	15	0.7%	-	-	-
Equilon Enterprises, LLC, Shell Oil Products US (formerly Texaco Refining)	117,980	16	0.6%	167,541	19	0.7%
Anheuser-Busch Incorporated	117,017	17	0.6%	234,404	13	0.9%
Beta Off Shore	107,969	18	0.6%	-	-	-
Insulfoam	99,470	19	0.5%	-	-	-
California Steel Industries	99,106	20	0.5%	-	-	-
Paramount Petroleum Company	-	-	-	236,448	12	1.0%
Rhodia Incorporated	-	-	-	357,150	8	1.4%
Mountainview Generating Station	-	-	-	247,164	11	1.0%
BP West Coast Products LLC	-	-	-	315,541	10	1.3%
Southern California Gas Company	-	-	-	203,479	15	0.8%
RRI Energy Etiwanda, Incorporated	-	-	-	157,427	20	0.6%
City of Los Angeles DWP	-	-	-	182,321	16	0.7%
Ball Metal Beverage Container Corporation	-	-	-	181,433	17	0.7%
Colmac Energy	-	-	-	169,222	18	0.7%
<b>Total Paid by Largest Payers at a Single Location</b>	<b>\$ 11,991,624</b>		<b>61.4%</b>	<b>\$ 13,758,242</b>		<b>55.4%</b>
<b>Total Emissions Based Fees Paid by All Emitters</b>	<b>\$ 19,542,162</b>			<b>\$ 24,826,356</b>		

\*Located at separate sites.

## **KEY AIR QUALITY AND DEMOGRAPHIC INFORMATION REGARDING THE REGION INCLUDED IN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

The South Coast Air Quality Management District includes all of Orange County and parts of Los Angeles, Riverside and San Bernardino Counties. The section below provides a brief description of each county.

Measuring 4,084 square miles, *Los Angeles County* is one of the nation's largest counties. It is the most populated county in the state of California and contains the most populated city in the state, the City of Los Angeles. Before World War II, Los Angeles County was one of the nation's foremost agricultural producers. As agricultural production declined, the economy has evolved into diverse areas that include trade, transportation, and utilities, government, educational and health services, professional and business services, and manufacturing. Tourism and entertainment as well as international trade also play a vital role in the county's economy. The county is home to the twin seaports of Los Angeles and Long Beach, together the nation's largest, as well as the single largest fixed source of air pollution in the region. The two ports are responsible for more smog-forming nitrogen oxide emissions than 7 million cars.

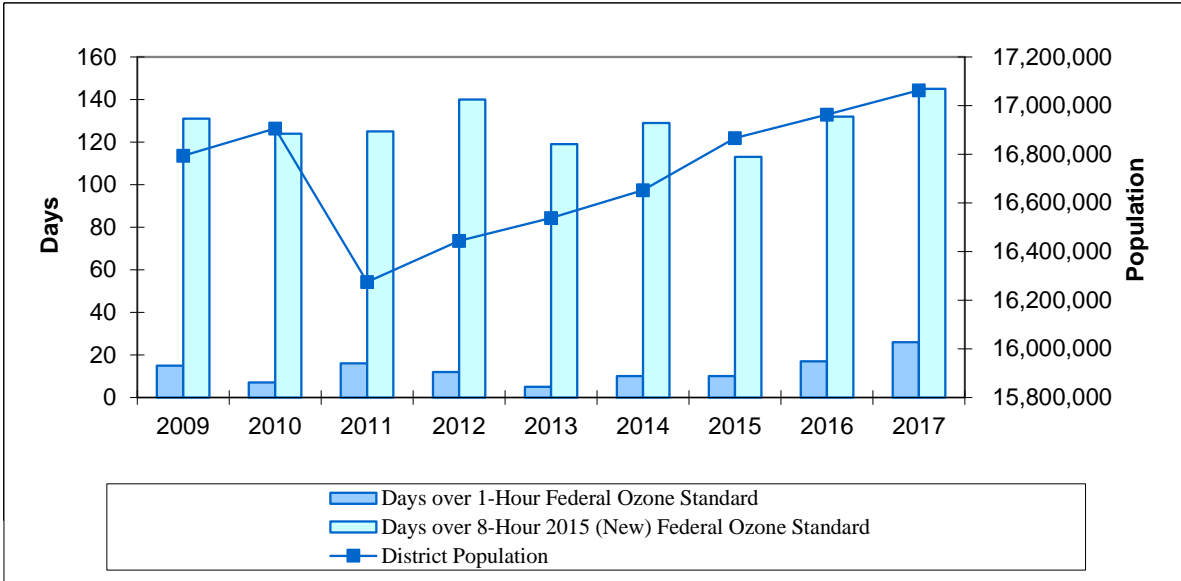
*Orange County* is the third most populated county in the state and lies south of Los Angeles County. When created in 1889, Orange County was named for its abundance of orange groves and thriving agricultural industry. Today, the largest industry employers are trade, transportation, and utilities, professional and business services, and manufacturing.

The varied topography of *Riverside County* is characterized by fertile river valleys to rolling plains and foothills to deserts below sea level and mountain peaks above 10,000 feet. Recent years have brought dramatic population growth to Riverside County. The population is expected to increase by 1.3 percent in 2016. Annual growth in the 2016 - 2021 period is expected to average 1.5 percent. The county's early years were linked to the agriculture industry, but commerce, construction, manufacturing, transportation, and tourism have contributed to the county's substantial growth. The County is also a major distribution center for Southern California and the Pacific Rim.

Roughly 90 percent of *San Bernardino County* is desert and the remaining portion consists of the San Bernardino Valley and San Bernardino Mountains. San Bernardino County and Riverside County are collectively known as the Inland Empire. San Bernardino ranks as the fifth-highest populated county in California from 2016 to 2021, population growth is expected to average 1.0 percent per year. The economy is led by services, government, retail trade, and manufacturing industries. Additionally, the county consistently ranks in the top fifteen agricultural-producing counties in the state.

All four counties within the South Coast Air Quality Management District's jurisdiction have experienced significant population growth in the last few years. The following charts illustrate air pollution, demographic, employment, and motor vehicle information relating to the South Coast Air Quality Management District region.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 12**  
**South Coast Air Basin Smog Trend**  
**Last Ten Calendar Years**



Year	Days over 1-Hour Federal Ozone Standard	Days over 8-Hour 2015 (New) Federal Ozone Standard	District Population
2009	15	131	16,793,784
2010	7	124	16,906,456
2011	16	125	16,274,797
2012	12	140	16,444,162
2013	5	119	16,538,490
2014	10	129	16,652,810
2015	10	113	16,866,350
2016	17	132	16,962,478
2017	26	145	17,063,249
2018	11	141	17,127,040

Notes:

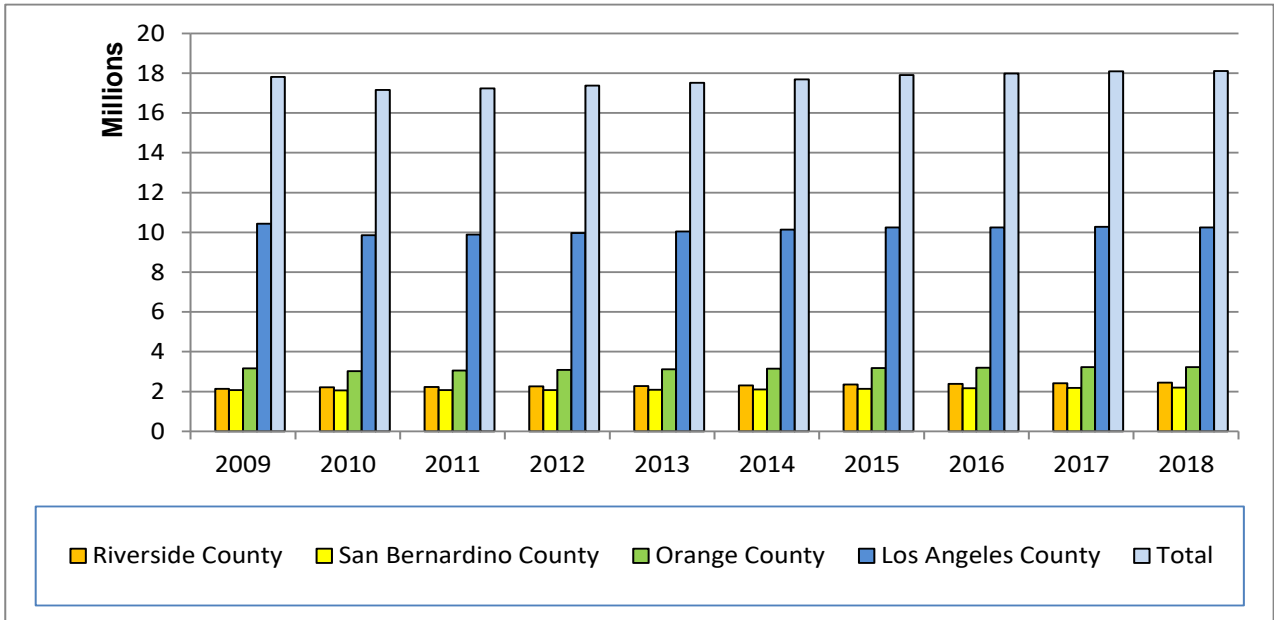
- The average number of days exceeding the federal ozone standard in the Basin decreased by 54% between the three-year period of 1976-78 and 2011-13.
- Favorable weather conditions and continued implementation of the air pollution control strategy contributed to the significant decrease in Days over the 1-Hour Ozone Standard in the recent decades.
- In 1997, the federal government implemented the 8-hour ozone National Ambient Air Quality Standard. The standard was revised in 2015 from 75 ppb to 70 ppb.

Source:

South Coast Air Quality Management District ([www.aqmd.gov](http://www.aqmd.gov)); State Subvention Guidance.



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 13**  
**Four-County Area Population**  
**Last Ten Calendar Years**



Year	Riverside County	San Bernardino County	Orange County	Los Angeles County	Total	% Increase
2009	2,139,535	2,073,149	3,166,461	10,441,080	17,820,225	1.08%
2010	2,217,778	2,052,397	3,029,859	9,858,989	17,159,023	-3.71%
2011	2,227,577	2,063,919	3,055,792	9,884,632	17,231,920	0.42%
2012	2,255,059	2,076,274	3,081,804	9,958,091	17,371,228	0.81%
2013	2,279,967	2,085,669	3,113,991	10,041,797	17,521,424	1.68%
2014	2,308,441	2,104,291	3,147,655	10,136,559	17,696,946	1.00%
2015	2,347,828	2,139,570	3,183,011	10,241,335	17,911,744	1.21%
2016	2,384,783	2,160,256	3,194,024	10,241,278	17,980,341	0.38%
2017	2,415,955	2,174,938	3,221,103	10,283,729	18,095,725	0.64%
2018	2,440,124	2,192,203	3,222,498	10,253,716	18,108,541	0.07%

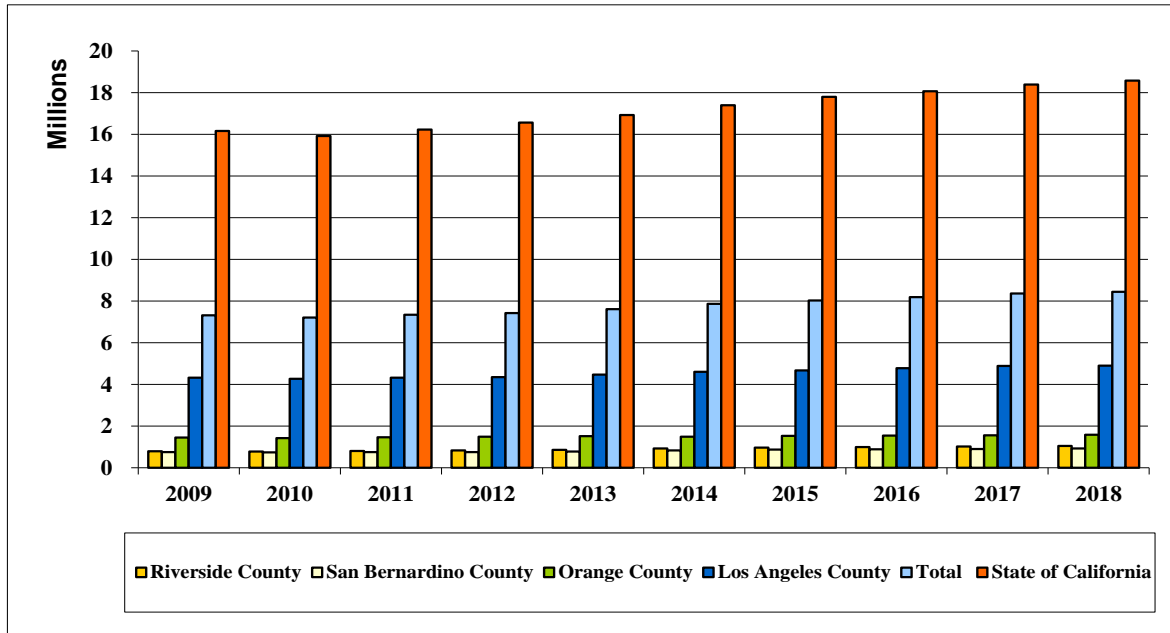
South Coast AQMD encompasses all of Orange County and parts of the Los Angeles, Riverside, and San Bernardino Counties, representing over 18 million residents.

Source:

California Department of Finance - Demographic Research Unit

[www.dof.ca.gov/budgeting/documents](http://www.dof.ca.gov/budgeting/documents)

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 14**  
**Los Angeles, Orange, Riverside, San Bernardino**  
**Counties, and State of California Civilian Employment**  
**Last Ten Calendar Years**



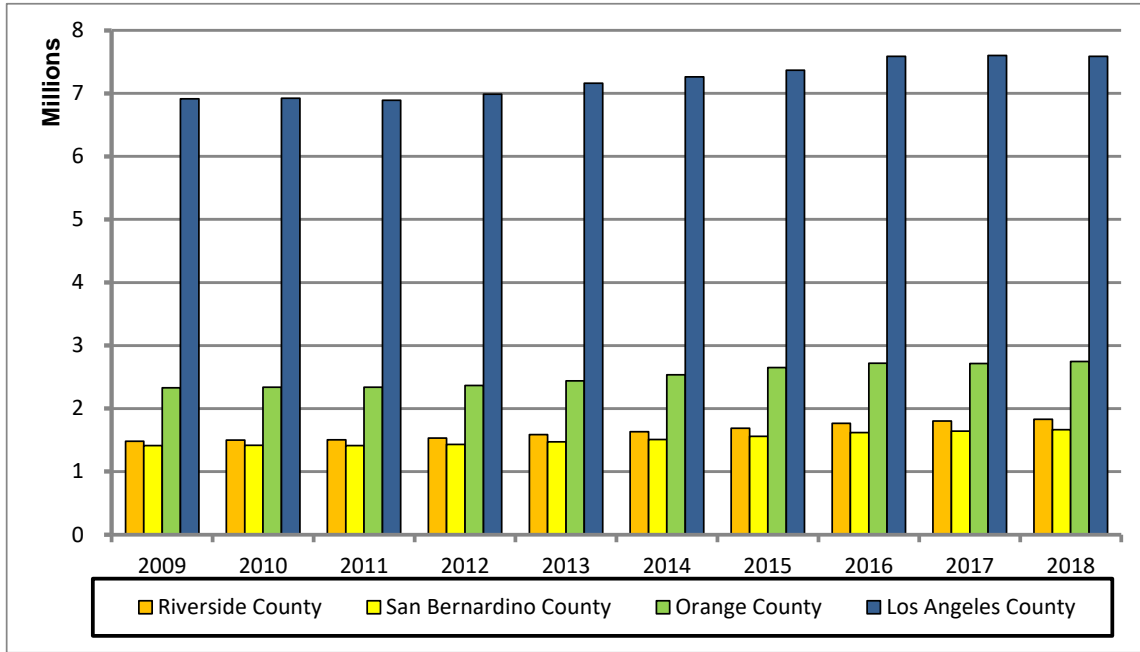
Year	Riverside County	San Bernardino County	Orange County	Los Angeles County	Total	State of California
2009	790,000	751,600	1,451,000	4,328,600	7,321,200	16,163,900
2010	779,500	733,800	1,429,700	4,262,300	7,205,300	15,916,300
2011	810,600	747,100	1,464,400	4,318,900	7,341,000	16,226,600
2012	828,800	758,000	1,496,000	4,345,700	7,428,500	16,560,300
2013	855,300	778,100	1,510,600	4,470,700	7,614,700	16,933,300
2014	927,300	836,000	1,489,200	4,610,800	7,863,300	17,397,100
2015	965,500	866,800	1,525,600	4,674,800	8,032,700	17,798,600
2016	988,000	882,200	1,538,000	4,778,800	8,187,000	18,065,000
2017	1,016,200	904,200	1,562,600	4,883,600	8,366,600	18,393,100
2018	1,044,600	922,300	1,577,900	4,896,500	8,441,300	18,582,800

Source:

State of California: Employment Development Department

[www.labormarketinfo.edd.ca.gov/cgi/dataanalysis](http://www.labormarketinfo.edd.ca.gov/cgi/dataanalysis)

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**Schedule 15**  
**Vehicle Registrations (Automobiles & Trucks)**  
**For Four County Area**  
**Last Ten Calendar Years**



Year	Riverside County	San Bernardino County	Orange County	Los Angeles County	Total District
2009	1,480,616	1,410,411	2,327,428	6,913,586	12,132,041
2010	1,497,595	1,417,354	2,337,837	6,920,671	12,173,457
2011	1,502,571	1,412,652	2,336,315	6,892,687	12,144,225
2012	1,532,040	1,428,725	2,367,745	6,984,730	12,313,240
2013	1,587,494	1,470,974	2,440,330	7,159,182	12,657,980
2014	1,630,405	1,507,903	2,536,833	7,263,982	12,939,123
2015	1,689,523	1,557,196	2,649,420	7,368,979	13,265,118
2016	1,765,545	1,618,573	2,716,672	7,585,269	13,686,059
2017	1,799,962	1,642,888	2,713,892	7,599,579	13,756,321
2018	1,831,189	1,666,102	2,744,304	7,586,587	13,828,182

South Coast AQMD encompasses all of Orange County, and parts of Los Angeles, Riverside, and San Bernardino counties.

Source:

California Department of Motor Vehicles - Estimated Vehicles Registered by County

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
Schedule 16  
Full-time Equivalent South Coast AQMD Employees by Function/Program  
Last Ten Fiscal Years

FUNCTION:	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
Executive Office	10	10	10	9	10	8	9	6	5	5
Clerk of the Boards	6	6	6	6	6	6	6	6	5	6
Legal *	-	-	-	-	-	-	-	27	28	29
District Counsel	13	12	11	11	12	12	10	-	-	
District Prosecutor	19	20	21	18	19	20	19	-	-	
Finance	45	43	42	41	44	41	40	42	44	43
Administrative & Human Resources	36	34	32	32	31	32	30	33	36	34
Information Management	48	49	48	47	47	46	47	45	47	48
Planning, Rule Development & Area										
Area Sources	105	103	96	88	85	85	85	94	111	117
Legislative, Public Affairs & Media	42	40	39	40	38	38	41	44	41	43
Science & Technology Advancement	156	146	143	144	144	150	148	145	159	160
Engineering & Compliance **	299	300	286	273	261	259	-	-	-	
Engineering & Permitting	-	-	-	-	-	-	136	133	133	122
Compliance & Enforcement	-	-	-	-	-	-	110	127	119	129
Total	<u>779</u>	<u>763</u>	<u>734</u>	<u>709</u>	<u>697</u>	<u>697</u>	<u>681</u>	<u>702</u>	<u>728</u>	<u>736</u>

\* In fiscal year 2013, District Counsel and District Prosecutor merged to become the Legal department.

\*\* In fiscal year 2016, Engineering & Compliance split into two divisions: Engineering & Permitting and Compliance & Enforcement.

Source: Administrative and Human Resources (vacancy and item control reports).

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
 Schedule 17  
 Operating Indicators by Function  
 Last Ten Fiscal Years

<u>Program Category</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
<b>Advance Clean Air Technology</b>										
Contracts awarded	530	526	556	938	523	1,047	421	403	357	564
Total Funding awarded	\$ 180,669,515	\$ 131,399,287	\$ 82,536,619	\$ 207,181,573	\$ 216,085,526	\$ 123,181,473	\$ 153,900,867	\$ 137,406,323	\$ 170,391,084	\$213,005,034
<b>Ensure Compliance with Clean Air Rules</b>										
Inspections	33,735	33,560	34,191	32,535	29,501	22,871	24,037	21,419	24,692	24,289
Notices of Violations	1,530	1,254	1,211	965	956	811	499	632	1,626	2,724
Hearing Board Orders for Abatement	35	47	93	51	46	41	23	27	24	29
Hearing Board Appeals	20	2	7	3	7	-	3	3	1	2
<b>Customer Service</b>										
Public Information Requests	3,821	3,410	3,543	3,460	4,505	4,012	4,958	5,282	4,676	4,830
Community/Public Meetings attended	202	190	274	294	264	217	239	210	156	193
Small Business Assistance Contacts	2,578	2,497	2,574	2,266	1,850	1,711	1,865	2,834	4,073	3,043
<b>Develop Programs to Achieve Clean Air</b>										
Transportation Plans processed	1,372	1,385	1,392	1,371	1,333	1,329	1,337	1,348	1,356	1,357
Emission Inventory Updates	703	521	530	408	460	336	356	244	343	294
<b>Develop Rules to Achieve Clean Air</b>										
Rules Developed	15	40	8	20	24	24	16	15	28	44
<b>Monitoring Air Quality</b>										
Samples Analyzed by the Laboratory	29,685	28,915	29,520	32,520	29,340	30,824	32,400	38,541	36,342	33,258
Source Testing Analyses/Evaluations/Reviews	740	1,030	952	1,035	968	996	936	952	714	632
<b>Timely Review of Permits</b>										
Applications Processed	9,627	13,044	12,225	14,153	13,217	9,495	9,482	11,780	10,913	9,463
Applications Received-Small Business	694	798	732	615	514	629	594	535	605	541
Applications Received-All Others	10,941	10,769	11,682	11,709	11,156	9,961	9,894	8,376	9,172	8,131
<b>Policy Support</b>										
News Releases	69	64	57	61	62	76	89	86	120	99
Media Calls	313	252	520	1,131	774	532	1,450	1,201	-	-
Media Inquiries Completed	313	252	520	1,131	774	532	1,450	1,201	-	-
News Media Interactions*	-	-	-	-	-	-	-	-	1,235	633

\*Tracking of News Media Interactions began in 2018. This will replace the tracking of media calls and media inquiries completed.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
Schedule 18  
Capital Assets Statistics by Function/Program  
Last Ten Fiscal Years

	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
<b><u>Function/Program</u></b>										
<b>Ensure Compliance with Clean Air Rules</b>										
Number of vehicles assigned to field inspection	125	127	121	121	112	108	100	98	100	97
<b>Monitoring Air Quality</b>										
Number of air monitoring stations	43	43	42	40	42	42	42	43	41	41
Number of air monitoring instruments installed in the air monitoring stations to measure air quality	283	283	249	292	260	208	223	222	224	224

Source: South Coast AQMD Human Resources and Science and Technology Advancement's records

# South Coast Air Quality Management District

## Demographic and Miscellaneous Statistics

<b><u>Established:</u></b>	February 1, 1977
<b><u>Area Covered:</u></b>	10,743 Square Miles
<b><u>Counties Included in District:</u></b>	All of Orange County and parts of Los Angeles, Riverside, and San Bernardino Counties
<b><u>Population:</u></b>	17,127,040 (In 2018)
<b><u>Average Unemployment Rate:</u></b>	Los Angeles County (4.7%), Orange (2.9%), Riverside (4.4%), and San Bernardino (4.0%) counties (In 2018)
<b><u>Transportation:</u></b>	Two transcontinental railroads – Burlington Northern Santa Fe and the Union Pacific  Six Commercial Airports – Los Angeles International, Burbank, Long Beach, Ontario International, Orange County, and Palm Springs  Freeways – Three major interstate freeways including four bypass routes, U.S. 101, and nine State freeway routes  Two major adjoining ports – Port of Long Beach and Port of Los Angeles
<b><u>Visitor Destinations:</u></b>	Disneyland, Knott’s Berry Farm, Magic Mountain, Motion Picture and Television Studios and the Rose Bowl
<b><u>Number of Registered Vehicles Within South Coast AQMD Jurisdiction:</u></b>	13,828,182 (In 2018)
<b><u>Average Daily Miles Traveled Per Vehicle:</u></b>	28 (CY 2018 data)
<b><u>Examples of Stationary Sources of Air Pollution Regulated:</u></b>	Oil Refineries, power plants, paint spray booths, incinerators, manufacturing facilities, dry cleaners, and service stations.
<b><u>Number of Sources:</u></b>	26,873 operating locations with 69,085 permits.
<b><u>Number of Air Monitoring Stations:</u></b>	41
<b><u>Full-time Authorized Positions:</u></b>	939
<b><u>Adopted FY 2019-20 Budget:</u></b>	\$170,896,725
<b><u>Key Federal, State, and Local Air Agencies:</u></b>	EPA Region IX (Environmental Protection Agency), CARB (California Air Resources Board), CAPCOA (California Air Pollution Control Officer’s Association), NACAA (National Association of Clean Air Agencies), ALAPCO (Association of Local Air Pollution Control Officials). There are 35 local air pollution control districts in California.

# Air Quality Historical Timeline

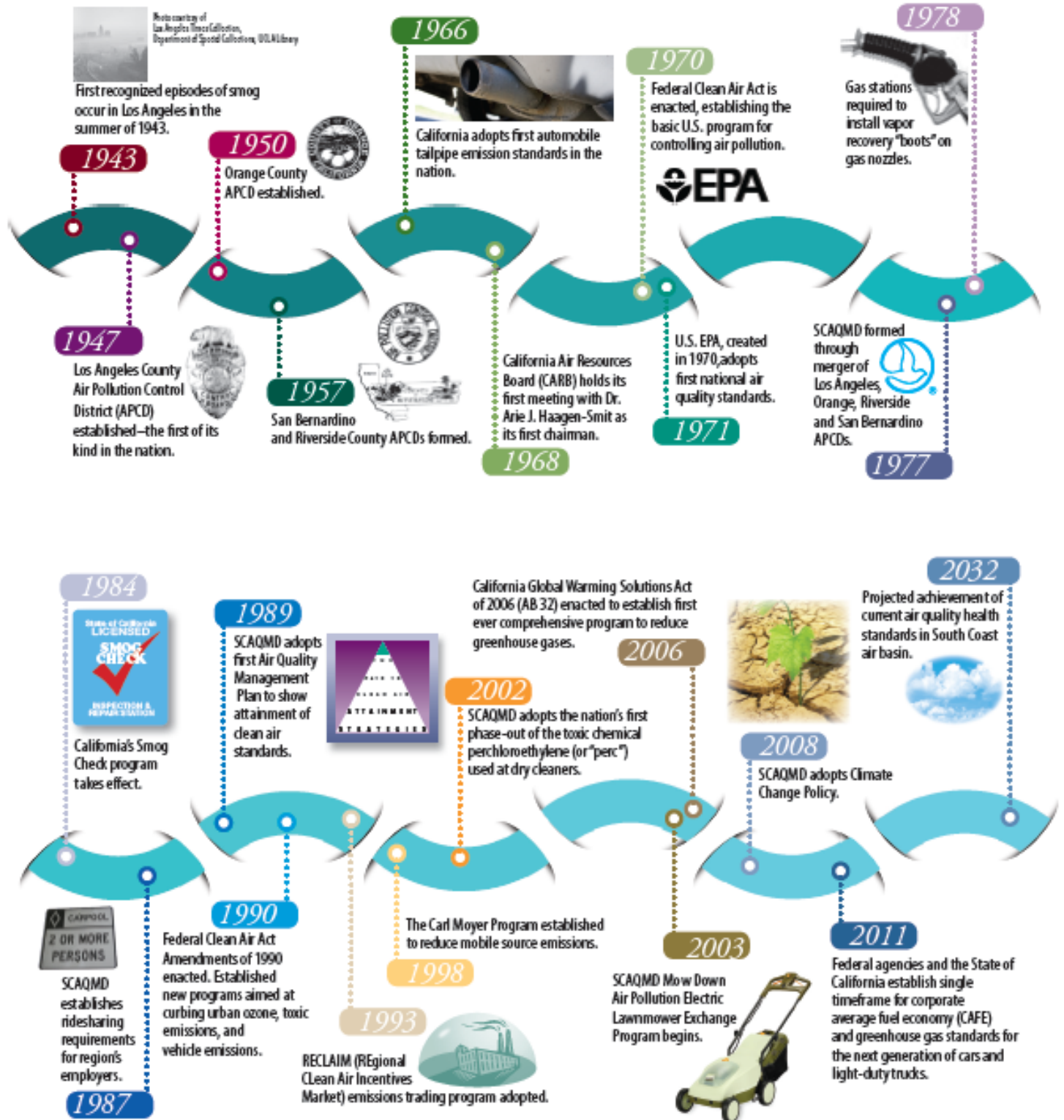


Photo courtesy of Los Angeles Times Collection, Department of Special Collections, UCLA Library





South Coast  
**AQMD**

South Coast  
Air Quality Management District

21865 Copley Drive  
Diamond Bar, CA 91765-4178

[www.aqmd.gov](http://www.aqmd.gov)

# **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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## **SINGLE AUDIT**

**JUNE 30, 2019**  
**(With Independent Auditor's Reports Thereon )**



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2355 Crenshaw Blvd. Suite 150 Torrance, CA 90501  
t: (310) 792-4640 f: (310) 792-4140

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**TABLE OF CONTENTS**

	<b>Page</b>
Independent Auditor’s Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with <i>Government Auditing Standards</i> .....	1
Independent Auditor’s Report on Compliance for Each Major Federal Program; Report on Internal Control Over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance .....	3
Schedule of Expenditures of Federal Awards .....	6
Notes to Schedule of Expenditures of Federal Awards .....	7
Schedule of Findings and Questioned Costs .....	8

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS  
BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN  
ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS***

To the Governing Board of  
South Coast Air Quality Management District  
Diamond Bar, California

We have audited in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, the blended component unit, each major fund, and the aggregate remaining fund information of the South Coast Air Quality Management District (South Coast AQMD) as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise South Coast AQMD's basic financials statements, and have issued our report thereon dated October 11, 2019.

**Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered South Coast AQMD's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of South Coast AQMD's internal control. Accordingly, we do not express an opinion on the effectiveness of South Coast AQMD's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

## **Compliance and Other Matters**

As part of obtaining reasonable assurance about whether South Coast AQMD's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

## **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering South Coast AQMD's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

*BCA Watson Rice, LLP*

Torrance, California

October 11, 2019

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR  
FEDERAL PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE;  
AND REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
REQUIRED BY THE UNIFORM GUIDANCE**

To the Governing Board of  
South Coast Air Quality Management District  
Diamond Bar, California

**Report on Compliance for Each Major Federal Program**

We have audited the South Coast Air Quality Management District's (South Coast AQMD) compliance with the types of compliance requirements described in the U.S. *Office of Management and Budget (OMB) Compliance Supplement* that could have a direct and material effect on each of South Coast AQMD's major federal programs for the year ended June 30, 2019. South Coast AQMD's major federal programs are identified in the summary of auditor's results section of the accompanying Schedule of Findings and Questioned Costs.

***Management's Responsibility***

Management is responsible for compliance with the federal statutes, regulations, and the terms and conditions of its federal award applicable to its federal programs.

***Auditor's Responsibility***

Our responsibility is to express an opinion on compliance for each of South Coast AQMD's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about South Coast AQMD's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination on South Coast AQMD's compliance.

### ***Opinion on Each Major Federal Program***

In our opinion, South Coast AQMD's complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2019.

### **Report on Internal Control over Compliance**

Management of South Coast AQMD is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered South Coast AQMD's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program as a basis for designing auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of South Coast AQMD's internal control over compliance.

*A deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

### **Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance**

We have audited the financial statements of the governmental activities, the blended component unit, each major fund, the aggregate remaining fund information of South Coast AQMD as of and for the year ended June 30, 2019, and the related notes to the financial statements, which collectively comprise South Coast AQMD's basic financial statements. We issued our report thereon dated October 11, 2019, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial

statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditure of Federal Awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

*BCA Watson Rice, LLP*

Torrance, CA  
October 11, 2019



**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS  
For the Year Ended June 30, 2019**

Federal Grantor / Pass-Through Grantor / Program Title	CFDA Number	Grant Number	Total Expenditures
<u>U.S. Environmental Protection Agency</u>			
<i>Air Pollution Control Program Support:</i>			
EPA Section 105 Air Grant	66.001*	A00909416-3	\$ 543,280
EPA Section 105 Air Grant	66.001*	A00909418-5	4,748,792
			<u>5,292,072</u>
<i>Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act:</i>			
PM 2.5 Monitoring	66.034	PM-00T86701-9	797,199
PM 2.5 Monitoring Pass-through from CAPCOA	66.034	PM2.5 from CAPCOA	17,239
National Air Toxics Trend Stations	66.034	XA-99T27601-4	226,208
Near Road Monitoring	66.034	XA-00T82301-5	25,804
Community Scale Air Toxics Monitoring	66.034	XA-99T33501-1	101,777
			<u>1,168,227</u>
<i>National Clean Diesel Emissions Reduction Program:</i>			
DERA-School Bus Replacement Project (FY 13)	66.039	DE-99T07001-5	52,000
DERA-Replace HDDTs-Interstate (FY 17)	66.039	DE-99T69701-0	122,224
DERA-Drayage Truck Replacement (FY 18)	66.039	DE-99T82401-0	9,898
			<u>184,122</u>
<i>Congressionally Mandated Projects:</i>			
Targeted Air Shed - Lawn/Garden Equipment Exchange	66.202*	EM-99T48301-0	350,522
Targeted Air Shed - Yard Tractor Replacement	66.202*	EM-99T48501-0	8,642
Targeted Air Shed - School Bus Replacement	66.202*	EM-99T71401-0	2,346,037
Targeted Air Shed - Shuttle Bus Replacement	66.202*	EM-99T71501-0	8,233
			<u>2,713,434</u>
<i>Science To Achieve Results (STAR) Research Program:</i>			
STAR Engage, Educate, and Empower	66.509	RD-83618401-3	109,083
Total U.S. Environmental Protection Agency			<u>9,466,938</u>
<u>U.S. Department of Energy</u>			
<i>Conservation Research and Development:</i>			
Zero Emission Cargo Transport Demo	81.086	DE-EE0005961-8	105,466
San Pedro Bay Ports FCEV and HEV Demo	81.086	DE-EE0006874-6	314,301
Passed through Newport Partners			
Devel Test Standard-Indoor AQ Sensors	81.086	N/A	40,318
Total Department of Energy			<u>460,085</u>
<u>U.S. Department of Homeland Security</u>			
<i>Homeland Security Biowatch Program:</i>			
Biowatch Program	97.091	06OHBIO00011-13-01	<u>1,521,933</u>
<u>National Aeronautics and Space Administration</u>			
Passed through RTI International			
<i>Science:</i>			
2016 Citizen Science for Earth Systems Prog II	43.001	1-340-0216485-65403L	<u>139,157</u>
Total Federal Expenditures			<u>\$ 11,588,113</u>

\* Major Programs

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**NOTES TO SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS**  
**For the Year Ended June 30, 2019**

**NOTE 1 – BASIS OF PRESENTATION**

The accompanying schedule of expenditures of federal awards (the Schedule) includes the federal award activity of the South Coast Air Quality Management District (South Coast AQMD) under programs of the federal government for the year ended June 30, 2019. The information in this Schedule is presented in accordance with the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of South Coast AQMD, it is not intended to and does not present the financial position, changes in net position or cash flows of the South Coast AQMD.

**NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

Expenditures reported in the Schedule are reported on the modified accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in *OMB Circular A-87, Cost Principles for State, Local, and Indian Tribal Governments*, or the cost principles contained in the *Uniform Guidance*, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

**NOTE 3– INDIRECT COST RATE**

The South Coast AQMD has elected not to use the 10% de minimis indirect cost rate allowed under the Uniform Guidance.

**NOTE 4– RELATIONSHIP TO COMPREHENSIVE ANNUAL FINANCIAL REPORT**

Amounts reported in the accompanying Schedule agree to amounts reported within the South Coast AQMD's Comprehensive Annual Financial Report.

**NOTE 5– CONTINGENCIES**

Under the terms of federal and state grants, additional audits may be requested by the grantor agencies and certain costs may be questioned as not being appropriate expenditures under the terms of the grants. Such audits could lead to a request for reimbursement to the grantor agencies.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
SCHEDULE OF FINDINGS AND QUESTIONED COSTS  
For the Year Ended June 30, 2019**

**SECTION I – SUMMARY OF AUDITOR’S RESULTS**

**A - Financial Statements**

- |   |               |
|---|---------------|
| 1) Type of auditor’s report issued:   | Unmodified    |
| 2) Internal control over financial reporting:                                       |               |
| a) Material weakness(es) identified?  | No            |
| b) Significant deficiency(ies) identified not considered to be material weaknesses? | None reported |
| 3) Noncompliance material to financial statements noted?                            | No            |

**B - Federal Awards**

- |   |               |
|---|---------------|
| 1) Type of auditor’s report issued on compliance for major programs:                                  | Unmodified    |
| 2) Internal control over major programs:  |               |
| a) Material weakness(es) identified?  | No            |
| b) Significant deficiency(ies) identified not considered material weakness(es)?                       | None reported |
| 3) Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)? | No            |

4) Identification of major programs:

<u>CFDA No.</u>	<u>Name of Federal Program</u>
66.001	Air Pollution Control Program Support
66.202	Congressionally Mandated Projects

- |   |           |
|---|-----------|
| 5) Dollar threshold used to distinguish between Type A and Type B programs: | \$750,000 |
| 6) Auditee qualified as low-risk auditee?                                   | Yes       |

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**SCHEDULE OF FINDINGS AND QUESTIONED COSTS**  
**For the Year Ended June 30, 2019**

**SECTION II – FINANCIAL STATEMENT FINDINGS**

None reported.

**SECTION III – FEDERAL AWARD FINDINGS AND QUESTIONED COSTS**

None reported.

**SECTION IV – STATUS OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS**

None reported.

BOARD MEETING DATE: December 6, 2019

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 South Coast AQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects.

COMMITTEE: Administrative, November 18, 2019, Reviewed

RECOMMENDED ACTION:  
Receive and file.

Wayne Natri  
Executive Officer

RMM:MAH:XC:agg

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### **Background**

Information Management (IM) provides a wide range of information systems and services in support of all South Coast AQMD 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 and Board-approved amendments to the Budget specify 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**  
**December 6, 2019 Board Meeting**  
**Information Management Status Report on Major Ongoing and**  
**Upcoming Projects During the Next Six Months**

<b>Project</b>	<b>Brief Description</b>	<b>Estimated Project Cost</b>	<b>Completed Actions</b>	<b>Upcoming Milestones</b>
Office 365 Implementation	Acquire and implement Office 365 for South Coast AQMD staff	\$350,000	<ul style="list-style-type: none"> <li>• Pre-assessment evaluation and planning completed</li> <li>• Board approved funding on October 5, 2018</li> <li>• Developed implementation and migration plan</li> <li>• Acquired Office 365 licenses</li> <li>• Implemented Office 365 email (Exchange) and migrated all users</li> <li>• Trained staff in Office 365 Pro Plus desktop software</li> <li>• Implemented Office 365 Suite including file storage (OneDrive for Business) and migrated users</li> </ul>	<ul style="list-style-type: none"> <li>• Implement Office 365 internal website (SharePoint) and migrate existing content</li> </ul>
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, Gas Stations and Automotive Spray Booths	\$694,705	<ul style="list-style-type: none"> <li>• Automated 400A form filing, application processing, and online permit generation for Dry Cleaner, Automotive Spray Booth and Gas Station Modules deployed to production</li> <li>• Enhanced processing of school locations with associated parcels</li> <li>• Deployed upgraded GIS Map integration and enhanced sensitive receptor identification and distance measurement work</li> </ul>	<ul style="list-style-type: none"> <li>• Continue Phase 1.1 project outreach support</li> </ul>

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Permitting System Automation Phase 2	Enhanced Web application to automate filing process of Permit Applications, Rule 222 equipment, and registration process for IC engines; implement electronic permit folder and workflow for internal South Coast AQMD users	\$525,000	<ul style="list-style-type: none"> <li>• Board approved initial Phase 2 funding December 2017</li> <li>• Phase 2 project startup and detail planning completed May 2018</li> <li>• Business process model approved</li> <li>• Board approved remaining Phase 2 funding October 5, 2018</li> <li>• Application submittals and form filing for 23 types of equipment under Rule 222</li> <li>• Deployment of all 23 Rule 222 equipment forms to stage for user testing completed</li> <li>• User demo and acceptance testing of all equipment forms completed</li> <li>• Forms modified based on user comments</li> <li>• Permitting Automation Workflow/Engineer shadowing/interviewing completed</li> <li>• Workflow analysis report completed</li> <li>• Report outlining recommendations for automation of Permitting Workflow completed</li> </ul>	<ul style="list-style-type: none"> <li>• Development of application submittals and form filing of two (2) of the remaining twenty six (26) 400-E forms</li> </ul>

<b>Project</b>	<b>Brief Description</b>	<b>Estimated Project Cost</b>	<b>Completed Actions</b>	<b>Upcoming Milestones</b>
Information Technology Review Implementation	Complete Board requested Information Technology review and initiate work on implementation of key recommendations	\$75,000 (funding included in \$350,000 Office 365 implementation project)	<ul style="list-style-type: none"> <li>• Initiated Implementation Planning and Resource Requirements for key recommendations</li> <li>• Completed Microsoft Project Plan training for all IM Managers, Supervisors and Secretaries</li> <li>• Established internal Information Technology Steering Committee, members and charter</li> <li>• Configured and deployed Project Management software for IM team</li> </ul>	<ul style="list-style-type: none"> <li>• Office 365 deployment</li> </ul>
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	\$100,000	<ul style="list-style-type: none"> <li>• Board approved funding December 2017</li> <li>• Project startup and detail planning completed</li> <li>• Development of Release 1 and application search module completed</li> <li>• User Acceptance Testing for data capture and user reports modules completed</li> <li>• Internal deployment of application for engineers to populate application related data completed</li> <li>• Enhancements requested by user completed</li> </ul>	<ul style="list-style-type: none"> <li>• Continue user data input for all open applications</li> <li>• Deployment of external application (and linked to FIND) for regulated community to view application related data</li> </ul>



Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Document Conversion Services	Document Conversion Services to convert paper documents stored at South Coast AQMD facilities to electronic storage in OnBase	\$83,000	<ul style="list-style-type: none"> <li>• Release RFQ October 5, 2018</li> <li>• Approved qualified vendors January 4, 2019</li> <li>• Executed purchase orders for scanning services</li> <li>• Converted over 1,207,505 rule administrative record documents</li> </ul>	<ul style="list-style-type: none"> <li>• Convert over 2,000,000 contract documents</li> </ul>
Replace Your Ride (RZR)	New Web application to allow residents to apply for incentives to purchase newer, less polluting vehicles	\$301,820	<ul style="list-style-type: none"> <li>• Phase 2 Fund Allocation, Administration and Management Reporting modules deployed and in production</li> <li>• Final Phase 2 user requested enhancements: VIN Number, Case Manager, Auto e-mail and document library updates deployed to production</li> <li>• Phase 3 Data Migration development work completed</li> <li>• Data migration approved</li> <li>• Phase 3 moved to production</li> </ul>	<ul style="list-style-type: none"> <li>• Implementation of RZR and PeopleSoft Financial integration module</li> <li>• Implementation of Electric Vehicle Service Equipment</li> <li>• Move latest requested modification and upgrades to production</li> </ul>
South Coast AQMD Mobile Application Enhancements	Enhancement of Mobile application with addition of advance notification, alternative fuel station search, media integration, infrastructure for hourly migration, and performance improvements	\$100,000	<ul style="list-style-type: none"> <li>• Project charter released</li> <li>• Task order issued, evaluated and awarded</li> <li>• Code development of Phase 1, alternative fuel, media integration, and performance improvements completed</li> <li>• User Acceptance Testing of Phase 1 completed</li> </ul>	<ul style="list-style-type: none"> <li>• Beta Release</li> <li>• Deployment of Phase 1</li> <li>• System development in progress for Phase 2</li> </ul>

<b>Project</b>	<b>Brief Description</b>	<b>Estimated Project Cost</b>	<b>Completed Actions</b>	<b>Upcoming Milestones</b>
Legal Division New System Development	Develop new web-based case management system for Legal Division to replace existing system	\$500,000	<ul style="list-style-type: none"> <li>• Task order issued, evaluated and awarded</li> <li>• Project charter finalized</li> <li>• Business Process Model completed</li> <li>• Sprint 1, 2 and 3 functional and system design completed</li> <li>• Testing of Sprints 1–3: NOVs, MSPAP, settlements, civil and small claims completed</li> <li>• Sprint 4 functional and design requirements: criminal, bankruptcy, non-NOV cases and check registers completed</li> </ul>	<ul style="list-style-type: none"> <li>• Test Sprint 4 modules and retest updates to Sprints 1, 2, and 3 modules</li> <li>• Sprint 5 development: investigative and legal assignments, OnBase and finance integration.</li> <li>• Sprint 6 development: reports and data migration</li> </ul>
Flare Event Notification – Rule 1118	Develop new web-based application to comply with Rule 1118 to improve current flare notifications to the public and staff	\$100,000	<ul style="list-style-type: none"> <li>• Project charter released</li> <li>• Task order issued, evaluated and awarded</li> <li>• Requirement gathering and design for Sprint 1, 2, and 3 completed</li> <li>• Sprint 4, Public Portal implementation completed</li> <li>• Major incident notification deployed</li> <li>• Refinery user training completed</li> </ul>	<ul style="list-style-type: none"> <li>• Application Demo to EC</li> <li>• Deployment to production</li> </ul>
VW Environmental Mitigation Action Plan Project	Develop a web application for Zero-Emission Class 8 Freight and Port Drayage Truck Project & Combustion Freight and Marine Project, and incentive programs, and maintain a database that will be queried for reporting for CARB	\$355,000	<ul style="list-style-type: none"> <li>• Project charter document released</li> <li>• Task order issued, evaluated and awarded</li> <li>• Requirement gathering and design for Phase 1 application acceptance completed</li> <li>• System development for Phase 1 completed</li> </ul>	<ul style="list-style-type: none"> <li>• Phase 1 system beta testing</li> <li>• Form creation for Class 8</li> <li>• Completion of User Acceptance Testing</li> <li>• System deployment to production</li> </ul>

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
AQ-SPEC Cloud Platform	Develop a cloud-based platform to manage and visualize data collected by low-cost sensors	\$385,500	<ul style="list-style-type: none"> <li>• Project charter released</li> <li>• Task order issued, evaluated and awarded</li> <li>• Business requirements gathering completed</li> <li>• System Architecture, Data Storage, and Design Data Ingestion completed</li> <li>• Data Transformations, Calculations, and Averaging completed</li> <li>• Dashboards, Microsites, Data Migration completed</li> <li>• Release 2 User Acceptance Testing completed</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment to Production</li> </ul>
PeopleSoft Electronic Requisition	South Coast AQMD is implementing electronic requisition for PeopleSoft Financials. This will allow submittal of requisitions online, tracking multiple levels of approval, electronic archival, pre-encumbrance of budget, and streamlined workflow	\$75,800	<ul style="list-style-type: none"> <li>• Project charter released</li> <li>• Task order issued, evaluated and awarded</li> <li>• Requirement Gathering and System Design completed</li> <li>• System Setup and Code Development and user testing for Information Management completed</li> <li>• System Setup and Code Development and user acceptance testing completed for AHR (Admin and Human Resources) completed</li> </ul>	<ul style="list-style-type: none"> <li>• Deployment to IM and AHR divisions</li> <li>• Integrated User Testing for other divisions</li> </ul>

<b>Project</b>	<b>Brief Description</b>	<b>Estimated Project Cost</b>	<b>Completed Actions</b>	<b>Upcoming Milestones</b>
Data Cable Infrastructure Installation	Vendor to install a full, turnkey data cable infrastructure system with the latest technical specifications that can provide connectivity and a broader network bandwidth	\$273,125	<ul style="list-style-type: none"> <li>Released RFP July 12, 2019</li> <li>Board approved funding on October 4, 2019</li> <li>Executed contract</li> </ul>	<ul style="list-style-type: none"> <li>Complete implementation February 28, 2020</li> </ul>
Prequalify Vendor List for PCs, Network Hardware, etc.	Establish list of prequalified vendors to provide customer, network, and printer hardware and software, and to purchase desktop computer hardware upgrades	\$300,000	<ul style="list-style-type: none"> <li>Released RFQQ November 1, 2019</li> </ul>	<ul style="list-style-type: none"> <li>Approve Vendors List February 7, 2020</li> </ul>
Annual Emission Reporting (AER) enhancement	Annual Emission Reporting (AER) program was developed to track emissions of air contaminants from permitted facilities. Substantial enhancements are required to meet the requirements for Rule 301 and AB617	\$275,800	<ul style="list-style-type: none"> <li>Project charter released</li> <li>Task order issued, evaluated and awarded</li> <li>Business requirements gathering completed</li> <li>System Architecture, System Design completed</li> <li>Development of Phase 1 completed</li> </ul>	<ul style="list-style-type: none"> <li>System Integration testing and User Acceptance Testing</li> <li>Deployment of Phase 1 before January 1, 2020 reporting period</li> </ul>

<b>Project</b>	<b>Brief Description</b>	<b>Estimated Project Cost</b>	<b>Completed Actions</b>	<b>Upcoming Milestones</b>
Rule 1403 Enhancements	The Rule 1403 web application automates the Rule 1403 notification process. Enhancements to the system are now required to streamline the process and to meet the new rule requirements	\$68,575	<ul style="list-style-type: none"> <li>• Project charter released</li> <li>• Task order issued, evaluated and awarded</li> <li>• Business requirements gathering completed</li> <li>• Development of Phase 1 completed</li> </ul>	<ul style="list-style-type: none"> <li>• Development of Phase 2</li> <li>• System Integration testing and User Acceptance Testing</li> </ul>

Projects that have been completed within the last 12 months are shown below.

### Completed Projects

Project	Date Completed
CLASS Database Software Licensing and Support	November 30, 2019
Ingres Database Migration to Version 11	August 23, 2019
Renewal of OnBase Software Support	July 15, 2019
Telecommunications Service	July 15, 2019
AB 617 – Community Monitoring Data Display Web Application	July 9, 2019
Online filing of Rule 1415 – Reduction of Refrigerant Emissions System	June 5, 2019
South Coast AQMD Mobile Application for Android devices	May 30, 2019
Renewal of HP Server Maintenance & Support	April 30, 2019
Implementation of Enterprise Geographic Information System (EGIS) Phase II	March 11, 2019
FIND (Facility Information Detail) upgrade	February 21, 2019
South Coast AQMD Mobile Application for IOS devices Phase I	November 2, 2018

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 18

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a meeting on Friday, November 8, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Dr. William A. Burke, Chair  
Administrative Committee

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### **Committee Members**

Present: Dr. William A. Burke/Chair (videoconference)  
Council Member Ben Benoit/Vice Chair (videoconference)  
Mayor Judith Mitchell  
Council Member Michael Cacciotti (videoconference)

Absent: None

### **Call to Order**

Chair Burke 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 Mitchell will attend the monthly CARB Board meeting as South Coast AQMD's representative in Sacramento on November 20-21, 2019. She will also attend the AB 617 Programs/CARB Board meeting in Oakland on December 4-5, 2019. Mayor Mitchell verbally noted that she will attend the monthly CARB Board meeting in Sacramento on December 11-13, 2019. Council Member Joe Buscaino will attend the National League of Cities, Energy, Environment & Natural Resources Committee in San Antonio, Texas on November 20-23, 2019.

3. **Report of Approved Out-of-Country Travel:** Mr. Wayne Nastri, Executive Officer, reported that a Fuel Cell Conference will potentially be held in February 2020 and will be brought back to committee when details are available.
4. **Review December 6, 2019 Governing Board Agenda:** Mr. Nastri reported that at the November Board meeting, there was a request to place Rule 1111 on the December agenda to address concerns, and that request has been accommodated. Council Member Benoit asked if Supervisor Rutherford was aware of this. Mr. Nastri responded that he met with Supervisor Rutherford and contractors in San Bernardino. At the end of the meeting, the contractors had a much better understanding of the requirements and the rule process. Supervisor Rutherford committed to noticing a teleconference location in San Bernardino for the next Stationary Source Committee meeting so that contractors can attend the meeting at that location and comment on the working groups taking place between now and then.
5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** None to report.
6. **Annual Audited Financial Statements for FY Ended June 30, 2019:** Sujata Jain, Chief Financial Officer/Deputy Executive Officer Finance, reported that this item transmits the annual audited financial statements with an unmodified opinion (the highest opinion) on its financial statements. Helen Chu, auditor/BCA Watson Rice, provided an update on the financial statements and single audit results. There were no material weaknesses or significant deficiencies.
7. **South Coast AQMD's FY 2019-20 First Quarter ended September 30, 2019 Budget vs. Actual (Unaudited):** Ms. Jain provided an overview of the budget vs. actual for the first quarter, ended on September 30, 2019, revenues, expenditures and the updated General Fund five-year projection.
8. **Status Report on Major Ongoing and Upcoming Projects for Information Management:** Ron Moskowitz, Chief Information Officer/Deputy Executive Officer Information Management, reported that due to the wildfires users of the South Coast AQMD mobile application has increased from 10,000 to over 15,000. All staff will be trained on Office 365 the next few weeks. Phase I of the VW mitigation website project is being finalized and it is anticipated to go live on December 6. Dr. Burke commented that it would advantageous to use mass mailings to get the message out on fires and other air quality. That could increase downloads of the mobile app. Dr. Burke inquired about the large database. Mr. Moskowitz responded that the current database will need to be updated, since it is a few years old. Mayor Mitchell asked about the VW website and what the website entails. Mr. Moskowitz responded that the first phase will

allow people to apply for funding and the second phase will involve an internal analysis. Mr. Naveen Berry, Assistant Deputy Executive Officer/Science & Technology Advancement, responded that the program announcement will be released for the first installment of funds available. Mayor Mitchell asked if settlement monies were involved and the amount. Mr. Berry responded that South Coast AQMD gets \$150 million in total. Mr. Nastri reported that South Coast AQMD administers the program on behalf of CARB and the program is administered statewide.

**ACTION ITEM:**

- 9. Transfer Funds for Enhanced Particulate Monitoring Program:** Dr. Jason Low, Assistant Deputy Executive Officer/Science & Technology Advancement reported that this item is to transfer \$300,000 from the Science & Technology Advancement budget in the Salaries category to the Services & Supplies category for the enhanced particulate monitoring program.

Moved by Cacciotti; seconded by Mitchell, unanimously approved.

Ayes: Benoit, Burke, Cacciotti, Mitchell  
Noes: None  
Absent: None

**OTHER MATTERS:**

- 10. Other Business:**

Mr. Nastri commented that Agenda Item #5 was not discussed and noted that there was no Board Consultant compensation.

- 11. Public Comment:**

None to report.

- 12. Next Meeting Date**

The next regular Administrative Committee meeting is scheduled for December 13, 2019 at 10:00 a.m.

**Adjournment**

The meeting adjourned at 10:26 a.m.



BOARD MEETING DATE: December 6, 2019

AGENDA NO. 19

REPORT: Investment Oversight Committee

SYNOPSIS: The Investment Oversight Committee held a meeting on Friday, November 15, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Michael A. Cacciotti, Chair  
Investment Oversight Committee

SJ:tm

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### **Committee Members**

Present: Council Member Michael Cacciotti, Chair (teleconference)  
Senator Vanessa Delgado (Retired) (teleconference)  
Richard Dixon  
Patrick Pearce

Absent: Dr. William A. Burke, Vice Chair  
Brent Mason

### **Call to Order**

Chair Cacciotti called the meeting to order at 12:07 p.m.

### **DISCUSSION ITEMS:**

1. *Quarterly Report of Investments:* The Committee reviewed the quarterly investment report that was provided to the Board. For the month of September 2019, the South Coast AQMD's weighted average yield on total investments of \$878,907,155 from all sources was 2.08%. The allocation by investment type was 89.31% in the Los Angeles County Pooled Surplus Investment Fund (PSI) and 10.69% in the State of California Local Agency Investment Fund (LAIF) and Special Purpose Investments (SPI). The one-year Treasury Bill rate as of September 30, 2019 was 1.75%.

2. Cash Flow Forecast: Sujata Jain, Chief Financial Officer/Deputy Executive Officer, reported on the cash flows for the current year and the projections for the next three years. South Coast AQMD Investment Policy limits its Special Purpose Investments to 75% of the minimum amount of funds available for investment during the Cash Flow Horizon. That limit, which includes all funds (General, MSRC, Clean Fuels), is \$134.6 million. Current Special Purpose Investments are well below the maximum limit. Staff works with Los Angeles County Treasurer for investments that will give additional interest yield.
3. Financial Market Update: Mr. Richard Babbe from PFM Asset Management provided information on current investment markets, economic conditions, and the overall economic outlook. He presented market information that shows an inverted yield curve. The biggest threat to the economy was trade war with China. Economic indicators showed jobs growth and GDP had slowed down and earnings have plateaued. Inflation is still below the federal 2% target. Although unemployment continues to be low at 3.5%, the labor market has slowed down. Even though consumer confidence was high, it was decreasing due to anticipated slow-down of the economy in the future. Even if there is no imminent threat of the recession, the economy seems to be slowing down.

**ACTION ITEM:**

4. Calendar Year 2020 Committee Meeting Dates: For calendar year 2020, quarterly Investment Oversight Committee meeting dates are as follows: Friday, February 21; Friday, May 15; Friday, August 21; and Friday, November 20.

Moved by Dixon; seconded by Pearce; unanimously approved.

Meeting adjourned at 12:47 p.m.

**OTHER MATTERS:**

**5. Other Business**

There was no other business.

**6. Public Comment Period**

There were no public comments.

**7. Next Meeting Date**

The next regular meeting of the Investment Oversight Committee is scheduled for February 21, 2020 at noon.

[↑ Back to Agenda](#)

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 20

REPORT: Legislative Committee

SYNOPSIS: The Legislative Committee held a meeting on Friday, November 8, 2019. The following is a summary of the meeting.

Agenda Item	Recommendation/Action
2020 Legislative Goals and Objectives	APPROVE

RECOMMENDED ACTION:  
Receive and file.

Judith Mitchell, Chair  
Legislative Committee

DJA:LTO:PFC:sg

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**Committee Members**

Present: Mayor Judith Mitchell/Chair  
Dr. William A. Burke (videoconference)  
Senator Vanessa Delgado (Ret.) (videoconference)  
Supervisor Janice Rutherford (videoconference)

Absent: Council Member Joe Buscaino/Vice Chair  
Supervisor V. Manuel Perez

**Call to Order**

Chair Mitchell called the meeting to order at 9:00 a.m.

**DISCUSSION ITEMS:**

**1. Update on Federal Legislative Issues**

South Coast AQMD's federal legislative consultants (Kadesh & Associates, Carmen Group, and Cassidy & Associates) each provided a written report on various key Washington, D.C. issues.

Mr. Mark Kadesh, of Kadesh & Associates reported that Representative Anna Eshoo introduced, H.R. 4924, the “Smoke Planning and Research Act” to help address public health effects related to wildfires. He reported that Representative Eshoo is the senior Democratic member of the House Energy and Commerce Committee and Chair of the Subcommittee on Health. Mr. Kadesh stated that South Coast AQMD lent support to Representative Eshoo’s legislative efforts resulting in 24 co-sponsors for the bill. Additionally, Mr. Kadesh added that the bill includes \$50 million for a grant program to assist entities like local air pollution control districts to plan and respond to wildfire smoke, including mitigation.

Mr. Kadesh also advised that it is unlikely that Congress will complete action on the Fiscal Year 2020 Appropriations bills by the end of the Continuing Resolution set to expire on November 21, 2019. He stated that Congress will likely extend the Continuing Resolution to right before the Christmas holiday as a deadline to complete action on the pending bills which include funding for the Diesel Emission Reductions Act, Targeted Airshed Grants and Section 103/105 for air quality.

Mr. Dal Harper of Carmen Group reported that there were no substantive updates from the written report.

Ms. Amelia Jenkins of Cassidy & Associates introduced Ms. Angela Ebner—a new member of their team—who will be assisting with South Coast AQMD issues. Ms. Jenkins reported that she would defer to the written report in the interest of time.

## **2. Update on State Legislative Issues**

South Coast AQMD’s state legislative consultants (Joe A. Gonsalves & Son, Quintana Watts and Hartmann, and California Advisors, LLC) provided written reports on various key issues in Sacramento.

Mr. Paul Gonsalves of Joe A. Gonsalves & Son reported that there were no substantive updates to his written report.

Mr. David Quintana of Quintana Watts and Hartmann reported that there were no substantive updates to his written report.

Mr. Ross Buckley of California Advisors, LLC informed the Committee that on November 1 Senator Jeff Stone of Riverside County resigned from the California Senate to take a federal appointment.

## **3. Recommend 2020 Legislative Goals and Objectives**

Mr. Philip Crabbe, Public Affairs Manager, presented on the proposed state legislative goals and objectives for 2020. Mr. Crabbe reported to the Committee that the proposed State Legislative Goals include the following:

- Seeking new and increasing existing funding sources for clean air programs and priorities that protect public health and ensure attainment of state and federal air quality standards, with a focus on incentive programs that support the 2016 AQMP. Mr. Crabbe stated that the South Coast AQMD's legislative priority in 2020, SB 732 (Allen), which is moving forward in January, is very much in line with this goal;
- Protecting South Coast AQMD authority to implement clean air policies and programs;
- Working to ensure that the state government does its fair share to reduce air pollution by providing legislative, funding, and regulatory support to the South Coast AQMD to facilitate implementation of the 2016 AQMP and attainment of federal air quality standards;
- Supporting legislation and funding to promote environmental justice initiatives that: reduce localized health risks from criteria pollutant and toxic air emissions, and expand access to clean air technology to disadvantaged communities. This includes securing the necessary resources to implement the South Coast AQMD's responsibilities created by AB 617;
- Supporting policies and funding that promote the development and deployment of zero and near-zero emission infrastructure, equipment, and vehicles;
- Supporting efforts directing that the Greenhouse Gas Reduction Fund provide a sustainable funding source to maximize criteria pollutant and toxic emission reduction co-benefits;
- Supporting energy efficiency, demand reduction, and reliable, cost effective and clean energy for the South Coast region; and
- Supporting legislation, policies and administrative actions that encourage job retention and creation, and promote economic growth, while working toward attainment of clean air standards.

Ms. Lisa Tanaka O'Malley, Senior Public Affairs Manager, presented on the proposed federal legislative goals and objectives for 2020. Ms. Tanaka O'Malley reported to the Committee that the proposed Federal Legislative Goals for 2020 are largely the same as those in 2019 and focus on:

- Attainment of federal clean air standards;
- Federal fair share in reducing sources of air pollution;
- Clean Trucks Initiative;
- Corporate Average Fuel Economy (café) Standards;
- Protecting the California Waiver;
- Climate Change Initiatives; and
- Potential Transportation and Infrastructure legislation.

**Staff recommended a position of APPROVE on this item.**

Moved by Burke; seconded by Delgado; unanimously approved

Ayes: Burke, Delgado, Mitchell, Rutherford

Noes: None

Abstain: None

Absent: Buscaino, Perez

**4. Update on Legislation Regarding Voting District Authorization for Clean Air**

Staff provided an update regarding South Coast AQMD-sponsored legislation, SB 732 (Allen), relating to the authorization of a voting district within the South Coast region to allow for potential ballot funding measures within the District.

Mr. Derrick Alatorre, Deputy Executive Officer/LPAM, reported that since the October Legislative Committee meeting, staff has continued to conduct outreach and education regarding SB 732 both in Sacramento and locally. Staff met with various stakeholders, including labor interests and various associations.

Based on input received and in order to increase legislative support for SB 732, staff has begun to pursue coauthors for the bill. As part of this effort, staff met with Assembly Member Wendy Carillo's office, Senator Maria Elena Durazo's office and with Assembly Member Eduardo Garcia. Additional meetings with state legislators and/or their staff are planned, including Senator Connie Leyva's office. South Coast AQMD staff will also continue to conduct outreach and provide education to stakeholders regarding SB 732.

Senator Delgado expressed her willingness to help with this legislation.

**5. Preliminary Spending Scenario for Potential South Coast Regional Funding Measure**

Ms. Sarah Rees, Assistant Deputy Executive Officer of Planning, Rule Development & Area Sources provided an overview regarding a preliminary spending scenario for any potential future funds generated from a sales tax measure within the South Coast region that could occur if SB 732 was passed into law, and a measure was placed on the ballot and ultimately adopted by voters.

Mr. Wayne Nastri, Executive Officer, informed the Committee that the legislative amendment language for SB 732 regarding an Oversight Committee was previously submitted to the Legislative Counsel in Sacramento, along with other proposed amendments, however it was not included in the bill at the end of session. Staff will be working to have this language included in the bill by the beginning of the new legislative session in January, or introduce a new bill if necessary, to ensure inclusion of this amendment.

Dr. Burke asked for clarification as to how ships and aircraft emissions would become a larger part of the emission inventory in future years, since the South Coast AQMD does not have authority over that. Ms. Rees responded that because SB 732 would generate incentive funding, no regulatory authority would be involved.

Dr. Burke asked who would administer any future funds received by the South Coast AQMD if SB 732 and a funding ballot measure are successful. Mr. Nastri responded that the South Coast AQMD would administer the new funds most likely through existing grant programs, primarily through the Science & Technology Advancement Office under Deputy Executive Officer, Dr. Matt Miyasato and his staff. Mr. Nastri added that there would also be efforts to work with cities and other organizations to assist in administering and deploying the funds more quickly, with the appropriate oversight mechanisms. Dr. Burke's support is contingent on ensuring efficient and responsible disbursement of funds. Mr. Nastri stated that staff would work on this issue to fully address the concerns expressed.

Senator Delgado asked how the money will be spent, and if that information is disseminated to stakeholders in order to get support at the local level. Mr. Alatorre responded that the spending scenario information would be shared with stakeholders that staff has previously met with, and with those that staff meets with in the future. Mr. Nastri commented that as part of the AQMP process, constant outreach and meetings with stakeholders are conducted that include discussion of these funding issues. Dr. Philip Fine, Deputy Executive Officer/ Planning, Rule Development & Area Sources, stated that the existing preliminary funding scenario analysis is based on the 2016 AQMP. As part of the upcoming 2022 AQMP, the funding analysis will be redone, and this will be vetted through the AQMP Advisory Group and any other stakeholders that are interested in being a part of that process. Dr. Fine stated that there are nearly 60 stakeholders that are part of the recently appointed AQMP Advisory Group, and they include representatives from all sectors, including environmental, business, and labor groups, as well as local government officials.

Senator Delgado suggested that business groups will be supportive of SB 732 if they fully understood that the alternative to this incentive funding approach is direct regulation. She asked if staff is planning to reach out to business interests on this topic. Mr. Alatorre responded in the affirmative.

Mayor Mitchell asked whether financial incentives will also be available for stationary sources. Dr. Fine responded that financial incentives for stationary sources were included within the 2016 AQMP and will likely be targeted towards the residential and commercial building sector. These are considered cost effective and will be included in the future AQMP; however, funding for stationary sources will be less than incentive funding for mobile sources.

Mayor Mitchell asked how SB 732 impacts the indirect source rule (ISR) efforts. Dr. Fine explained that both incentives and regulations are available tools, and that incentives can motivate the use of clean vehicles and equipment.

Mayor Mitchell mentioned CARB's future regulations to control emissions from trucks and public transit. She asked how this interrelates with SB 732 related incentive funding and how to ensure that this incentive money is disbursed before the CARB requirements take effect. Dr. Fine clarified that CARB's current regulations are not enough to allow the South Coast region to attain federal air quality standards so financial incentives need to be disbursed as soon as possible.

Denny Zane, Executive Director of Move LA, expressed support for this effort and for financial incentives for clean vehicles. He was pleased with the spending scenario because of its large scale of proposed incentive funding. He does not believe that the South Coast region can get to clean air in any other way. Mr. Zane encouraged an addition to the spending scenario to clarify that greenhouse gas emissions will also be substantially reduced.

Mr. Alatorre mentioned that five out of six local sales tax ballot measures were successfully passed by voters in the most recent election.

### **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 Legislative Committee meeting is scheduled for Friday, December 13, 2019 at 9:00 a.m.

### **Adjournment**

The meeting adjourned at 9:43 a.m.

### **Attachments**

1. Attendance Record
2. Update on Federal Legislative Issues – Written Reports
3. Update on State Legislative Issues – Written Reports
4. Draft 2020 Legislative Goals and Objectives
5. Preliminary Spending Scenario for Potential South Coast Regional Funding Measure



# ATTACHMENT 1

## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT LEGISLATIVE COMMITTEE MEETING ATTENDANCE RECORD – November 8, 2019**

Dr. William A. Burke (videoconference).....	South Coast AQMD Board Member
Senator Vanessa Delgado (Ret.) (videoconference) .....	South Coast AQMD Board Member
Mayor Judith Mitchell (videoconference).....	South Coast AQMD Board Member
Supervisor Janice Rutherford (videoconference).....	South Coast AQMD Board Member
Guillermo Gonzalez .....	Board Consultant (Perez)
Thomas Gross .....	Board Consultant (Benoit)
Marisa Perez.....	Board Consultant (Mitchell)
Andrew Silva .....	Board Consultant (Rutherford)
Mark Kadesh (teleconference) .....	Kadesh & Associates
Dal Harper (teleconference).....	Carmen Group, Inc.
Amelia Jenkins (teleconference).....	Cassidy & Associates
Paul Gonsalves (teleconference).....	Joe A. Gonsalves & Son
David Quintana (teleconference) .....	Quintana, Watts and Hartmann
Ross Buckley (teleconference).....	California Advisors, LLC
Todd Campbell.....	Clean Energy
Jessica Alvarenga.....	Pacific Merchant Shipping Association
Rita Loof .....	RadTech
David Rothbart.....	Los Angeles County Sanitation District
Denny Zane .....	Move LA
Derrick Alatorre .....	South Coast AQMD Staff
Barbara Baird.....	South Coast AQMD Staff
Naveen Berry .....	South Coast AQMD Staff
Philip Crabbe .....	South Coast AQMD Staff
Amir Dejbakhsh.....	South Coast AQMD Staff
Philip Fine.....	South Coast AQMD Staff
Denise Peralta Gailey.....	South Coast AQMD Staff
Stacy Garcia .....	South Coast AQMD Staff
Bayron Gilchrist.....	South Coast AQMD Staff
Sujata Jain .....	South Coast AQMD Staff
Megan Lorenz .....	South Coast AQMD Staff
Ian MacMillan.....	South Coast AQMD Staff
Matt Miyasato .....	South Coast AQMD Staff
Wayne Nastri .....	South Coast AQMD Staff
Robert Paud.....	South Coast AQMD Staff
Sarah Rees.....	South Coast AQMD Staff
Lisa Tanaka O'Malley .....	South Coast AQMD Staff
Mary Reichert .....	South Coast AQMD Staff
Jeanette Short.....	South Coast AQMD Staff
Danielle Soto.....	South Coast AQMD Staff
Todd Warden .....	South Coast AQMD Staff
Kim White.....	South Coast AQMD Staff
William Wong.....	South Coast AQMD Staff
Jill Whynot.....	South Coast AQMD Staff
Paul Wright .....	South Coast AQMD Staff

# **ATTACHMENT 2**

## **South Coast AQMD Report for the November 2019 Legislative Meeting Covering October 2019**

### **Kadesh & Associates**

#### ***October:***

October featured a two-week recess at the beginning of the month during which South Coast AQMD and others responded to the EPA's late September announcements threatening regulatory actions and the withholding of transportation funds for California. Kadesh & Associates helped plan and execute Congressional meetings for Executive Officer Nastri in conjunction with his participation in the NACAA conference in late October. We also coordinated the timely dissemination of articles, Congressional letters and agency responses among South Coast AQMD's Congressional audience.

#### ***Budget and Appropriations:***

Bicameral spending talks for Fiscal Year (FY) 2020 have started slowly, but senators are working to move closer to a deal by passing their own batch of small appropriations bills. Senate Appropriations Chairman Richard Shelby (R-Ala.) said he would like to start talks in earnest with House Appropriations Chairwoman Nita Lowey (D-N.Y.) on top-line allocations for all 12 spending bills shortly after the Senate passes its four-bill package of smaller, noncontroversial bills (H.R. 3055). Lowey has said Senate Republicans have been slow to discuss a bicameral set of allocations, even as the Nov. 21 deadline to fund the government approaches. Senator Shelby is focused on getting the Senate to pass its first appropriations package for fiscal 2020, covering Agriculture-Food and Drug Administration, Commerce-Justice-Science, Interior-Environment and Transportation-Housing and Urban Development spending. The committee advanced all four bills by a 31-0 vote. The Senate voted on October 22 to limit debate on the motion to proceed to the spending package by a 92-2 vote, with Senators Marsha Blackburn (R-Tenn.) and Rand Paul (R-Ky.) opposing.

Even when passed by the Senate, it's likely headed nowhere in the House, at least not until the two chambers agree to an allocation agreement for all the spending bills. Chair Lowey said she doesn't expect to take up the spending package or work toward a conference package negotiated by House and Senate lawmakers until there's been an agreement on the spending bill levels, called 302(b) numbers.

The next Senate appropriations package to the floor will include the Defense and Labor-Health and Human Services (HHS)-Education bills. The Defense and Labor-HHS-Education bills combined make up nearly two-thirds of federal discretionary spending. Senate Democrats have said there needs to be a 302(b) agreement before they'll allow a vote on the Defense measure.

FY19 ended on September 30. The federal deficit was \$984 billion, the highest figure since FY12, according to a Congressional Budget Office. The deficit was 4.7% of GDP, compared to 3.9% in fiscal 2018.

**DERA and Targeted Airshed Grants** (previously reported): The current FY19 levels are \$87M for DERA and \$52M for TAG. The House Appropriations Committee in its FY20 Interior Appropriations bill initially funded DERA at only \$50M and \$30M for the Targeted Airshed Grant (TAG) program.

Through an effort led by southern California House Appropriations Members, \$5M was added to DERA for a total of \$55M. The Senate Appropriations has marked their bill to \$85.166M for DERA and \$56.306M for TAG.

Contacts included staff with California's Senators and the 23 House Members whose districts fall all or in part within South Coast AQMD's area of responsibility as well as staff of the House and Senate Appropriations Committees. Offices worked with in particular in the wake of EPA's actions included Representatives Levin and Rouda and Senator Feinstein.

###



**Carmen Group**  
I N C O R P O R A T E D

## MEMORANDUM

**To:** South Coast AQMD Legislative Committee

**From:** Carmen Group

**Date:** October 24, 2019

**Re:** Federal Update -- Executive Branch

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**Leadership Change at Energy Department:** Secretary of Energy Rick Perry announced in October that he would be voluntarily leaving the Administration later this year, and President Trump quickly announced that he would nominate Deputy Energy Secretary Dan Brouillette to take over Secretary – a change that appears to signal continuity in the Administration’s overall approach to important national energy issues. Before joining the Department in 2017, Brouillette served as Senior Vice President and head of public policy for USAA, and prior to that as Vice President of Ford Motor Company. He previously served as Chief of Staff at the House Committee on Energy and Commerce and as Assistant Secretary of Energy for Congressional and Intergovernmental Affairs from 2001 to 2003. He is also a former state energy regulator, having served as a member of the Louisiana State Mineral and Energy Board from 2013 to 2016.

**EPA Head Wheeler Comments on Pending Car and Truck Emissions Rules:** EPA Administrator Andrew Wheeler -- speaking to reporters after a speech at the Detroit Economic Club in October -- made brief comments of interest on the pending rulemakings on automobile fuel economy standards and on the Cleaner Trucks Initiative. On CAFÉ, Wheeler said that work is continuing on the final rule and – in repetition and further emphasis on what he has said before -- he indicated that the final rule will not look “exactly like” the proposed rule issued in August 2018 which froze standards at 2020 levels through 2026. He said that “in some of the out years, we’re actually more restrictive on CO2 emissions than the Obama proposal was,” arguing that the Trump rule will eliminate “off ramps” and “loopholes” that make it easier for automakers to comply without achieving the same environmental benefit. Wheeler said he is hopeful that some of the most ardent critics of the 2018 proposed rule will have a different more positive view when they said the new final rule. On the separate ultra-low NOx rule for heavy trucks, Wheeler confirmed the agency’s plan is to move forward to put out a proposed rule to set new standards sometime next year.

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**DC Circuit Court Rejects EPA Rule on Cross-State Air Pollution:** The DC Circuit Court of Appeals struck down an EPA rule that would have closed out the obligations of 20 states to reduce smog under the Cross-State Air Pollution Rule (CSAPR). The court said the rule failed to require reductions in pollutants by a 2021 deadline as required in law. The EPA has indicated it may appeal the decision.

**International “Clean Air Fund” is Announced at UN Climate Summit:** A new philanthropic initiative called “The Clean Air Fund” was announced at the recent United Nations Climate Change Summit held in New York City in September. The Fund will work with organizations globally that seek to combat air pollution, improve human health, and accelerate decarbonization through offering grants and support. So far, the fund has received \$50 million (with a goal to raise \$100 million) from such groups as the IKEA Foundation, the Children’s Investment Fund Foundation, The Bernard van Leer foundation, the Oak Foundation, Guy’s and St. Thomas’ Charity, and the FIA Foundation.

**EPA’s Revamped Advisory Committee Debates Need for New Clean Air Standard:** EPA’s seven-member Clean Air Scientific Advisory Committee (CASAC)—all of whose members were appointed during the Trump Administration—are meeting in late October to address the science underlying EPA’s review of the particulate matter standard. At issue is whether the science justifies keeping the current standard or issuing a new stricter standard for PM 2.5. EPA’s internal review supports a new stricter standard and this is backed up by the findings of a group of experts (calling themselves the Independent Particulate Matter Review Panel) who were earlier dismissed from the CASAC panel by EPA Administrator Andrew Wheeler. But the new seven-member CASAC appears to have at least some members in sharp disagreement with the need for a new standard. How the full CASAC group comes down on the matter will be an important marker in possible future legal disputes over this important clean air regulatory issue.

**EPA Reviews Trump Executive Orders on Regulatory “Guidance”:** The EPA quickly announced that it would move forward with plans to implement a pair of presidential executive orders issued in October mandating that federal agencies scale back on the use regulatory guidance memos for enforcement purposes. EPA Administrator Wheeler said in an internal memo that the agency would establish two internal working groups to “think critically” about how the orders should be implemented. One of the orders mandates that agencies post all guidance documents on a searchable website, otherwise the guidance will be considered withdrawn. The other order mandates that businesses or individuals found to be in noncompliance with regulatory guidance would be given “an opportunity to be heard” before they are penalized.

###

# CASSIDY&ASSOCIATES

733 Tenth Street, N.W., Suite 400  
Washington, DC 20001-4886

(202) 347-0773  
www.cassidy.com

To: South Coast Air Quality Management District  
From: Cassidy & Associates  
Date: October 24, 2019  
Re: Federal Update

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## Look Ahead

There are 23 legislative days remaining in 2019. Under the short-term continuing resolution signed into law on Sept. 27, funding runs through November 21<sup>st</sup>. The House passed 10 of its 12 funding bills by August recess, and the Senate will hold floor votes on smaller, non-controversial appropriations packages three weeks into fiscal year (FY) 2020. The first package will likely include domestic funding in the Agriculture and Transportation-Housing and Urban Development bills, and the second will include Defense spending and opioid funding. Bicameral appropriators continue to negotiate to topline numbers for the FY 20 spending bills, though senior appropriators expect that another short, stopgap funding measure will be needed to keep the government open past Nov. 21.

The Trump Administration will continue to face bipartisan opposition regarding its decision to withdraw troops from Syrian Kurdish territory and potential House and Senate votes on sanctions against Turkey for its incursion into Syria. Next week the House will consider several public lands bills, including H.R. 823, the Colorado Outdoor Recreation and Economy Act; H.R. 2181, the Chaco Cultural Heritage Area Protection Act; and H.R. 1373, the Grand Canyon Centennial Protection Act.

We anticipate the House filling the floor schedule with the last of individual committee bills that need approval prior to the year end, including health extenders legislation and prescription drug/surprise billing legislation, as well as longer term items including Intel Authorization, the National Defense Authorization Act, and the U.S.-Mexico-Canada Agreement (USMCA). The House impeachment inquiry continues pick up steam after comments by Administration officials such as acting chief of staff Mick Mulvaney, and depositions by former officials.

Next Friday, November 1, the House leaves for a week-long recess, and the Senate is in session.

## Summary of Congressional Activities in October

Domestically, impeachment dominated the beginning of the October session following whistleblower reports related to foreign aid to Ukraine. Several foreign policy issues gained attention as well, including the U.S. withdrawal from Syria and ongoing protests in Hong Kong. Last week on the Floor, 354 Members voted to oppose the President's decision Syria. House Democrats continued to highlight the impacts of climate change through a series of committee hearings that were somewhat overshadowed by impeachment news.

Senate Democrats forced a vote on Oct. 17 using a legal procedure known as the Congressional Review Act, which allows Congress to reverse and review final rules within 60 days, in an attempt to reverse the EPA's Affordable Clean Energy (ACE) rule, a weak replacement for the Clean Power Plant rule. The vote failed 41-53, with Susan Collins the only R to join the Democrats.

### **House Committee Actions in October**

The **House Energy and Commerce Committee Subcommittee on Environment and Climate Change** held its fourth hearing yesterday as part of its series to develop legislation to achieve 100 percent clean economy by 2050. The Subcommittee discussed decarbonizing non light-duty vehicle (LDVs) in a hearing on Wed. October 23 including medium- and heavy-duty trucks, buses, ships, aircraft, and rail. Witnesses testified from Neste, Cummins Inc., Earthjustice, Port of Seattle and the Northwest Seaport Alliance, Truck & Engine Manufacturers Association, and the National Association of Truckstop Operators.

The **House Natural Resources Subcommittee on Energy and Mineral Resources** held a hearing entitled "The Case for Climate Optimism: Realistic Pathways to Achieving Net-Zero Emissions." California Air Resources Board Member Hector De La Torre, testified and outlined California's efforts to cut emissions and transition to a clean energy economy through programs such as Renewable Portfolio Standards, Low Carbon Fuel Standards, the Cap-and-Trade Program, and Advanced Clean Cars. Testimony available here:

<https://naturalresources.house.gov/imo/media/doc/Testimony%20-%20Hector%20De%20La%20Torre%20-%20EMR%20Ov%20Hrg%2010.17.19.pdf>

The **House Select Committee on the Climate Crisis** held two hearings in October related to resilience. The first examined how improving resilience in residential and commercial buildings is key to reducing carbon pollution and the second focused on how natural systems such as forests, grasslands and wetlands, and can increase carbon storage.

**House Oversight Environment Subcommittee** will hold a hearing on Oct. 29 titled, "[Trump's Wrong Turn on Clean Cars: The Effects of Fuel Efficiency Rollbacks on the Climate, Car Companies and California](#)".

### **Introduced Legislation**

The following bills related to climate/climate change/environment:

#### [H.R.4657](#)

To require the Federal Energy Regulatory Commission to consider greenhouse gas emissions related to natural gas pipelines, and for other purposes.

Rep. McGovern

Introduced 10/11/2019

Referred to House Energy & Commerce Committee

#### [H. R. 4656](#)

To direct the Administrator of the Environmental Protection Agency to seek to enter an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a study on the science of

background ozone in the United States and to provide research recommendations to better understand background ozone contributions to ground-level ozone, and for other purposes.

Reps. McAdams & Rooney

Introduced 10/11/2019

Referred to House Committee on Science, Space, and Technology

### **Senate Committee Actions in October**

Senators Chris Coons (D-DE) and Mike Braun (R-IN) officially launched the **Senate Climate Solutions Caucus** to convene experts and discuss ideas “such as developing economic incentives to reduce emissions, promoting the role of agriculture as a climate solution, and ensuring that any energy transition protects American energy consumers while supporting energy security and workforce development.”

**Senate Environment and Public Works Committee Subcommittee on Clean Air and Nuclear Safety** held a subcommittee hearing entitled, “Reducing Emissions While Driving Economic Growth: Industry-led Initiatives” with witnesses testifying to the economic risks of curbing emissions and the impacts to groups such as National Cattlemen’s Beef Association and Chamber of Commerce.

**Senate Energy and Natural Resources Committee** held a hearing to examine “Energy Efficiency Efforts in the United States and Internationally.” Witnesses included Environmental and Energy Study Institute, World Resources Institute, International Energy Agency, and Executive Director, Center for Energy Efficiency & Sustainability Ingersoll Rand.

Senator Murkowski has signaled her hope that a package of energy bills could be assembled for consideration on the Senate floor early next year, potentially in January. Senate Majority McConnell has not taken a firm position on this possibility to date, but this action from Murkowski follows up on activity in the Senate Energy and Natural Resources Committee in September when it favorably reported more than twenty energy bills to the Senate floor. Should the Senate consider an energy bill on the floor, it would provide another opportunity to advance reauthorization of the Diesel Emissions Reduction Act via amendment on the Senate floor.

In December, the Senate Energy and Natural Resources Committee will also need to prioritize the nomination of Dan Brouillette to replace Rick Perry as Secretary of Energy. Unless something widely unexpected happens, Brouillette is expected to be confirmed by the Senate as the next Secretary of Energy. Perry’s last day as Secretary of Energy will be on December 1.



## **Summary of Congressional Outreach**

- ❖ Weekly calls with SCAQMD staff.
- ❖ Monitoring Congressional hearings related to non-LDV decarbonization technologies.
- ❖ Monitoring Clean Trucks Initiative and ongoing Heavy-Duty NOx rulemaking.
- ❖ Meeting with Energy and Commerce Committee staff.

# ATTACHMENT 3



## **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 916 441-5061

Email: gonsalves@gonsalvi.com

**TO:** South Coast Air Quality Management District

**FROM:** Anthony, Jason & Paul Gonsalves

**SUBJECT:** Legislative Update – 2019

**DATE:** Friday, October 25, 2019

---

As you know, the Legislature had until September 13, 2019 to pass all remaining Legislation to Governor Newsom for his consideration. The Governor had until October 13, 2019 to act on all remaining legislation.

We will continue to monitor the Governor's actions on Legislation, and any other state interest to the District, and keep you apprised as they progress.

## **HOW OFTEN DO GOVERNOR'S SAY NO?:**

Each year, the Senate Office of Research releases a document titled; "How often do Governor's Say No". This document provides a historical comparison of actions taken by California Governor's since 1971. The following are some highlights of that report:

- In 1979 and 1980, the Legislature overrode the governor's veto of two bills and eight items in the budget bill. Before these overrides, the governor's veto had been overridden on only two occasions since 1973. The Legislature has not overridden a governor's veto since 1980.
- This year, his first year in office, Governor Newsom vetoed 16.51% of bills, a similar rate to Governor Brown's in his last year in office.
- In 1982, Governor Brown vetoed just 30 of the 1,674 bills he considered, setting the record for the lowest number of vetoes and the lowest veto rate (1.8%).
- Governor Pat Brown considered 9,383 bills during his two terms in office (1959–66). He vetoed (including "pocket vetoes") 671 bills, or about 7.2%.
- The 5 years with the highest number of chaptered bills were all with Republican governors (1971, 1984, 1967, 1990, 1988). Four of the five years with the highest

number of vetoed bills (1990, 2008, 1988, 2000, 1998) were with Republican governors (the exception was Governor Davis in 2000).

- Governor Deukmejian holds the record for the most bills vetoed in a year, 436 (1990); Governor Schwarzenegger is next with 414 vetoes (2008).
- Governor Schwarzenegger vetoed more than a quarter (26.4%) of the 7,461 bills that he considered over his seven years in office. He signed the lowest average number of bills per year (784 per year over seven years).
- Of the last five past governors, three vetoed the most bills of their tenures, both by percentage and absolute number, in their final year in office (Brown in 2018, Wilson in 1998, and Deukmejian in 1990).

## **CARB'S CLEAN TRANSPORTATION INVESTMENT**

On October 24, 2019, the California Air Resources Board (CARB) approved a \$533 million plan to fund clean car rebates, zero-emission transit and school buses, clean trucks, and other innovative, clean transportation and mobility pilot projects.

The Funding Plan for Clean Transportation Incentives, largely funded with cap-and-trade proceeds, is part of California's comprehensive strategy for improving air quality and reducing greenhouse gas emissions in the transportation sector. Of the \$533 million total, \$485 million comes from the cap-and-trade program. The remaining \$48 million comes from the Air Quality Improvement Program (AQIP). CARB uses this funding to accelerate development and early commercial deployment of the cleanest vehicle technologies and to improve access to clean transportation for all Californians.

The plan serves as a blueprint for expending funds appropriated to CARB in budget bills passed this year by the Legislature and signed by the Governor, including \$485 million from cap-and-trade auction proceeds. The plan establishes priorities for the funding, describes the projects CARB intends to fund, and sets funding targets for each project.

Investments made in previous years' Funding Plans have been successful. As a result, two programs, the statewide Clean Vehicle Rebate (CVRP) and Hybrid and Zero-Emission Truck and Bus Voucher Incentive Projects (HVIP), have been oversubscribed. The plan includes changes to each to ensure these popular programs more effectively address the need to accelerate the cleanup and transformation of California's vehicle fleet. Changes to CVRP include a maximum base MSRP of \$60,000 for vehicle eligibility. The Board also took further action to limit plug-in hybrid electric vehicle eligibility to only those vehicles that achieve a minimum 35-mile electric range, as determined by CARB. The plan also graduates hybrid vehicles and 8.9-liter natural gas low-NO<sub>x</sub> engines out of HVIP.

The plan continues to prioritize environmental justice by addressing specific community needs and increasing awareness of, and access to, cleaner transportation and mobility options in disadvantaged and low-income communities. The plan also continues investments in heavy-duty zero-emission demonstration and pilot projects in the freight sector.

Highlights of the Plan include:

- **\$238 million** for the Clean Vehicle Rebate Project (CVRP), with a stipulation that \$25 million be used to fund increased rebates for low-income consumers. CVRP promotes clean-vehicle adoption by offering rebates for the purchase or lease of new, eligible zero-emission vehicles, including electric, plug-in hybrid electric and fuel cell vehicles.
- **\$182 million** for clean trucks, buses and off-road freight equipment, including \$142 million for the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) and \$40 million for advanced technology demonstration and pilot projects in the heavy-duty sector.
- **\$65 million** for Clean Transportation Equity Projects to continue efforts to increase access to clean transportation and mobility options benefitting low-income communities and households. These include funding for existing projects such as Clean Cars 4 All, which provides incentives for lower-income drivers to scrap and replace older, high-polluting cars with zero- or near-zero-emission cars, and school bus replacements. Two new projects to increase outreach and support communities in their planning efforts also will receive funding.
- **\$48 million** in Air Quality Improvement Program funding to clean up heavy-duty truck emissions. Demand is expected to rise as a result of a new law that will only allow trucks that are compliant with California's Truck and Bus Regulation to be registered by the Department of Motor Vehicles.

## **LEGISLATION**

The following will provide you with a status update on the bills our firm is taking the lead on for the SCAQMD:

- AB 142 (C. Garcia) Lead-Acid Batteries – Chaptered by the Governor on October 13, 2019.
- AB 1714 (Aguilar-Curry) Emissions limitations: wine fermentation – 2-year bill, Senate Environmental Quality Committee.
- SB 210 (Leyva) Heavy Duty Vehicle Inspection and Maintenance Program – Chaptered by the Governor on September 20, 2019
- SB 44 (Skinner) Medium and Heavy-Duty Vehicles: Comprehensive Strategy – Chaptered by the Governor on September 20, 2019
- SB 633 (Stern) Santa Susana Field Laboratory: Monitoring Program – 2-year bill, Assembly Floor

## **LEGISLATIVE CALENDAR**

- Sept. 13 Last day for any bill to be passed. Interim Recess begins upon adjournment
- October 13, 2019 Last day for Governor to take action on all legislation presented to him.
- January 6, 2020 Legislature Reconvenes.





October 30, 2019

**To:** South Coast Air Quality Management District  
**From:** Quintana, Watts & Hartmann  
**RE:** October 2019 Report

### General Update:

The Legislature is Adjourned

### Legislative Update:

Set up and attended (Oct 22) meetings with South Coast AQMD executive staff and the following entities to discuss SB 732 (Allen): CalFire, Truck and Engine Manufacturers Assn, International Longshore & Warehouse Union and Cal Truckers Assn

Set up meeting with South Coast AQMD Executive Officer and others from the executive staff with Asm Eduardo Garcia, Chairman of Water, Parks and Wildlife Committee in his district office in Coachella. Meeting will be to discuss the clean air and water bond that Chairman Garcia is authoring



SCAQMD Report  
California Advisors, LLC  
November 8, 2019 Legislative Committee Hearing

## **General Update**

On Sunday, October 13th, Governor Gavin Newsom acted on the remaining measures passed by the Legislature. In total, the Governor considered 1,042 bills out of 2,625 total bills introduced (Senate – 792 bills; Assembly – 1,833 bills). In his first year in office, Newsom vetoed 16.51% of bills that made it to his desk, a similar rate to former Governor Jerry Brown’s during his time in office. More specifically, Newsom signed 870 bills and vetoed 172.

In summary, 39.7 percent of the bills introduced made it to the Governor’s Desk, which is about average when compared to the past few years. As a result, 33 percent (45 percent in 2018) of the bills introduced got signed into law, while 6.5 percent (9 percent in 2018) of the bills introduced got vetoed.

To compare Newsom’s action this year to Governors in previous years, below are the veto rates dating back to 2004, as follows:

- Between 2011 and 2018, Governor Jerry Brown vetoed between 10.71 percent and 16.52 percent of the bills
- Between 2004 and 2010, Governor Arnold Schwarzenegger vetoed between 22.20 percent and 35.17 percent of the bills

Finally, November 5<sup>th</sup> marks the special election date to fill the vacant Assembly District 1 seat. The two candidates on the ballot are Elizabeth Betancourt (D) and Megan Dahle (R). The seat became vacant when Brian Dahle (R) was elected to the Senate in a special election earlier this year.

## **Elected Officials Contacted on Behalf of SCAQMD:**

California Advisors met with the following legislators or their offices on behalf of South Coast Air Quality Management District:

Senate:  
Ben Allen (SB 732)

## **2019 Legislative Update**

Voting District Authorization for Clean Air Legislation

SB 732 (Allen) was pulled from Senate Appropriations Committee at the request of the author on May 13<sup>th</sup>.

AB 142 (Garcia, C) would increase the amount of the manufacturer battery fee from \$1 to \$2 and would provide that the fee would continue indefinitely. *This bill was signed by the Governor.*

AB 285 (Friedman) would require the Department of Transportation to address in the California Transportation Plan how the state will achieve maximum feasible emissions reductions in order to attain a statewide reduction of greenhouse gas emission of 40% below 1990 levels by the end of 2030 and attain the air quality goals required by the federal Clean Air Act. *This bill was signed by the Governor.*

AB 836 (Wicks) would establish the Wildfire Smoke Clean Air Centers for Vulnerable Populations Incentive Pilot Program, to be administered by the State Air Resources Board to provide funding through a grant program to retrofit ventilation systems to create a network of clean air centers. *This bill was signed by the Governor.*

AB 1500 (Carrillo) would authorize a unified program agency to suspend, revoke, or withhold issuance of a unified program facility permit if conditions exist at the unified program facility that the unified program agency considers an imminent or substantial threat to public health, safety, or the environment. The bill would require the permittee to immediately discontinue operating that facility or function of the facility to which the permit or permit element applies until the threat is abated and the permit or permit element is issued, reinstated or reissued. *This bill was held in the Senate Appropriations Committee.*

SB 1 (Atkins) would require specified agencies to take prescribed actions regarding certain federal requirements and standards pertaining to air, water, and protected species. *This bill was vetoed by the Governor.*

SB 44 (Skinner) would require the Air Resources Board to update the state board's 2016 mobile source strategy to include a comprehensive strategy for the deployment of medium- and heavy-duty vehicles in the state for the purpose of bringing the state into compliance with federal ambient air quality standards and reducing motor vehicle greenhouse gas emissions. *This bill was signed by the Governor.*

SB 210 (Leyva) would authorize the state board to develop and implement a Heavy-Duty Vehicle Inspection and Maintenance Program for nongasoline heavy-duty onroad motor vehicles. *This bill was signed by the Governor.*





# South Coast Air Quality Management District

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(909) 396-2000 • www.aqmd.gov

## ATTACHMENT 4

# DRAFT

### **South Coast AQMD's State Legislative Goals & Objectives for 2020**

*The following goals and objectives are identified to protect public health and facilitate attainment of state and federal clean air standards within the South Coast region by statutory deadlines, while working with and serving as a resource to state legislators and the Governor; federal, state, and local agencies; business, environmental and community groups; and other stakeholders:*

#### ***Air Quality Funding***

Increase existing and identify new funding sources for clean air programs and priorities that protect public health, eliminate unhealthy air pollution and ensure attainment of state and federal air quality standards, with a focus on incentive programs and research and development projects that support the 2016 Air Quality Management Plan (AQMP) and create opportunities to partner with stakeholders, including local businesses, communities and residents.

#### ***South Coast AQMD Authority / Policy Implementation***

Protect and ensure adequate South Coast AQMD authority for implementation of the Board's clean air policies and programs, including those required by state and federal law and the 2016 AQMP.

#### ***State Support***

Work to ensure that the state government does its fair share to reduce air pollution within the South Coast region by providing ample funding and legislative and administrative support to the South Coast AQMD to facilitate implementation of the 2016 AQMP and attainment of federal ozone and particulate matter ambient air quality standards by upcoming federal deadlines.

#### ***Environmental Justice***

Support and promote legislative policies and funding that: 1) promote and sustain environmental justice initiatives which reduce localized health risks resulting from criteria pollutant and toxic air contaminant emissions; 2) develop and expand access to clean air technology, especially in disproportionately impacted communities; 3) enhance community participation in decision-making; and 4) provide the resources necessary to fully implement local air districts' responsibilities and programs created through Assembly Bill 617 (C. Garcia, Chapter 136, Statutes of 2017).

#### ***Development and Deployment of Clean Technology***

Support legislative policies and funding that promote the development and deployment of near-zero and zero emission infrastructure, equipment and vehicle technology to protect public health, facilitate attainment of clean air standards and support a healthy economy.

## SCAQMD's State Legislative Goals & Objectives for 2020

### ***Climate Change***

Seek to influence climate change policies and initiatives and facilitate their implementation consistent with Board policy. In particular, support efforts directing that the Greenhouse Gas Reduction Fund provide a sustainable funding source to maximize criteria and toxic emission reduction co-benefits, promote near- zero and zero-emission vehicles, and address air quality and public health impacts in the South Coast region.

### ***Clean Energy***

Support legislative efforts that advance the Board's Energy Policy which promotes energy efficiency, demand reduction and reliable, cost effective and clean energy for all consumers in the District while facilitating attainment of clean air standards and providing support for a healthy economy.

### ***Business/Jobs Climate***

Support legislative policies and/or administrative actions that promote job retention and creation as well as economic growth, while working toward attainment of clean air standards; and that support and assist the regulated community in complying with rules and regulations in the most efficient and cost-effective manner.

### ***Surface Transportation & Goods Movement***

Support and expand policy and funding considerations that promote air quality priorities in connection with the implementation of state and federal surface transportation and goods movement policies and programs, including those related to the FAST Act or successor transportation and infrastructure law.



# South Coast Air Quality Management District

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# DRAFT

## South Coast AQMD's Federal Legislative Goals & Objectives for 2020

*The following goals and objectives are identified to enable South Coast AQMD to seek rules, legislative policies, and funding levels from the federal government that will assist the South Coast Air Basin in meeting the National Ambient Air Quality Standards (NAAQS) to protect public health through practical and innovative strategies. It is critical that SCAQMD work with and serve as a resource to the Administration and agencies, Congress, business, environmental, health, community and other stakeholders.*

### ***Air Quality Funding (Authorization of Program and Policies and Appropriations of Funds)***

Seek adequate funding levels for air quality issues through existing and potential new opportunities to enable the South Coast Air Basin to reach attainment of NAAQS. Support key programs such as, but not limited to, the Diesel Emissions Reduction Act, Targeted Airshed Grants, Subvention Funds from Clean Air Act Section 103/105, Energy Efficiency & Renewable Energy grants, and other programs.

### ***Clean Air Act, National Ambient Air Quality Standards (NAAQS) and SIP***

Support policies, legislation and/or administrative efforts to:

- Protect science-driven and health-based determinations of national ambient air quality standards, and efforts to streamline and provide flexible implementation of SIP requirements, as needed, to ensure feasibility of attainment; and,
- Providing regulatory authority adequate for nonattainment areas to attain NAAQS for upcoming federal deadlines, and in particular, the South Coast AQMD to implement the 2016 Air Quality Management Plan (AQMP) and attain federal ozone and particulate matter standards.

### ***Climate Change***

Seek to influence climate change initiatives and facilitate their implementation at local levels, including funding, to promote co-benefits with NAAQS and air toxics reduction, consistent with the Board's policy.

### ***Surface Transportation & Goods Movement***

Pursue the adoption of legislation and/or policies which will reduce or eliminate air quality impacts from mobile sources with an emphasis on the goods movement sector (for both medium-duty and heavy duty vehicles), as well as off-road vehicles (such as agricultural vehicles, cargo handling equipment, freight handling equipment, and construction equipment).

### ***Marine Vessels***

Pursue legislative and/or administrative policies that will further reduce marine vessel emissions and will ensure, through regulatory and/or incentive-based policies that the cleanest vessels come to U.S. ports.

## SCAQMD's Federal Legislative Goals & Objectives for 2020

### ***Locomotives***

Pursue efforts to reduce locomotive emissions, through regulatory and/or incentive-based policies.

### ***Reduction of Toxic Emissions***

Pursue efforts through legislative and administrative programs, to reduce toxic emissions, and the public's exposure to toxic emissions, within the South Coast region.

### ***Environmental Justice***

Support legislation which promotes environmental justice initiatives that will reduce localized health risks, develop clean air technologies that directly benefit disproportionately impacted communities, and enhance community participation in decision-making.

### ***Technology Advancement***

Expand funding opportunities, policies and federal tax incentives for advanced clean technology research, development, demonstration and deployment programs, including those related to:

- Zero and near-zero emission technologies;
- Clean vehicles (such as light-, medium- and heavy-duty vehicles, locomotives, marine vessels, and aircraft technologies);
- Clean fuels and refueling/recharging technologies and infrastructure;
- Clean energy sources;
- Technologies, systems and/or processes which reduce ambient concentrations of air pollutants and/or toxic air emissions;
- Establishing programs or policies that incentivize the federal government to purchase and use advanced clean technologies; and,
- Incentivizing individuals, businesses, states, and local governments to purchase and use advanced clean technologies.

### ***Business/Jobs***

Support legislation, policies or administrative actions that support and assist the regulated community to comply with rules and regulations in the most efficient and cost-effective manner that protects and encourages job retention and creation, and promotes economic growth, while working toward attainment of clean air standards.

### ***New Source Review Offsets***

Modernize federal New Source Review offset requirements for areas where the supply of offsets is inadequate, while furthering the pursuit of clean air objectives.

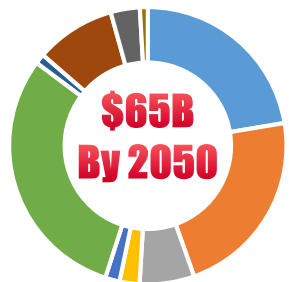
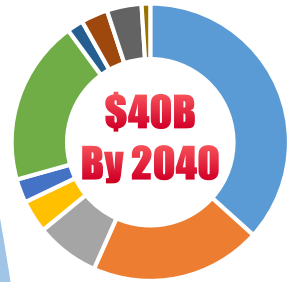
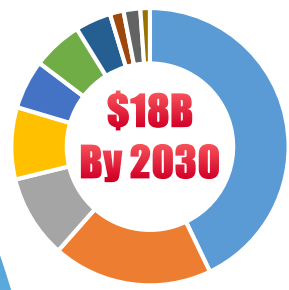
## **ATTACHMENT 5**

Earlier this year, while staff was providing background information regarding proposed Senate Bill 732 (Allen), several stakeholders requested additional information about how any funds raised through a sales tax might be spent. Staff then developed the following handout that demonstrated one potential spending scenario. This spending scenario is based on the potential revenue from a ½ cent sales tax in South Coast AQMD and is consistent with priorities established in the 2016 AQMP. The draft spending scenario presented in this handout was conducted in the spring of 2019, and reflects only one potential approach. Some of the analysis has been updated in the slides for this committee meeting, and further refinements are expected with additional stakeholder feedback.



# History of Success

# DRAFT SPENDING SCENARIO



**80%**  
*Zero Emissions Funding*

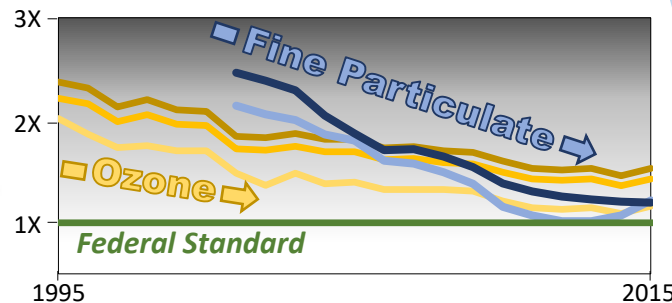
- Trucks
- Off-Road Equipment
- Transit Buses & Passenger Rail
- School Buses
- Port Cargo Handling Equipment
- Locomotives
- Cars & Pickups
- Ships & Aircraft
- ZE Infrastructure
- AB 2766+

**Annual Benefits**  
3,000 Premature Deaths Avoided  
\$31B in Public Health Benefits

**Attain Federal Standards by 2031**

Particulates **↓ 51%**

Ozone **↓ 40%**



# Smog-Free Future



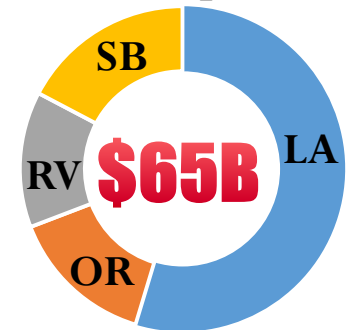


# South Coast AQMD

## Annual Health Benefits of Meeting 2031 Federal Air Quality Standard

- \$31.0 billion in monetized public health benefit
- 3,000 avoided premature deaths

## Share of Spending



## Draft Spending Scenario – South Coast AQMD (\$ millions)

Category	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	Total
Trucks	\$3,296	\$4,397	\$4,652	\$2,175	\$0	\$0	<b>\$14,520</b>
Off-Road Equipment	\$2,010	\$1,333	\$1,575	\$2,994	\$3,700	\$2,800	<b>\$14,411</b>
Transit Buses & Passenger Rail	\$859	\$875	\$597	\$597	\$597	\$597	<b>\$4,122</b>
School Buses	\$1,200	\$308	\$0	\$0	\$0	\$0	<b>\$1,508</b>
Port Cargo Handling Equipment	\$456	\$569	\$70	\$0	\$0	\$0	<b>\$1,095</b>
Locomotives	\$100	\$950	\$2,225	\$4,350	\$5,000	\$7,000	<b>\$19,625</b>
Cars & Pickups	\$375	\$375	\$0	\$0	\$0	\$0	<b>\$750</b>
Ships & Aircraft	\$35	\$250	\$645	\$310	\$2,303	\$2,510	<b>\$6,053</b>
ZE Infrastructure	\$100	\$250	\$500	\$750	\$500	\$100	<b>\$2,200</b>
Local Cities/Counties	\$100	\$100	\$100	\$100	\$100	\$100	<b>\$600</b>
<b>Total</b>	<b>\$8,531</b>	<b>\$9,406</b>	<b>\$10,364</b>	<b>\$11,276</b>	<b>\$12,200</b>	<b>\$13,107</b>	<b>\$64,884</b>

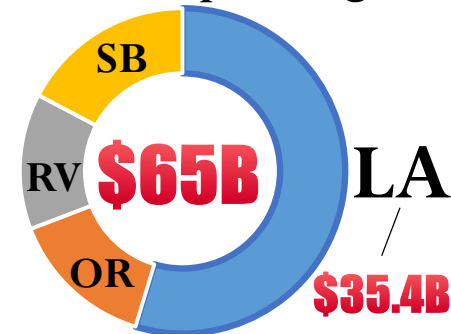


# Los Angeles County

## Annual Health Benefits of Meeting 2031 Federal Air Quality Standard

- \$21.5 billion in monetized public health benefit
- 2,100 avoided premature deaths

## Share of Spending



## Draft Spending Scenario – Los Angeles County (\$ millions)

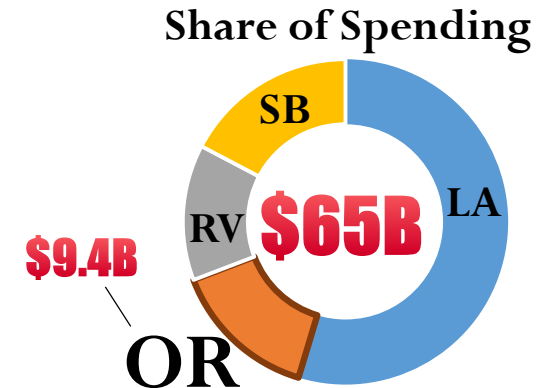
Category	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	Total
Trucks	\$1,712	\$2,301	\$2,418	\$1,161	\$0	\$0	<b>\$7,592</b>
Off-Road Equipment	\$1,036	\$687	\$811	\$1,542	\$1,906	\$1,443	<b>\$7,425</b>
Transit Buses & Passenger Rail	\$606	\$627	\$446	\$446	\$446	\$446	<b>\$3,015</b>
School Buses	\$611	\$157	\$0	\$0	\$0	\$0	<b>\$768</b>
Port Cargo Handling Equipment	\$456	\$569	\$70	\$0	\$0	\$0	<b>\$1,095</b>
Locomotives	\$43	\$410	\$960	\$1,876	\$2,157	\$3,019	<b>\$8,465</b>
Cars & Pickups	\$222	\$222	\$0	\$0	\$0	\$0	<b>\$444</b>
Ships & Aircraft	\$35	\$220	\$545	\$260	\$1,888	\$2,058	<b>\$5,005</b>
ZE Infrastructure	\$59	\$148	\$296	\$444	\$296	\$59	<b>\$1,303</b>
Local Cities/Counties	\$59	\$59	\$59	\$59	\$59	\$59	<b>\$355</b>
<b>Total</b>	<b>\$4,839</b>	<b>\$5,398</b>	<b>\$5,605</b>	<b>\$5,789</b>	<b>\$6,752</b>	<b>\$7,084</b>	<b>\$35,467</b>



# Orange County

## Annual Health Benefits of Meeting 2031 Federal Air Quality Standard

- \$4.8 billion in monetized public health benefit
- 460 avoided premature deaths



## Draft Spending Scenario – Orange County (\$ millions)

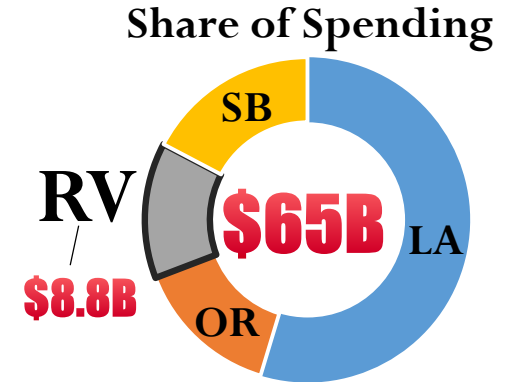
Category	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	Total
Trucks	\$536	\$679	\$753	\$285	\$0	\$0	<b>\$2,252</b>
Off-Road Equipment	\$388	\$257	\$304	\$578	\$714	\$540	<b>\$2,781</b>
Transit Buses & Passenger Rail	\$149	\$149	\$110	\$110	\$110	\$110	<b>\$738</b>
School Buses	\$180	\$46	\$0	\$0	\$0	\$0	<b>\$226</b>
Port Cargo Handling Equipment	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Locomotives	\$11	\$108	\$254	\$496	\$570	\$798	<b>\$2,236</b>
Cars & Pickups	\$73	\$73	\$0	\$0	\$0	\$0	<b>\$146</b>
Ships & Aircraft	\$0	\$14	\$48	\$24	\$198	\$216	<b>\$502</b>
ZE Infrastructure	\$19	\$49	\$97	\$146	\$97	\$19	<b>\$428</b>
Local Cities/Counties	\$19	\$19	\$19	\$19	\$19	\$19	<b>\$117</b>
<b>Total</b>	<b>\$1,376</b>	<b>\$1,395</b>	<b>\$1,585</b>	<b>\$1,658</b>	<b>\$1,709</b>	<b>\$1,703</b>	<b>\$9,426</b>



# Riverside County

## Annual Health Benefits of Meeting 2031 Federal Air Quality Standard

- \$2.3 billion in monetized public health benefit
- 230 avoided premature deaths



### Draft Spending Scenario – Riverside County (\$ millions)

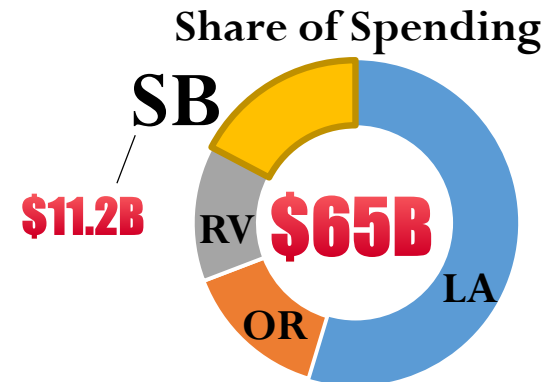
Category	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	Total
Trucks	\$439	\$575	\$618	\$271	\$0	\$0	<b>\$1,903</b>
Off-Road Equipment	\$340	\$225	\$266	\$506	\$625	\$473	<b>\$2,436</b>
Transit Buses & Passenger Rail	\$36	\$33	\$7	\$7	\$7	\$7	<b>\$95</b>
School Buses	\$211	\$54	\$0	\$0	\$0	\$0	<b>\$266</b>
Port Cargo Handling Equipment	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Locomotives	\$18	\$173	\$406	\$794	\$912	\$1,277	<b>\$3,581</b>
Cars & Pickups	\$43	\$43	\$0	\$0	\$0	\$0	<b>\$87</b>
Ships & Aircraft	\$0	\$2	\$7	\$4	\$31	\$34	<b>\$78</b>
ZE Infrastructure	\$12	\$29	\$58	\$87	\$58	\$12	<b>\$254</b>
Local Cities/Counties	\$12	\$12	\$12	\$12	\$12	\$12	<b>\$69</b>
<b>Total</b>	<b>\$1,110</b>	<b>\$1,147</b>	<b>\$1,374</b>	<b>\$1,679</b>	<b>\$1,645</b>	<b>\$1,814</b>	<b>\$8,769</b>



# San Bernardino County

## Annual Health Benefits of Meeting 2031 Federal Air Quality Standard

- \$2.4 billion in monetized public health benefit
- 240 avoided premature deaths



## Draft Spending Scenario – San Bernardino County (\$ millions)

Category	2021-2025	2026-2030	2031-2035	2036-2040	2041-2045	2046-2050	Total
Trucks	\$609	\$842	\$863	\$458	\$0	\$0	<b>\$2,773</b>
Off-Road Equipment	\$247	\$164	\$193	\$368	\$454	\$344	<b>\$1,770</b>
Transit Buses & Passenger Rail	\$68	\$66	\$35	\$35	\$35	\$35	<b>\$274</b>
School Buses	\$198	\$51	\$0	\$0	\$0	\$0	<b>\$249</b>
Port Cargo Handling Equipment	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$0</b>
Locomotives	\$27	\$259	\$606	\$1,184	\$1,361	\$1,906	<b>\$5,343</b>
Cars & Pickups	\$37	\$37	\$0	\$0	\$0	\$0	<b>\$73</b>
Ships & Aircraft	\$0	\$13	\$45	\$22	\$185	\$202	<b>\$468</b>
ZE Infrastructure	\$10	\$24	\$49	\$73	\$49	\$10	<b>\$215</b>
Local Cities/Counties	\$10	\$10	\$10	\$10	\$10	\$10	<b>\$59</b>
<b>Total</b>	<b>\$1,205</b>	<b>\$1,465</b>	<b>\$1,800</b>	<b>\$2,151</b>	<b>\$2,094</b>	<b>\$2,506</b>	<b>\$11,222</b>

*PRELIMINARY SPENDING SCENARIO  
FOR POTENTIAL SOUTH COAST  
REGIONAL FUNDING MEASURE*

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Legislative Committee

November 8, 2019



# BACKGROUND

## DEVELOPMENT OF PRELIMINARY SPENDING SCENARIO

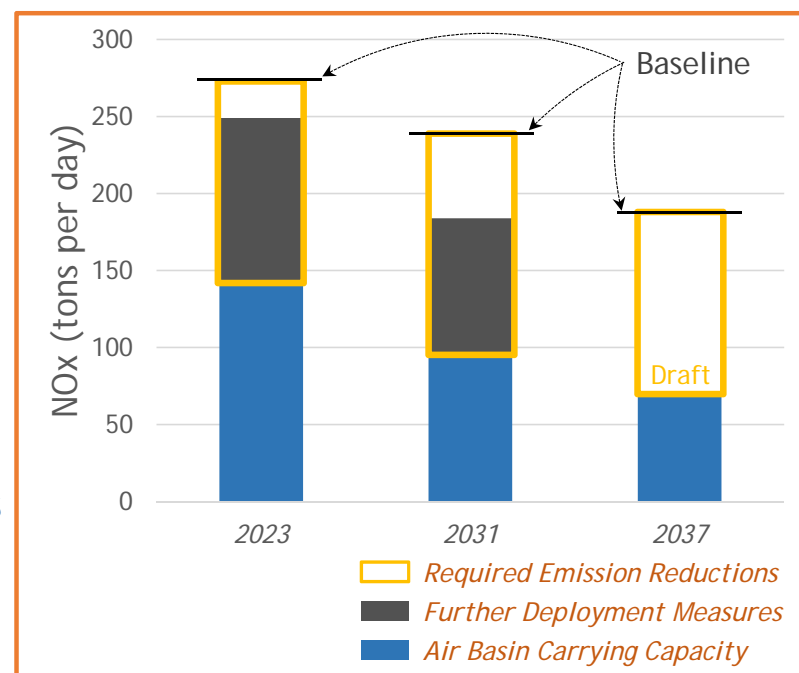
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- A Voting District Authorization bill was discussed with stakeholders in 2019, many requested details about how funds might be spent
  - Request for more detail than in 2016 AQMP
- Preliminary spending scenario developed by staff based on 2016 AQMP and potential revenue from a new one-half cent sales tax
  - Subsequent, more detailed analysis underway
    - Analysis needed to support 2023 Contingency Measures and 2022 AQMP
    - Will include updated funding needs
    - Updated analysis will be brought back to committee
- Formal Spending Plan would need to be developed if Voting District Authorization bill passes

# BACKGROUND

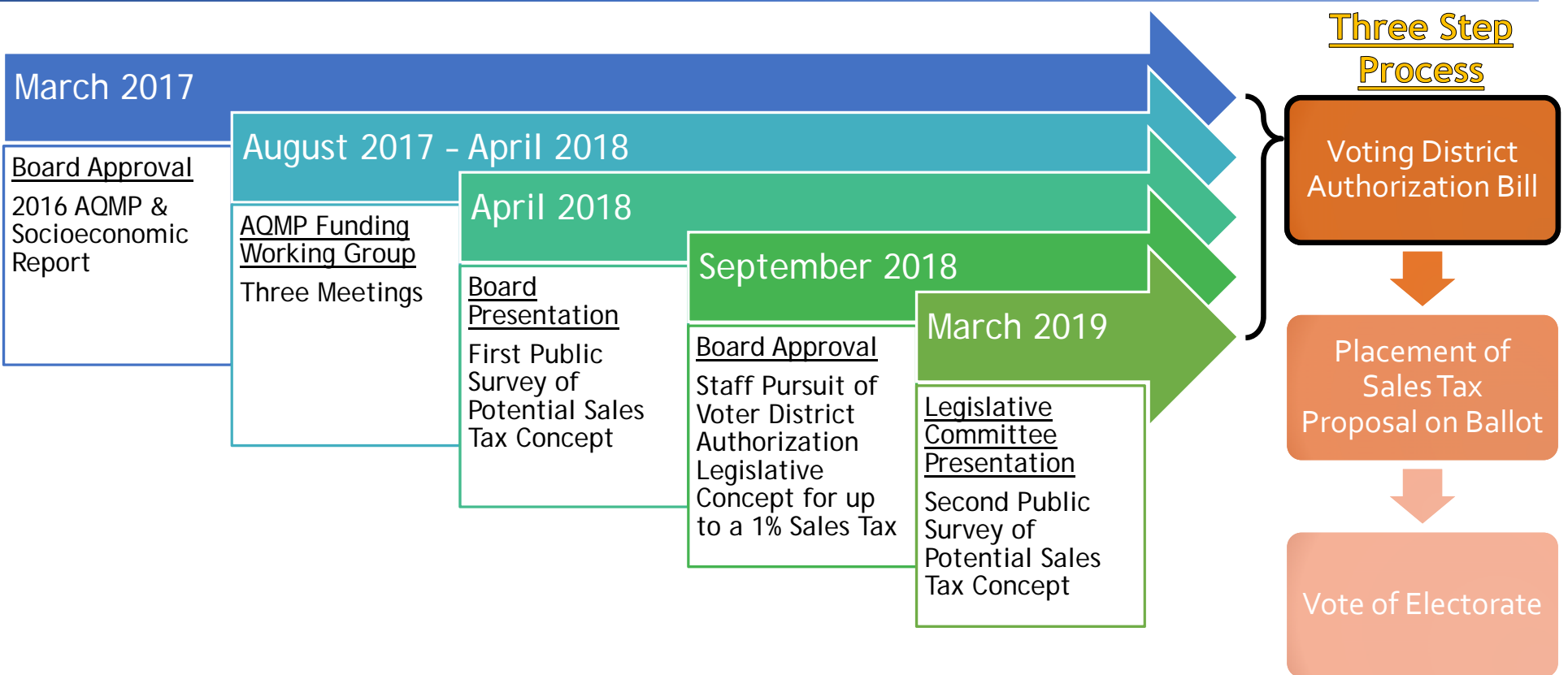
## 2016 AQMP

- Significant NOx reductions beyond baseline needed to meet federal ozone standards
  - 2023 requires 45% reduction
  - 2031 requires 55% reduction
  - *2037 likely requires ~62% reduction*
    - *2022 AQMP will more fully analyze*
- 'Further Deployment Measures' are majority of reductions in 2023 and 2031
  - Includes incentives, new regulations, or other measures
- **\$14.6 billion** needed between 2017-2031 to implement Further Deployment Measures
  - 90+% for mobile sources
  - Cost analysis based on replacement of vehicles at specified incentive levels, after considering all regulations



# BACKGROUND

## VOTING DISTRICT AUTHORIZATION BILL



# PRELIMINARY SPENDING SCENARIO MODELING APPROACH

---

- Key inputs
  - Estimated incentive levels by vehicle/equipment, control type, and through time
  - Potential control levels
  - Potential tax revenue by year
  - County-level vehicle/equipment populations and emissions
- Key outputs
  - Emission reductions by vehicle/equipment type
  - Spending by vehicle/equipment type
  - Spending in five year increments
  - Spending by county





# PRELIMINARY SPENDING SCENARIO

## REVENUE/SPENDING THROUGH TIME

### Total Potential Revenue Based on ½ cent Sales Tax

Time Period	Potential Cumulative Revenue (\$ Billions)
2023 - 2030	\$13.9
2023 - 2040	\$34.4
2023 - 2050	\$58.6



- Begins in 2023 and assumes no sunset date
- Increased annual revenue through time reflects expected growth of population and economy
- Funding needed to meet current air quality standards in 2023, 2031, and 2037
  - Additional future standards are possible
- Coalition of support needed for this measure
  - Some stakeholders have suggested that funding from this measure can also support their needs (e.g., clean transportation)
    - Air quality needs are top priority

# PRELIMINARY SPENDING SCENARIO

## REVENUE/SPENDING BY COUNTY

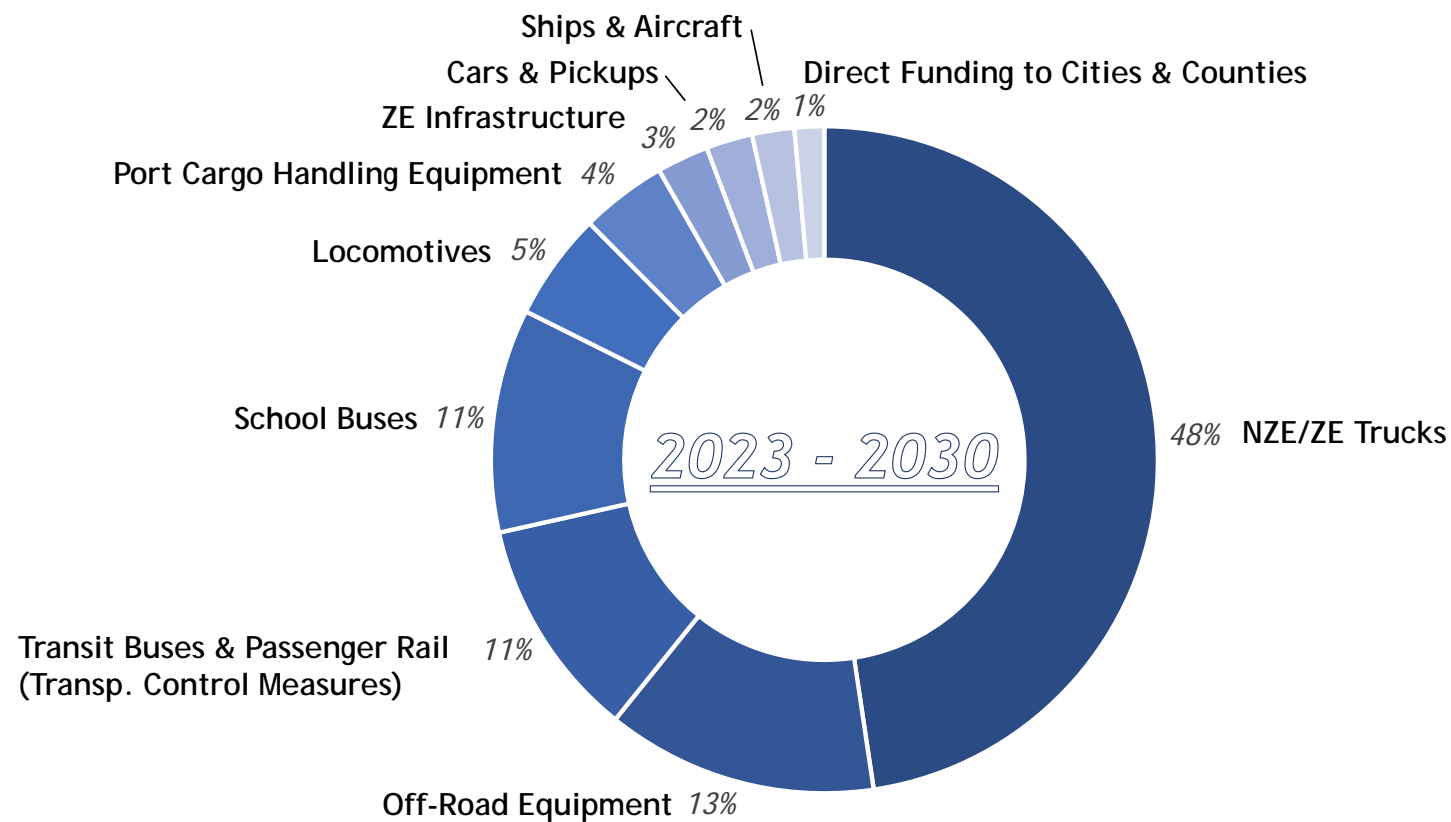
### Spending & Revenue by County through 2040

County	% of SCAQMD Population	% of Sales Tax Revenue	% of SCAQMD NOx Emissions	% of Spending (varies through time)
Los Angeles	58%	54%	61% - 63%	52% - 57%
Orange	19%	23%	14% - 15%	15% - 16%
Riverside	14%	13%	11% - 13%	12% - 15%
San Bernardino	9%	10%	11%	15% - 19%

- County-level analysis based on registered location of vehicles/equipment, or emissions if registration data unavailable
- Spending by county expected to fluctuate through time depending on when each vehicle/equipment type is replaced

# PRELIMINARY SPENDING SCENARIO

## EXAMPLE OF SPENDING BY VEHICLE/EQUIPMENT TYPE



# PRELIMINARY SPENDING SCENARIO

## KEY BENEFITS OF SPENDING APPROACH

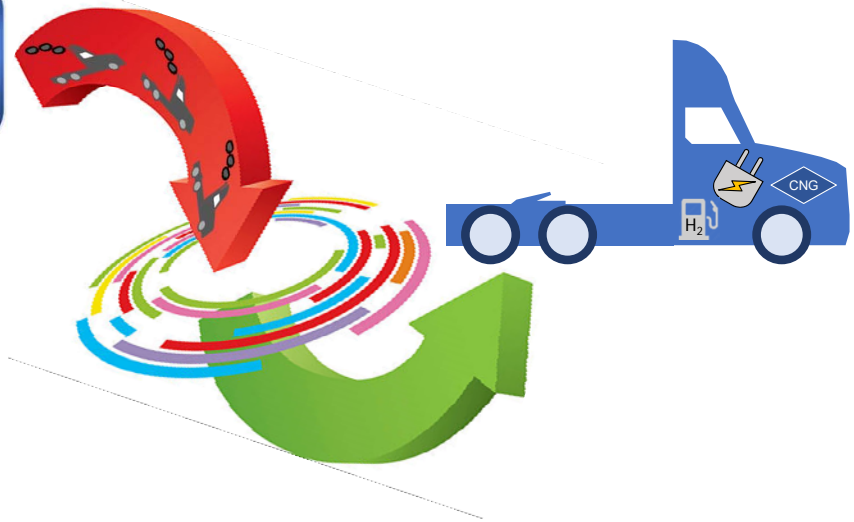
### TRANSFORMATION OF THE GOODS MOVEMENT SECTOR

75% of all  
trucks to ZE  
by 2040

90% of port  
equipment to  
ZE by 2030

All school  
and transit  
buses to ZE  
by 2030

Significant  
GHG  
Reductions



- ✓ *Attain Federal Air Quality Standards in 2031 & 2037*
- ✓ *Avoid 3,000 Premature Deaths Annually*
- ✓ *\$31 Billion in Public Health Benefits*

# NEXT STEPS LEGISLATION

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- Secure substantive and cleanup amendments to SB 732 (Allen), including adding Oversight Committee language
- Continue to conduct outreach, both locally and in Sacramento, to educate about the bill
- Secure passage of SB 732 through Senate Appropriations Committee and Senate Floor by end of Jan. 2020
- Work with legislators to shepherd SB 732 or new bill if needed through legislative process during 2020 legislative session
- Secure Governor's signature

# NEXT STEPS

## SPENDING SCENARIO ANALYSIS

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- Develop formal Spending Plan if Voting District Authorization bill passes
  - Public process would be undertaken and plan would be brought to Board for approval
- Draft spending analysis scenarios will continue to be developed to support 2016 and 2022 AQMP needs
  - Additional scenarios may also be needed to support Voting District Authorization bill

[↑ Back to Agenda](#)

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 21

REPORT: Mobile Source Committee

SYNOPSIS: The Mobile Source Committee held a meeting on Friday, November 15, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Dr. William A. Burke, Chair  
Mobile Source Committee

PF:SLR:AK

---

### **Committee Members**

Present: Dr. William Burke/Chair (videoconference)  
Mayor Pro Tem Larry McCallon  
Mayor Judith Mitchell

Absent: Supervisor Lisa Bartlett  
Supervisor V. Manuel Perez  
Supervisor Janice Rutherford

### **Call to Order**

Chair Burke called the meeting to order at 9:05 a.m.

### **INFORMATIONAL ITEMS:**

- 1. Update on Facility-Based Mobile Source Measure for Commercial Airports**  
Zorik Pirveysian, Planning and Rules Manager, presented on the status of draft MOUs with five commercial airports (Los Angeles International Airport (LAX), Ontario, John Wayne, Burbank, and Long Beach).

Mayor Mitchell inquired about tracking progress toward meeting 2023 and 2031 emission reduction targets. Mr. Pirveysian replied that the airports' first progress report is due in June 2021 and will provide an indication whether the airports are on track to meet their performance targets. Based on the first progress report, South Coast AQMD will submit a report to U.S. EPA by November 2021 and, in the event of a potential shortfall, substitute measures would be submitted to U.S. EPA by February 2022. Mayor Mitchell requested clarification regarding development of substitute measures and affected sources to remedy a potential shortfall.

Mr. Pirveysian reiterated that airports are committed to their performance targets and no shortfall is expected. However, in the event of a potential shortfall, the substitute measures would be developed by working with the airports through a public process focusing on additional reduction opportunities from airports.

Mayor Pro Tem McCallon inquired whether airport tenants engaged in cargo operations at Ontario airport are aware of the proposed Indirect Source Rule (ISR) for warehouses which would affect cargo trucks operating at the airport. Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development, and Area Sources, confirmed that they are aware of the ISR and have requested to be under the ISR instead of the airport MOU.

Dr. Burke expressed concerns about idling vehicles in traffic on route to LAX. He inquired about ground power units (GPU) and whether they are covered under the MOUs. Mr. Pirveysian confirmed that GPUs are covered under the MOU measures for ground support equipment (GSE) which establish fleet average performance targets covering all GSE operated at each airport. Dr. Burke asked about South Coast AQMD's authority if the airports fail to perform under the MOUs.

Ms. Barbara Baird, Chief Deputy Counsel, stated that South Coast AQMD has the authority to consider an ISR for airports if the voluntary MOU approach is not successful. Dr. Burke also expressed concerns regarding the stringency of the MOU approach and inquired about how long it will take to determine whether the airports are fulfilling their obligations under the MOUs. Mr. Pirveysian responded that the annual reports submitted by the airports beginning in 2021 will indicate whether the airports are making adequate progress toward meeting their performance targets in 2023 and 2031. Dr. Burke suggested that staff develop an ISR in parallel that will go into effect, in the event that the MOUs are not successful. Dr. Burke also asked which authority is responsible for LAX's MOU commitment. Mr. Pirveysian indicated the City of Los Angeles Board of Commissioners approved the MOU last week but will inquire whether the MOU needs to be approved by the City Council.



Dr. Burke also inquired about the disposition of older GSE at the airports. Mr. Pirveysian responded that airlines generally retire older equipment when they reach their useful life. Per the MOU, the airports are also required to include in their annual reports the status of older equipment retired or sold and on rare occasions when they are moved within the South Coast Air Basin. Dr. Burke suggested that the MOU could include language to prohibit the movement of older equipment within the airports in the Basin. Dr. Burke further inquired if LAX utilizes pipelines to deliver jet fuel, including to satellite terminals. Mr. Carter Atkins from Los Angeles World Airports confirmed the use of jet fuel pipelines at LAX, but was unsure if satellite terminals were also served by the pipelines. Dr. Burke indicated that emissions from fuel deliveries to satellite terminals should also be evaluated if not served by pipelines.

Mayor Pro Tem McCallon inquired about the extent of GSE operations by the airports and airlines and whether airlines are committed to the performance targets. Mr. Pirveysian indicated that the majority of GSE are operated by airlines and third party GSE operators. He also confirmed the performance targets for GSE measures had been jointly developed by airports and airport tenants.

## **2. Update on Contingency Measure Plan for the 1997 8-Hour Ozone Standard**

Dr. Sarah Rees, Assistant Deputy Executive Officer/Planning, Rule Development, and Area Sources, provided a briefing on the Contingency Measure Plan for the 1997 8-hour Ozone Standard for the South Coast Air Basin.

Mayor Pro Tem McCallon asked for a clarification between AB 2766 and MSRC funding, and whether there is double counting between these two funds. Ms. Baird explained that there are two separate funds and staff will verify the funding levels. Mayor Pro Tem McCallon also inquired about the willingness of the federal government to help California to meet the clean air goals. He also commented on the sales tax measure, and expressed concern that some cities have already maxed out on the sales tax cap to preempt an additional sales tax. He also asked about the NO<sub>x</sub> control pathway and suggested that there may be an imbalance between NO<sub>x</sub> and VOC control and urged staff to continue to evaluate this issue. Executive Officer Wayne Nastri mentioned a recent L.A. Times article referencing a new scientific paper regarding NO<sub>x</sub> reductions and air quality trends in the Basin. Dr. Fine elaborated that the article seems to support the current NO<sub>x</sub> control strategy in the Basin. He added that air quality modeling for future years shows that NO<sub>x</sub> reductions are more effective especially when looking at the highest ozone sites, and that current modeling shows that NO<sub>x</sub> reductions are the only pathway to attainment in the future years.

Dr. Burke asked whether there is a backup plan in case the sales tax measure does not move forward as anticipated. Mr. Nastri stated that staff is working on a strategy and will present it to the Board soon.

**WRITTEN REPORTS:**

**3. Rule 2202 Activity Report: Rule 2202 Summary Status Report**

This item was received and filed.

**4. Monthly Report on Environmental Justice Initiatives: CEQA Document Commenting Update**

This item was received and filed.

**OTHER MATTERS:**

**5. Other Business**

There was no other business.

**6. Public Comment Period**

There were no public comments.

**7. Next Meeting Date:**

The next regular Mobile Source Committee meeting is scheduled for Friday, January 24, 2020.

**Adjournment**

The meeting adjourned at 9:59 a.m.

**Attachments**

1. Attendance Record
2. Rule 2202 Activity Report – Written Report
3. Monthly Report on Environmental Justice Initiatives: CEQA Document Commenting Update – Written Report

# ATTACHMENT 1

## **SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT MOBILE SOURCE COMMITTEE MEETING Attendance – November 15, 2019**

Dr. William Burke (videoconference) .....	South Coast AQMD Board Member
Mayor Judith Mitchell.....	South Coast AQMD Board Member
Mayor Pro Tem Larry McCallon .....	South Coast AQMD Board Member
Ron Ketcham .....	Board Consultant (McCallon)
Carter Atkins .....	Los Angeles World Airports
Bill Pearce .....	Boeing
Chris Waller .....	Alta Environmental
Barbara Baird .....	South Coast AQMD Staff
Kalam Cheung .....	South Coast AQMD Staff
Philip Crabbe .....	South Coast AQMD Staff
Amir Dejbakhsh .....	South Coast AQMD Staff
Philip Fine .....	South Coast AQMD Staff
Laura Garrett .....	South Coast AQMD Staff
Carol Gomez .....	South Coast AQMD Staff
Angela Kim .....	South Coast AQMD Staff
Sang-Mi Lee.....	South Coast AQMD Staff
Megan Lorenz .....	South Coast AQMD Staff
Jason Low .....	South Coast AQMD Staff
Wayne Nastri .....	South Coast AQMD Staff
Robert Paud.....	South Coast AQMD Staff
Zorik Pirveysian.....	South Coast AQMD Staff
Sarah Rees.....	South Coast AQMD Staff
Angelica Reyes .....	South Coast AQMD Staff
Zafiro Sanchez .....	South Coast AQMD Staff
Lijin Sun.....	South Coast AQMD Staff
Jill Whynot.....	South Coast AQMD Staff



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov

## Rule 2202 Summary Status Report

Activity for January 1, 2019 to October 31, 2019

Employee Commute Reduction Program (ECRP)	
# of Submittals:	291

Emission Reduction Strategies (ERS)	
# of Submittals:	460

Air Quality Investment Program (AQIP) Exclusively		
County	# of Facilities	\$ Amount
Los Angeles	48	\$ 306,268
Orange	10	\$ 146,005
Riverside	1	\$ 26,776
San Bernardino	6	\$ 26,247
<b>TOTAL:</b>	<b>65</b>	<b>\$ 505,295</b>

ECRP w/AQIP Combination		
County	# of Facilities	\$ Amount
Los Angeles	5	\$ 19,847
Orange	1	\$ 187
Riverside	1	\$ 8,598
San Bernardino	2	\$ 18,797
<b>TOTAL:</b>	<b>9</b>	<b>\$ 47,429</b>

### Total Active Sites as of October 31, 2019

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP <sup>1</sup>	AQIP <sup>2</sup>	ERS <sup>3</sup>				
505	14	22	541	99	700	1,340
37.68%	1.04%	1.64%	40.37%	7.39%	52.24%	100% <sup>4</sup>

### Total Peak Window Employees as of October 31, 2019

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP <sup>1</sup>	AQIP <sup>2</sup>	ERS <sup>3</sup>				
375,551	5,286	14,503	395,340	15,813	313,679	724,832
51.81%	0.73%	2.00%	54.54%	2.18%	43.28%	100% <sup>4</sup>

- Notes:**
1. ECRP Compliance Option.
  2. ECRP Offset (combines ECRP w/AQIP). AQIP funds are used to supplement the ECRP AVR survey shortfall.
  3. ERS with Employee Survey to get Trip Reduction credits. Emission/Trip Reduction Strategies are used to supplement the ECRP AVR survey shortfall.
  4. Totals may vary slightly due to rounding.

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Warehouse &amp; Distribution Centers</b> <b>RVC19100-05</b> Plot Plan No. 180022 - Fast Track No. 2017-04	The proposed project consists of construction of 135,054 square feet of warehouse and commercial uses on 66.95 acres. The project is located near the southeast corner of Sky Canyon Drive and Sparkman Way near the community of French Valley. Reference RVC170103-02  Comment Period: 10/2/2019 - 11/5/2019 Public Hearing: 11/5/2019	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Riverside	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>RVC191016-01</b> IDI Rider 2 and 4 Warehouses and Perris Valley Storm Drain Channel Improvement Project	The proposed project consists of construction of two warehouses totaling 1,373,449 square feet and improvements to 3,490 linear feet of an existing storm drain channel on 94.7 acres. The project is located on the southeast corner of Morgan Street and Redlands Avenue. Reference RVC190509-02 and RVC190507-09  Comment Period: 10/16/2019 - 11/14/2019 Public Hearing: 11/6/2019	Notice of Preparation	City of Perris	** Under review, may submit written comments
<b>Warehouse &amp; Distribution Centers</b> <b>RVC191023-01</b> Horizon Business Park Warehouse Project (MA181211)	The proposed project consists of construction of a 310,760-square-foot warehouse on 13.9 acres. The project is located on the northwest corner of Eirwanda Avenue and Cantu-Galleano Ranch Road. Reference RVC181205-03  Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Jurupa Valley	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>SBC191001-02</b> Casmalia and Locust Warehousing Project	The proposed project consists of construction of three warehouses totaling 87,189 square feet on 5.13 acres. The project is located on the southwest corner of Casmalia Street and Locust Avenue.  Comment Period: 9/20/2019 - 10/9/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Rialto	Document reviewed - No comments sent

\*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.  
\*\* Disposition may change prior to Governing Board Meeting  
Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

A-1

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Warehouse &amp; Distribution Centers</b> <b>SBC191003-01</b> Willow Avenue Warehouse Project	The proposed project consists of construction of two warehouses totaling 160,834 square feet on 2.06 acres. The project is located on the southwest corner of Willow Avenue and San Bernardino Avenue.  Comment Period: 9/29/2019 - 10/28/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Rialto	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>SBC191009-01</b> Olympic Holdings Inland Center Warehouse	The proposed project consists of construction of a 101,464-square-foot warehouse on 5.25 acres. The project is located near the southeast corner of Inland Center Drive and Riverwalk Drive.  Comment Period: 10/8/2019 - 10/28/2019 Public Hearing: 12/10/2019	Mitigated Negative Declaration	City of San Bernardino	Document reviewed - No comments sent
<b>Warehouse &amp; Distribution Centers</b> <b>SBC191010-01</b> Bridge Point North Rialto	The proposed project consists of construction of a 382,018-square-foot warehouse on 15.95 acres. The project is located on the northeast corner of North Locust Avenue and West Norwood Street. Reference SBC190322-13 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC191010-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC191010-01.pdf</a>  Comment Period: 10/9/2019 - 10/28/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Rialto	South Coast AQMD staff commented on 10/23/2019
<b>Warehouse &amp; Distribution Centers</b> <b>SBC191016-03</b> Scheu Distribution Center	The proposed project consists of construction of four warehouses totaling 240,710 square feet on 13.23 acres. The project is located on the northeast corner of Archibald Avenue and 7th Street.  Comment Period: 10/11/2019 - 11/13/2019 Public Hearing: 11/13/2019	Mitigated Negative Declaration	City of Rancho Cucamonga	** Under review, may submit written comments
<b>Industrial and Commercial</b> <b>LAC191022-04</b> Highline Truck Yard Project	The proposed project consists of construction of a truck yard facility with 42 trailer parking spaces on 2.77 acres. The project is located at 20915 South Lambertson Avenue on the southwest corner of South Lambertson Avenue and 209th Street.  Comment Period: 10/22/2019 - 11/12/2019 Public Hearing: N/A	Notice of Intent to Adopt a Negative Declaration	City of Carson	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting  
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A-2

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Industrial and Commercial</b> <b>LAC191023-06</b> ENV-2018-7626: 222 Corinth Avenue	The proposed project consists of demolition of 52,506 square feet of existing buildings and construction of a 134,996-square-foot office building on 3.28 acres. The project is located on the southeast corner of Olympic Boulevard and Corinth Avenue in the community of West Los Angeles.  Comment Period: 10/3/2019 - 10/23/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<b>Industrial and Commercial</b> <b>RVC191001-07</b> MA19203 (PAR19006) Pedley Road	The proposed project consists of construction of a 14,591-square-foot automobile servicing building on 0.77 acres. The project is located on the southwest corner of Pedley Road and 63rd Street.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-07.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-07.pdf</a>  Comment Period: 9/30/2019 - 10/14/2019 Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 10/8/2019
<b>Industrial and Commercial</b> <b>RVC191001-16</b> PM 37746, PP2019-0007, and V2019-0002	The proposed project consists of construction of a 101,690-square-foot industrial building on 4.8 acres. The project is located on the northeast corner of East Grand Boulevard and 3rd Street.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-16.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191001-16.pdf</a>  Comment Period: 9/25/2019 - 10/10/2019 Public Hearing: 10/10/2019	Site Plan	City of Corona	South Coast AQMD staff commented on 10/8/2019
<b>Industrial and Commercial</b> <b>RVC191015-01</b> MA19211 (CUP199004)	The proposed project consists of construction of a 20,000-square-foot semi-trailer rental and service facility on 17.18 acres. The project is located at 5610 Market Street on the southwest corner of Market Street and Rubidoux Boulevard.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191015-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191015-01.pdf</a>  Comment Period: 10/11/2019 - 10/30/2019 Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 10/22/2019
<b>Industrial and Commercial</b> <b>SBC191001-06</b> Altitude Business Centre Project	The proposed project consists of demolition of 87,000 square feet of residential and agricultural uses and construction of 25 commercial buildings totaling 1,313,000 square feet on 72.9 acres. The project is located on the southeast corner of Kimball Avenue and Euclid Avenue. Reference SBC190501-16 and SBC170519-02  Comment Period: N/A Public Hearing: 10/7/2019	Final Environmental Impact Report	City of Chino	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
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A-3

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Waste and Water-related</b> <b>LAC191001-09</b> Southern California Gas Company, Pico Rivera Base Facility	The proposed project consists of modifications to an existing hazardous waste facility permit to include revisions to waste codes. The project is located at 8101 South Rosemead Boulevard near the southwest corner of Rosemead Boulevard and Slauson Avenue within the City of Pico Rivera.  Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent
<b>Waste and Water-related</b> <b>LAC191002-01</b> Rho-Chem LLC	The proposed project consists of modifications to an existing hazardous waste facility permit to include a material handling and packaging procedure. The project is located at 425 Isis Avenue near the southwest corner of Isis Avenue and West Manchester Boulevard within the City of Inglewood. Reference LAC190716-05 and LAC130716-06  Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent
<b>Waste and Water-related</b> <b>LAC191010-02</b> San Pedro Boat Works	The proposed project consists of development of removal actions to clean up, remove, and dispose contaminated soil with metals, total petroleum hydrocarbons, polynuclear aromatic hydrocarbons, and polychlorinated biphenyls on 3.07 acres. The project is located at Berth 44 on the southwest end of Miners Street within the Port of Los Angeles. Reference LAC190321-01  Comment Period: N/A Public Hearing: N/A	Response to Comments	Department of Toxic Substances Control	Document reviewed - No comments sent
<b>Waste and Water-related</b> <b>LAC191023-02</b> Ocean Water Desalination Project	The proposed project consists of construction of an ocean water desalination facility with a capacity ranging from 20 to 60 million gallons per day of potable drinking water, 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 LAC180327-10 and LAC150901-03  Comment Period: N/A Public Hearing: 11/18/2019	Final Environmental Impact Report	West Basin Municipal Water District	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
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A-4

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Waste and Water-related</b> <b>ORC191015-04</b> Former Tom's Truck Center	The proposed project consists of development of cleanup actions to excavate, remove, and dispose contaminated soil with lead and total petroleum hydrocarbon on 6.7 acres. The project is located at 639 East 3rd Street on the northwest corner of East 3rd Street and Lacy Street within the City of Santa Ana.	Draft Removal Action Workplan	Department of Toxic Substances Control	Document reviewed - No comments sent
Comment Period: 10/11/2019 - 11/12/2019 Public Hearing: N/A				
<b>Waste and Water-related</b> <b>RVC191010-06</b> Stringfellow Superfund Site	The proposed project consists of development of remedial actions to clean up contaminated groundwater with perchlorate, trichloroethene, and chloroform on 17 acres. The project is located at 3400 Pyrite Street near the northeast corner of Pyrite Street and Granite Hill Drive within the City of Jupa Valley. Reference RVC181023-09, RVC171025-06, RVC150814-02, and SBC140319-01	Community Notice	Department of Toxic Substances Control	Document reviewed - No comments sent
Comment Period: N/A Public Hearing: 10/23/2019				
<b>Waste and Water-related</b> <b>SBC191001-17</b> Elder Creek Channel Improvement Project	The proposed project consists of a 700-foot extension of the flood control boundary and improvements to the existing stormwater channels to withstand a 100-year flood event. The project is located along the Elder Creek Channel between Old Greenspot Road and Plunge Creek within the City of Highland. Reference SBC120427-03	Mitigated Negative Declaration	County of San Bernardino Department of Public Works	Document reviewed - No comments sent
Comment Period: 9/27/2019 - 10/30/2019 Public Hearing: N/A				
<b>Waste and Water-related</b> <b>SBC191011-03</b> Huston Creek Waste Water Treatment Plant Dewatering Building and Primary Clarifier Project	The proposed project consists of construction of a 0.7-million-gallon-per-day water clarifier 38 feet in diameter and 15 feet deep, a water holding tank 23 feet in diameter and 15 feet deep, and a 3,468-square-foot building on three acres. The project is located at 24516 Lake Drive near the northeast corner of Lake Drive and Edelweiss Drive in the community of Crestline within San Bernardino County.	Notice of Intent to Adopt a Mitigated Negative Declaration	Crestline Sanitation District	Document reviewed - No comments sent
Comment Period: 10/8/2019 - 11/6/2019 Public Hearing: 11/14/2019				

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A-5

**ATTACHMENT A  
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October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Transportation</b> <b>LAC191002-03</b> Shoemaker Bridge Replacement Project	The proposed project consists of replacement of an existing 0.4-mile bridge and roadway improvements. The project is located along West Shoreline Drive between the southern end of State Route 710 at the Los Angeles River (Post Mile (PM) 6.0) to the 10th Street off-ramp (PM 6.4) within the City of Long Beach. Reference LAC160407-08	Notice of Availability of a Draft Environmental Impact Report/ Environmental Assessment	California Department of Transportation	** Under review, may submit written comments
Comment Period: 9/26/2019 - 11/12/2019 Public Hearing: 10/17/2019				
<b>Transportation</b> <b>ORC191001-05</b> Superior Avenue Pedestrian and Bicycle Bridge and Parking Lot Project	The proposed project consists of construction of a 280-foot by 16-foot overcrossing bridge, a 65,000-square-foot surface parking lot, and a 0.3-acre park on 3.4 acres. The project is located on the northeast corner of Superior Avenue and Highway 101.	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Newport Beach	Document reviewed - No comments sent
Comment Period: 9/23/2019 - 10/23/2019 Public Hearing: N/A				
<b>Transportation</b> <b>ORC191001-10</b> State Route 55 Improvement Project	The proposed project consists of widening of a 7.3-mile segment of State Route (SR) 55 from four lanes to five lanes between the interchange of Interstate 5 and SR-55 (Post Mile (PM) 10.4) to the interchange of SR-55 and SR-91 (PM R17.9). The project traverses through the cities of Anaheim, Tustin, and Santa Ana in Orange County. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC191001-10.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC191001-10.pdf</a>	Negative Declaration	California Department of Transportation	South Coast AQMD staff commented on 10/22/2019
Comment Period: 9/30/2019 - 10/30/2019 Public Hearing: 10/16/2019				
<b>Transportation</b> <b>RVC191011-02</b> County Line Road Transportation Corridor Project	The proposed project consists of construction of 7,084 feet of roadway improvements. The project is located along County Line Road between Park Avenue in the City of Calimesa to Bryant Street in the City of Yucaipa.	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Calimesa	Document reviewed - No comments sent
Comment Period: 10/11/2019 - 11/12/2019 Public Hearing: N/A				

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A-6

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Transportation</b> <b>RVC191022-03</b> Interstate 15 Express Lanes Project Southern Extension	The proposed project consists of construction of 14.5 miles of freeway lanes along Interstate 15 from the intersection of State Route 74 and Central Avenue (Post Mile (PM) 22.3) in the City of Lake Elsinore to Cajalco Road (PM 36.8) in the community of Temescal Valley in Riverside County. Reference RVC160513-04 and RVC150730-09	Notice of Preparation	California Department of Transportation	** Under review, may submit written comments
Comment Period: 10/22/2019 - 11/22/2019 Public Hearing: 11/12/2019				
<b>Institutional (schools, government, etc.)</b> <b>LAC191009-02</b> Rancho Los Amigos South Campus Project	The proposed project consists of demolition of 105 existing buildings, and construction of three buildings totaling 650,000 square feet and two parking structures totaling 953,750 square feet on a 35-acre portion of 74 acres. The project is located on the southwest corner of Golondrinas Street and Dahlia Street within the City of Downey. Reference LAC170809-05	Draft Environmental Impact Report	County of Los Angeles	** Under review, may submit written comments
Comment Period: 10/9/2019 - 11/22/2019 Public Hearing: 10/28/2019				
<b>Institutional (schools, government, etc.)</b> <b>ORC191001-08</b> Chet Holifield Federal Building	The proposed project consists of construction of a one-million-square-foot building on 86.5 acres. The project is located on the southeast corner of Avila Road and Alicia Parkway within the City of Laguna Niguel.	Notice of Intent to Prepare an Environmental Impact Statement	United States General Services Administration	Document reviewed - No comments sent
Comment Period: 9/23/2019 - 10/21/2019 Public Hearing: 10/2/2019				
<b>Institutional (schools, government, etc.)</b> <b>ORC191015-03</b> EF Education First: International Language Campus	The proposed project consists of construction of a 68,000-square-foot school to accommodate 1,347 students and 85,500 square feet of housing facilities with 627 beds on 6.13 acres. The project is located at 3150 Bear Street on the southeast corner of Bear Street and Interstate 405.	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Costa Mesa	** Under review, may submit written comments
Comment Period: 10/15/2019 - 11/4/2019 Public Hearing: 11/25/2019				

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
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A-7

**ATTACHMENT A  
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October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Institutional (schools, government, etc.)</b> <b>RVC191011-01</b> Longfellow Elementary School Expansion Project	The proposed project consists of demolition of two residential units, one inn, and 12 portable classrooms. The project will also include construction of three buildings with 12 classrooms and modernization of six buildings. The project is located at 3610 Eucalyptus Avenue on the southwest corner of Sixth Street and Franklin Avenue within the City of Riverside. Reference RVC190703-06 and RVC190102-10	Final Environmental Impact Report	Riverside Unified School District	** Under review, may submit written comments
Comment Period: N/A Public Hearing: 11/4/2019				
<b>Medical Facility</b> <b>RVC191015-05</b> Kaiser Permanente Moreno Valley Medical Center	The proposed project consists of demolition of 147,200 square feet of existing structures and construction of 1,125,000 square feet of medical service facilities with 460 hospital beds on 30 acres. The project is located at 27300 Iris Avenue on the northwest corner of Iris Avenue and Oliver Street. Reference RVC181127-05	Draft Environmental Impact Report	City of Moreno Valley	** Under review, may submit written comments
Comment Period: 10/11/2019 - 11/25/2019 Public Hearing: N/A				
<b>Medical Facility</b> <b>SBC191016-02</b> PROJ-2019-0004	The proposed project consists of construction of a 105,051-square-foot assisted living facility with 109 beds and subterranean parking on 3.16 acres. The project is located at 13225 Serenity Trail near the southeast corner of Serenity Trail and Hillview Drive South. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC191016-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC191016-02.pdf</a>	Site Plan	County of San Bernardino	South Coast AQMD staff commented on 10/22/2019
Comment Period: 10/11/2019 - 10/30/2019 Public Hearing: N/A				
<b>Retail</b> <b>LAC191023-07</b> ENV-2019-5436: 20539 Ventura Boulevard	The proposed project consists of demolition of 49,920 square feet of existing structures and construction of a 140,040-square foot retail building on 2.78 acres. The project is located near the northeast corner of Ventura Boulevard and Premiere Hills Drive in the community of Canoga Park-Winnetka-Woodland Hills-West Hills.	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
Comment Period: 10/17/2019 - 11/6/2019 Public Hearing: N/A				

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A-8

**ATTACHMENT A  
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October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Retail</b> RVC191003-02 Magnolia Crossings Project	The proposed project consists of construction of 18,162 square feet of restaurant and retail uses, a 1,200-square-foot car wash facility, a 3,800-square-foot fueling canopy, and a gasoline service station with 16 pumps on 3.9 acres. The project is located at 3505 Van Buren Boulevard on the northeast corner of Van Buren Boulevard and State Route 91. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191003-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191003-02.pdf</a> Comment Period: 10/4/2019 - 10/23/2019 Public Hearing: 10/31/2019	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Riverside	South Coast AQMD staff commented on 10/17/2019
<b>Retail</b> RVC191015-06 The Agua Caliente Band of Cahuilla Indians Cathedral City Fee-To-Trust Casino Project	The proposed project consists of construction of 125,000 square feet of gaming, retail, commercial, and office uses on 13.6 acres. The project is generally located along State Route 111 between Date Palm Drive and Buddy Rogers Avenue within the City of Cathedral City. Reference RVC181023-05 Comment Period: N/A Public Hearing: N/A	Finding of No Significant Impact/Tribal Environmental Impact Report	United States Department of Interior, Bureau of Indian Affairs	Document reviewed - No comments sent
<b>Retail</b> RVC191016-04 Newport Pointe Commercial (Planning Application No. DEV2019-053)	The proposed project consists of construction of 61,953 square feet of retail, commercial, and restaurant uses, a 9,990-square-foot daycare center, a 3,700-square-foot car wash facility, a 3,060-square-foot fueling canopy, and a gasoline service station with 12 pumps on 11.14 acres. The project is located on the southwest corner of Newport Road and Evans Road. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191016-04.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191016-04.pdf</a> Comment Period: 10/9/2019 - 10/30/2019 Public Hearing: 10/30/2019	Site Plan	City of Menifee	South Coast AQMD staff commented on 10/22/2019
<b>General Land Use (residential, etc.)</b> LAC191001-01 Jefferson on Avalon Specific Plan Project	The proposed project consists of construction of 1,200 residential units, 15,000 square feet of retail and restaurant uses, and a hotel with 200 rooms on 20 acres. The project is located on the northeast corner of Avalon Boulevard and 213th Street. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC191001-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC191001-01.pdf</a> Comment Period: 9/25/2019 - 10/24/2019 Public Hearing: 10/9/2019	Notice of Preparation	City of Carson	South Coast AQMD staff commented on 10/22/2019

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A-9

**ATTACHMENT A  
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October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>General Land Use (residential, etc.)</b> LAC191001-04 1045 Olive Project	The proposed project consists of demolition of 35,651 square feet of existing structures, and construction of a 751,777-square-foot building with 794 residential units and 12,904 square feet of commercial uses with subterranean parking on 0.96 acres. The project is located on the northwest corner of South Olive Street and West 11th Street in the community of Central City. Reference LAC180522-13 and LAC171221-03 Comment Period: 9/26/2019 - 11/12/2019 Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	** Under review, may submit written comments
<b>General Land Use (residential, etc.)</b> LAC191001-11 340 South Hill Street Equity Residential Mixed-Use Project	The proposed project consists of demolition of an 850-square-foot restaurant, and construction of an 850,000-square-foot building with 428 residential units, commercial and retail uses, and subterranean parking on 0.75 acres. The project is located on the southeast corner of South Hill Street and West 4th Street in the community of Central City. Reference LAC170221-01 Comment Period: 9/26/2019 - 10/28/2019 Public Hearing: N/A	Sustainable Communities Environmental Assessment	City of Los Angeles	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> LAC191001-12 The Arroyo at Monrovia Station Project	The proposed project consists of demolition of 47,112 square feet of existing residential and industrial uses, and construction of 302 residential units totaling 318,612 square feet, and 7,080 square feet of commercial uses with subterranean parking on 2.9 acres. The project is located on the southeast corner of West Evergreen Avenue and South Magnolia Avenue. Reference LAC190528-03 Comment Period: 9/26/2019 - 11/13/2019 Public Hearing: 11/13/2019	Draft Environmental Impact Report	City of Monrovia	** Under review, may submit written comments
<b>General Land Use (residential, etc.)</b> LAC191017-01 Modern Argyle	The proposed project consists of demolition of 61,816 square feet of existing buildings, and construction of a 237,159-square-foot building with 276 residential units and 27,000 square feet of retail uses with subterranean parking on 1.1 acres. The project is located on the southeast corner of Argyle Avenue and Selma Avenue in the community of Hollywood. Reference LAC190418-04 and LAC170818-04 Comment Period: N/A Public Hearing: N/A	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent

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A-10

**ATTACHMENT A  
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October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>General Land Use (residential, etc.)</b> LAC191022-02 Compton Artesia Specific Plan	The proposed project consists of construction of one million square feet of buildings with 4,800 residential units, 74,348 square feet of retail uses, and 76,426 square feet of office uses on 1.19 square miles. The project is located near the southeast corner of Bennet Street and South Wilmington Avenue. Reference LAC190404-05 Comment Period: 10/22/2019 - 12/9/2019 Public Hearing: N/A	Draft Program Environmental Impact Report	City of Compton	** Under review, may submit written comments
<b>General Land Use (residential, etc.)</b> LAC191022-05 Hollywood and Wilcox (ENV-2016-3177-EIR)	The proposed project consists of construction of a 278,892-square-foot building with 260 residential units and 17,800 square feet of retail and restaurant uses with subterranean parking on 1.4 acres. The project is located on the southeast corner of Hollywood Boulevard and Wilcox Avenue in the community of Hollywood. Reference LAC170526-05 Comment Period: N/A Public Hearing: N/A	Environmental Leadership Development Project	City of Los Angeles	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> LAC191023-03 7617 Santa Monica Boulevard Project	The proposed project consists of demolition of 4,910 square feet of existing structures, and construction of a 63,560-square-foot building with 71 residential units and 9,240 square feet of commercial uses with subterranean parking on 0.72 acres. The project is located at 7617 Santa Monica Boulevard near the northeast corner of Santa Monica Boulevard and North Spaulding Avenue. Comment Period: 10/24/2019 - 11/25/2019 Public Hearing: N/A	Sustainable Communities Environmental Assessment	City of West Hollywood	** Under review, may submit written comments
<b>General Land Use (residential, etc.)</b> LAC191023-04 222 West 2nd Project	The proposed project consists of construction of a 688,401-square-foot building with 107 residential units, 7,200 square feet of retail uses, and 534,044 square feet of office uses on 2.71 acres. The project is located on the southeast corner of West 2nd Street and South Broadway in the community of Central City. Reference LAC190322-05 Comment Period: N/A Public Hearing: 11/20/2019	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent

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A-11

**ATTACHMENT A  
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October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>General Land Use (residential, etc.)</b> LAC191023-05 ENV-2018-7330: 1424 N. Deepwater Avenue	The proposed project consists of construction of a 51,202-square-foot building with 56 residential units on 56,060 square feet. The project is located near the southeast corner of East Sandison Street and Eubank Avenue in the community of Wilmington-Harbor City. Comment Period: 10/3/2019 - 11/4/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	** Under review, may submit written comments
<b>General Land Use (residential, etc.)</b> LAC191023-08 ENV-2019-3845: 8547 North Sepulveda Boulevard	The proposed project consists of demolition of an existing 6,400-square-foot building and construction of a 37,850-square-foot building with 54 residential units on 0.51 acres. The project is located near the southwest corner of Sepulveda Boulevard and Parthenia Street in the community of Mission Hills-Panorama City-North Hills. Comment Period: 10/17/2019 - 11/6/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> ORC191010-03 Magnolia Tank Farms	The proposed project consists of construction of 250 residential units, a 211,000-square-foot hotel with 215 rooms, and 19,000 square feet of retail uses on 28.9 acres. The project will also include 5.6 acres of open space. The project is located at 21845 Magnolia Street on the northwest corner of Magnolia Street and Banning Avenue. Reference ORC181219-04 Comment Period: N/A Public Hearing: 10/22/2019	Response to Comments	City of Huntington Beach	Document reviewed - No comments sent
<b>General Land Use (residential, etc.)</b> MA191009-03 MA19209 (PAR19008)	The proposed project consists of construction of a 57,600-square-foot hotel with 120 rooms, a 38,391-square-foot theater with 480 seats, a 57,000-square-foot medical office, 112,521 square feet of restaurant and retail uses, 10,810 square feet of automobile repair and car wash facilities, and a gasoline service station with 12 pumps on 31.33 acres. The project is located on the northeast corner of Mission Boulevard and Pyrite Street. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191009-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC191009-03.pdf</a> Comment Period: 10/9/2019 - 10/25/2019 Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 10/22/2019
<b>General Land Use (residential, etc.)</b> SBC191002-02 Commstart LP Mobile Home Park	The proposed project consists of construction of 51 mobile home units totaling 82,500 square feet on 6.79 acres. The project is located near the northeast corner of Piedmont Avenue and East Highland Avenue. Comment Period: 9/25/2019 - 10/15/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of San Bernardino	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting  
Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

A-12

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Plans and Regulations</b> LAC191001-13 Planned Development, General Plan Amendment, Zoning Code Amendment, and Alexan Foothills Specific Plan and Development Project	The proposed project consists of demolition of 28,400 square feet of existing structures and construction of a 375,729-square-foot building with 436 residential units on 9.63 acres. The project is located on the southeast corner of South Mayflower Avenue and West Evergreen Avenue. Reference LAC181030-01  Comment Period: 9/26/2019 - 11/13/2019 Public Hearing: 11/13/2019	Draft Environmental Impact Report	City of Monrovia	** Under review, may submit written comments
<b>Plans and Regulations</b> LAC191001-14 Olive View-UCLA Medical Center Campus Master Plan	The proposed project consists of development of design guidelines, policies, and programs to guide campus development with a net increase of 1.3 million square feet in building footprint with a planning horizon of 20 years. The project is located at 14445 Olive View Drive on the northeast corner of Kennedy Road and Olive View Drive in the community of Sylmar. Reference LAC190528-02 and LAC160407-12  Comment Period: N/A Public Hearing: 10/15/2019	Final Environmental Impact Report	County of Los Angeles	Document reviewed - No comments sent
<b>Plans and Regulations</b> LAC191001-15 Long Beach Building Standards Code Amendments	The proposed project consists of citywide updates to the Long Beach Municipal Code to establish uniform construction and maintenance standards. The project encompasses 50 square miles and is bounded by State Route 91 to the north, Interstate 605 to the east, East Ocean Boulevard to the south, and State Route 47 to the west.  Comment Period: 10/1/2019 - 10/30/2019 Public Hearing: N/A	Notice of Intent to Adopt a Negative Declaration	City of Long Beach	Document reviewed - No comments sent
<b>Plans and Regulations</b> LAC191011-04 Monterey Park Focused General Plan Update	The proposed project consists of updates to the General Plan land use element to remove growth control zoning and create land use policies to attract economic and housing development with a planning horizon year of 2040. The project encompasses 4.270 acres and is bounded by Interstate 10 to the north, City of Rosemead to the east, State Route 60 to the south, and Interstate 710 to the west. Reference LAC190611-03 and LAC190416-04  Comment Period: N/A Public Hearing: 10/28/2019	Final Environmental Impact Report	City of Monterey Park	** Under review, may submit written comments

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting  
Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

A-13

**ATTACHMENT A  
INCOMING CEQA DOCUMENTS LOG  
October 1, 2019 to October 31, 2019**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Plans and Regulations</b> LAC191016-05 General Plan Land Use and Urban Design Elements Project	The proposed project consists of updates to the City's General Plan Land Use Element and Urban Design Element to guide future development with a planning horizon year of 2040. The project encompasses 50 square miles and is bounded by State Route 91 to the north, Interstate 605 to the east, East Ocean Boulevard to the south, and State Route 47 to the west. Reference LAC190619-06, LAC160913-06, and LAC150519-04  Comment Period: N/A Public Hearing: 10/17/2019	Response to Comments	City of Long Beach	Document reviewed - No comments sent

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting  
Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

A-14

**ATTACHMENT B<sup>\*</sup>  
ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS  
OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Goods Movement</b> LAC190905-02 Berths 97-109 [China Shipping] Container Terminal Project	Staff provided public comments at the Los Angeles Board of Harbor Commissioners Special Meeting on October 8, 2019 for the proposed project. The proposed project consists of modifications to ten of 52 mitigation measures that were previously approved in the 2008 EIS/EIR, and six of ten modified mitigation measures are related to air quality. The project will also include an increase in the cargo throughput by 147,504 twenty-foot equivalent units (TEUs) from 1,551,000 TEUs to 1,698,504 TEUs in 2030. The project is located at the Port of Los Angeles on the northeast corner of State Route 47 and Interstate 110 in the communities of San Pedro and Wilmington. Reference LAC181002-11, LAC170616-02, LAC150918-02, LAC081218-01, LAC080501-01, LAC060822-02, and LAC170725-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-02.pdf</a> Comment Period: N/A Public Hearing: 10/8/2019	Final Supplemental Environmental Impact Report	City of Los Angeles Harbor Department	South Coast AQMD staff commented on 10/4/2019
<b>Warehouse &amp; Distribution Centers</b> LAC190920-01 Bridge Point South Bay II Warehouse Project, Project No. 2017-004820-(2)	The proposed project consists of construction of a 203,877-square-foot warehouse on 8.98 acres. The project is located at 20850 South Normandie Avenue on the southeast corner of South Normandie Avenue and Torrance Boulevard in the community of West Carson. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190920-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190920-01.pdf</a> Comment Period: 9/19/2019 - 10/23/2019 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Los Angeles	South Coast AQMD staff commented on 10/22/2019
<b>Warehouse &amp; Distribution Centers</b> RVC190924-01 Barker Logistics LLC EIR Plot Plan PPT190008	The proposed project consists of construction of a 694,630-square-foot warehouse on 31.55 acres. The project is located on the northeast corner of Piacentia Avenue and Patterson Street in the community of Mead Valley. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-01.pdf</a> Comment Period: 9/13/2019 - 10/13/2019 Public Hearing: 10/8/2019	Notice of Preparation	County of Riverside	South Coast AQMD staff commented on 10/8/2019
<b>Warehouse &amp; Distribution Centers</b> RVC190924-02 San Geronio Crossing Gateway Center Project	This document includes additional air quality and energy analyses in response to the Riverside County Superior Court's decision for the proposed project. The proposed project consists of construction of a 1,823,760-square-foot warehouse on a 140.23-acre portion of 229 acres. This project will also include 84.8 acres of open space. The project is located on the northwest corner of Cherry Valley Boulevard and Vineland Street in the community of Cherry Valley. Reference RVC170921-02, RVC170609-02, RVC170125-04, RVC161129-06, and RVC150113-01 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190924-02.pdf</a> Comment Period: 9/20/2019 - 10/23/2019 Public Hearing: N/A	Notice of Preparation	County of Riverside	South Coast AQMD staff commented on 10/22/2019

\*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.  
\*\* Disposition may change prior to Governing Board Meeting

B-1

**ATTACHMENT B  
ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS  
OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Warehouse &amp; Distribution Centers</b> SBC190913-02 Goodman Logistics Center Fontana III	The proposed project consists of construction of three warehouses totaling 1,118,460 square feet on 47.5 acres. The project is located on the northwest corner of Jurupa Avenue and Juniper Avenue. Reference SBC190314-04 <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC190913-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC190913-02.pdf</a> Comment Period: 9/6/2019 - 10/21/2019 Public Hearing: 10/1/2019	Draft Environmental Impact Report	City of Fontana	South Coast AQMD staff commented on 10/8/2019
<b>Industrial and Commercial</b> RVC190917-07 Project No. PLN 19-20026 - The Homestead Industrial Project	The proposed project consists of construction of seven warehouses totaling 1,080,060 square feet on 56 acres. The project is located on the southwest corner of Archibald Avenue and Remington Avenue. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-07.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-07.pdf</a> Comment Period: 9/16/2019 - 10/16/2019 Public Hearing: 10/1/2019	Notice of Preparation	City of Eastvale	South Coast AQMD staff commented on 10/8/2019
<b>Waste and Water-related</b> LAC190924-04 La Brea Subarea Well and Transmission Main Project	The proposed project consists of demolition of an existing structure and rehabilitation of existing 10,250 linear feet of water pipelines ranging in diameter from 18 inches to 24 inches. The project will also include construction of a four-mile water pipeline 16 inches in diameter and a 700-gallon-per-minute water well. The project is located along Burton Way, Le Doux Road, and La Cienega Boulevard from the northeast corner of Charlton Street and Guthrie Avenue in the City of Los Angeles to the northeast corner of La Cienega Boulevard and Cadillac Avenue in the City of Beverly Hills. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190924-04.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190924-04.pdf</a> Comment Period: 9/23/2019 - 10/23/2019 Public Hearing: N/A	Mitigated Negative Declaration	City of Beverly Hills	South Coast AQMD staff commented on 10/22/2019
<b>Waste and Water-related</b> ORC190917-08 Bee Canyon Composting Operation at the Frank R. Bowerman Landfill	The proposed project consists of development of a green waste composting facility with a receiving capacity of 437 tons per day of organic wastes diverted from landfills. The project is located at 110022 Bee Canyon Access Road near the southeast corner of Bee Canyon Access Road and State Route 241 within the City of Irvine. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190917-08.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190917-08.pdf</a> Comment Period: 9/20/2019 - 10/21/2019 Public Hearing: 12/17/2019	Mitigated Negative Declaration	Orange County Department of Waste and Recycling	South Coast AQMD staff commented on 10/17/2019
<b>Waste and Water-related</b> RVC190917-06 Coachella Valley Water District Sanitation Master Plan Update 2020	The proposed project consists of development of regulations, policies, strategies, and programs to meet current and future needs for wastewater treatment services. The project encompasses 885 square miles within Riverside and Imperial counties. <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-06.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-06.pdf</a> Comment Period: 9/12/2019 - 10/12/2019 Public Hearing: 9/24/2019	Notice of Preparation	Coachella Valley Water District	South Coast AQMD staff commented on 10/1/2019

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting

B-2



**ATTACHMENT B  
ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS  
OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>Transportation</b> LAC190905-01 Westside Purple Line Extension Wilshire/Rodeo Station North Portal Project	The proposed project consists of development of three build alternatives for a transit station ranging from 6,200 square feet to 9,200 square feet. The project is located along Wilshire Boulevard between North Beverly Drive and North Crescent Drive.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190905-01.pdf</a> Comment Period: 9/5/2019 - 10/10/2019 Public Hearing: 9/19/2019	Notice of Preparation	City of Beverly Hills	South Coast AQMD staff commented on 10/1/2019
<b>Transportation</b> LAC190911-01 SR-110 Arroyo Seco Parkway Safety and Operational Enhancement Project	The proposed project consists of construction of 4.81-mile roadway improvements. The project is located along Arroyo Seco Parkway from Figueroa Street off-ramp (Post Mile (PM) 25.78) within the City of Los Angeles to Orange Grove (PM 30.59) within the City of South Pasadena.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190911-01.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190911-01.pdf</a> Comment Period: 9/9/2019 - 10/24/2019 Public Hearing: 9/30/2019	Notice of Preparation	California Department of Transportation	South Coast AQMD staff commented on 10/8/2019
<b>Transportation</b> SBC190924-03 BNSF One Lead Track Extension Project	The proposed project consists of construction of two rail track segments totaling 4.3 miles along the existing Burlington Northern Santa Fe corridor from the intersection of State Street and University Parkway in the community of Muscovy within San Bernardino County to the intersection of West Fifth Street and North Mt. Vernon Avenue in the City of San Bernardino.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC190924-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/SBC190924-03.pdf</a> Comment Period: 9/23/2019 - 10/22/2019 Public Hearing: N/A	Notice of Preparation	City of San Bernardino	South Coast AQMD staff commented on 10/22/2019
<b>Institutional (schools, government, etc.)</b> RVC190917-05 K-8 STEAM Academy	The proposed project consists of construction of a 124,361-square-foot elementary school with 1,191 classroom seats on 23 acres. The project is located on the northwest corner of Washington Street and Abelia Street in the community of French Valley within Riverside County.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-05.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190917-05.pdf</a> Comment Period: 9/18/2019 - 10/18/2019 Public Hearing: 11/2/2019	Negative Declaration	Temecula Valley Unified School District	South Coast AQMD staff commented on 10/16/2019
<b>Retail</b> ORC190919-06 Bayside Family Resort Hotel	The proposed project consists of construction of a 201,499-square-foot hotel with 275 rooms and a 5.21-acre surface parking lot on 14.29 acres. The project is located on the northwest corner of Pacific Coast Highway and Jamboree Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190919-06.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190919-06.pdf</a> Comment Period: 9/16/2019 - 10/16/2019 Public Hearing: 9/25/2019	Notice of Preparation	City of Newport Beach	South Coast AQMD staff commented on 10/8/2019

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting

B-3

**ATTACHMENT B  
ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS  
OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>General Land Use (residential, etc.)</b> LAC190903-02 Duarte Station Specific Plan	The proposed project consists of construction of 1,400 residential units, 12,500 square feet of retail uses, and 100,000 square feet of office uses on 19.09 acres. The project is located on the northwest corner of Highland Avenue and Duarte Road. Reference LAC190321-05  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-02.pdf</a> Comment Period: 8/27/2019 - 10/10/2019 Public Hearing: N/A	Subsequent Environmental Impact Report	City of Duarte	South Coast AQMD staff commented on 10/10/2019
<b>General Land Use (residential, etc.)</b> LAC190903-12 The Villages at the Alhambra	The proposed project consists of demolition of 93,098 square feet of existing structures and construction of 1,060 residential units totaling 1,357,630 square feet with subterranean parking on 38.38 acres. The project is located on the northwest corner of South Fremont Avenue and West Mission Road.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-12.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190903-12.pdf</a> Comment Period: 9/3/2019 - 11/1/2019 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Alhambra	South Coast AQMD staff commented on 10/17/2019
<b>General Land Use (residential, etc.)</b> LAC190906-07 Rose Hill Courts Redevelopment Project	The proposed project consists of demolition of 82,645 square feet of existing structures, and construction of nine buildings totaling 156,926 square feet with 185 residential units and 6,366 square feet of office uses on 5.24 acres. This project will also include 125,022 square feet of open space. The project is located at 4446 Florizel Street on the southwest corner of Florizel Street and McKenzie Street in the community of El Sereno. Reference LAC180926-03  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190906-07.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190906-07.pdf</a> Comment Period: 9/6/2019 - 10/21/2019 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report/Draft Environmental Impact Statement	City of Los Angeles Housing Authority	South Coast AQMD staff commented on 10/17/2019
<b>General Land Use (residential, etc.)</b> LAC190918-03 8850 Sunset Boulevard Project	The proposed project consists of demolition of 48,450 square feet of existing structures, and construction of a 369,000-square-foot building with 41 residential units and a hotel with 115 rooms with subterranean parking on 39,983 square feet. The project is located on the southwest corner of Sunset Boulevard and Larrabee Street.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190918-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190918-03.pdf</a> Comment Period: 9/19/2019 - 10/25/2019 Public Hearing: 10/10/2019	Notice of Preparation	City of West Hollywood	South Coast AQMD staff commented on 10/8/2019

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting

B-4

**ATTACHMENT B  
ONGOING ACTIVE PROJECTS FOR WHICH SOUTH COAST AQMD HAS  
OR IS CONTINUING TO CONDUCT A CEQA REVIEW**

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
<b>General Land Use (residential, etc.)</b> LAC190918-05 93-Unit Detached Condominium Subdivision - Dockweiler Residential Project	The proposed project consists of construction of 93 residential units totaling 227,850 square feet on 21.18 acres of roads and easements on 79.68 acres. The project will also include 20.1 acres of open space. The project is located on the southwest corner of Dockweiler Drive and State Route 14.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190918-05.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190918-05.pdf</a> Comment Period: 9/10/2019 - 10/1/2019 Public Hearing: 10/1/2019	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Santa Clarita	South Coast AQMD staff commented on 10/1/2019
<b>General Land Use (residential, etc.)</b> ORC190820-03 Nakase Nursery/Toll Brothers Project	The proposed project consists of demolition of a 1,744-square-foot existing structure, and construction of 776 residential units totaling 1.3 million square feet and an elementary school to accommodate up to 1,000 students on 122 acres. The project will also include 28 acres of open space. The project is located on the southeast corner of Rancho Parkway and Bake Parkway. Reference ORC180713-01  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190820-03.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/ORC190820-03.pdf</a> Comment Period: 8/20/2019 - 10/3/2019 Public Hearing: N/A	Draft Environmental Impact Report	City of Lake Forest	South Coast AQMD staff commented on 10/3/2019
<b>General Land Use (residential, etc.)</b> RVC190906-05 Rockport Ranch Project	The proposed project consists of construction of 305 residential units totaling 549,000 square feet and 21.18 acres of roads and easements on 79.68 acres. The project will also include 20.1 acres of open space. The project is located on the southwest corner of Briggs Road and Old Newport Road. Reference RVC170905-01 and RVC170106-05  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190906-05.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190906-05.pdf</a> Comment Period: 9/5/2019 - 10/21/2019 Public Hearing: N/A	Draft Environmental Impact Report	City of Menifee	South Coast AQMD staff commented on 10/18/2019
<b>General Land Use (residential, etc.)</b> RVC190919-05 MA19184 (PAR19005)	The proposed project consists of subdivision of 10.59 acres for future construction of 220 residential units. This project will also include 3.47 acres of open space. The project is located on the southwest corner of Canal Street and Pacific Avenue.  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190919-05.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/RVC190919-05.pdf</a> Comment Period: 9/19/2019 - 10/3/2019 Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 10/1/2019
<b>Plans and Regulations</b> LAC190815-02 Port Master Plan Update	The proposed project consists of establishment of development policies, guidelines, and amendments to existing land uses. The project encompasses the Port of Long Beach that is located on the southwest corner of the West Anaheim Street and De Forest Avenue. Reference LAC180809-06  <a href="http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190815-02.pdf">http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2019/october/LAC190815-02.pdf</a> Comment Period: 8/15/2019 - 10/3/2019 Public Hearing: 9/4/2019	Draft Program Environmental Impact Report	City of Long Beach Harbor Department	South Coast AQMD staff commented on 10/3/2019

# - Project has potential environmental justice concerns due to the nature and/or location of the project.  
\*\* Disposition may change prior to Governing Board Meeting

B-5

**ATTACHMENT C  
ACTIVE SOUTH COAST AQMD LEAD AGENCY PROJECTS  
THROUGH OCTOBER 31, 2019**

PROJECT DESCRIPTION	PROPOSER	TYPE OF DOCUMENT	STATUS	CONSULTANT
The Phillips 66 (formerly ConocoPhillips) Los Angeles Refinery Ultra Low Sulfur Diesel project was originally proposed to comply with federal, state and South Coast AQMD requirements to limit the sulfur content of diesel fuels. Litigation regarding the CEQA document was filed. Ultimately, the California Supreme Court concluded that the South Coast AQMD had used an inappropriate baseline and directed the South Coast AQMD to prepare an EIR, even though the project has been built and has been in operation since 2006. The purpose of this CEQA document is to comply with the Supreme Court's direction to prepare an EIR.	Phillips 66 (formerly ConocoPhillips), Los Angeles Refinery	Environmental Impact Report (EIR)	The Notice of Preparation/Initial Study (NOP/IS) was circulated for a 30-day public comment period on March 26, 2012 to April 26, 2012. The consultant submitted the administrative Draft EIR to South Coast AQMD 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. South Coast AQMD staff has reviewed the responses to comments and provided edits which the consultant is incorporating into the Final EIR.	Environmental Audit, Inc.
Quemetco is proposing to modify existing South Coast AQMD permits to allow the facility to recycle materials 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.	Quemetco	Environmental Impact Report (EIR)	A Notice of Preparation/Initial Study (NOP/IS) was released for a 56-day public review and comment period from August 31, 2018 to October 25, 2018, and 154 comment letters were received. Two CEQA scoping meetings were held on September 13, 2018 and October 11, 2018 in the community. South Coast AQMD staff is reviewing the comments received.	Trinity Consultants
Tesoro is proposing to revise the project originally analyzed in the Final Environmental Impact Report for the May 2017 Tesoro Los Angeles Refinery Integration and Compliance Project (LARIC) to adjust the construction schedule and to modify its Title V permit to: 1) relocate the propane recovery component of the original project from the Carson Operations Naphtha Isomerization Unit to the Carson Operations C3 Splitter Unit; 2) increase the throughput of the Carson Operations Tank 35; and, 3) update the toxic air contaminant specification for the six crude oil storage tanks at the Carson crude terminal with additional data.	Tesoro Refining & Marketing Company, LLC (Tesoro)	Addendum to the Final Environmental Impact Report for the May 2017 Tesoro Los Angeles Refinery Integration and Compliance Project (LARIC)	South Coast AQMD staff provided edits to the Revised Draft Addendum.	Environmental Audit, Inc.

C-1

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 22

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: Below is a summary of key issues addressed at the MSRC's meeting on November 21, 2019. The next meeting is scheduled for Thursday, January 16, 2020 at 2:00 p.m., in Conference Room CC8.

RECOMMENDED ACTION:  
Receive and file.

Ben Benoit  
SCAQMD Representative to MSRC

MMM:NB:psc

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### **Adoption of 2020 Meeting Schedule**

The MSRC adopted its 2020 meeting schedule (*Attachment 1*). The MSRC will continue to meet on the third Thursday of every month at 2:00 p.m. Its Technical Advisory Committee will continue to meet on the first Thursday of every month at 1:30 p.m., except for the months of January and December which have been moved to the second Thursday because of holiday conflicts. Both the MSRC and the MSRC-TAC will be dark in July. Both meetings are usually conducted in Room CC8.

### **FYs 2018-2021 Work Program**

#### **Regional Goods Movement Program**

The Better World Group Advisors continue their assessment of other funding providers' active and potential programs with a nexus to the reduction of emissions from goods movement, further developing relationships with entities previously contacted as well as additional collaborative opportunities to be pursued.

#### **Market Acceleration Program**

The Market Acceleration Program (MAP) is a South Coast AQMD program to support the early deployment of near-zero emission natural gas trucks, targeting heavy-duty trucks used in short-haul drayage activities. Its key audience includes fleets who don't meet the scrap truck qualification criteria of the Prop 1B and Carl Moyer Programs, and owners of older trucks who can't afford new near-zero trucks even with state incentives. Clean Energy, which originally proposed MAP to South Coast AQMD, will promote

and coordinate the program but is not a funding recipient. A funding allocation from the MSRC would augment the South Coast AQMD's existing MAP funding and increase the number of trucks scrapped and new near-zero emission trucks placed into service. At least 89 truck replacements would be expected absent any other co-funding. The MSRC considered this partnership opportunity and approved an allocation of up to \$4,000,000 to augment the South Coast AQMD funding to implement the MAP as an element of the FYs 2018-21 Work Program.

#### Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities

The MSRC approved the release of PON #PON2020-01 under the FYs 2018-21 Work Program. The PON, with an initial targeted funding amount not to exceed \$20,000,000, solicits pre-proposals from owners and/or operators of warehouses, distribution centers, and logistics facilities located within the South Coast AQMD portions of Riverside or San Bernardino Counties describing how the organization would like to partner with the MSRC to implement air pollution reduction strategies and technologies at their facilities. The PON includes an open application period commencing with its release on December 6, 2019 and closing February 21, 2020. Upon receipt of a project concept, the MSRC could a) request a more detailed proposal for possible sole-source award; b) notify entities that an RFP will be issued at a later date; or c) decline the funding request.

#### Major Event Center Transportation Program

As part of its FYs 2018-21 Work Program, the MSRC allocated \$6.5 million for event center transportation programs and released Program Announcement #PA2019-03. The Program Announcement solicits applications from qualifying major event centers and/or transportation providers to provide transportation service for venues not currently served by sufficient transportation service. To date, the MSRC has awarded a total of \$1,631,783. The MSRC considered recommendations concerning an additional application submitted by Metro. Metro requested the MSRC to consider an award of \$2,188,899 to provide express bus service to Dodger Stadium for 2020 and 2021. For the 2020 season, service would be provided for one preseason game, 81 regular season games, one All-Star game, two special events, and up to ten post-season games. The 2021 season would have approximately 82 regular season games, two special events, and up to ten post-season games. Service would begin at least 90 minutes prior to game/event start time and would utilize "near-zero" CNG buses. Metro and the Los Angeles Dodgers are committed to provide at least \$3,011,026 in co-funding contributions to the administration and marketing of the project. The MSRC allocated an additional \$87,642 to the Program and approved a contract award to Metro in an amount not to exceed \$2,188,899 as part of the FYs 2018-21 Work Program for the Dodger Stadium Express bus service.

### **Contract Modification Request**

The MSRC considered six contract modification requests and took the following actions:

1. For the City of Los Angeles, General Services Department, Contract #ML14018, which provided \$810,000 to purchase 27 heavy-duty natural gas vehicles, a 29-month term extension;
2. For the San Bernardino County Transportation Authority, Contract #MS14072, which provided \$1,250,000 for a Signal Synchronization Partnership Program, a two-year term extension;
3. For the City of Yucaipa, Contract #ML16057, which provided \$380,000 to implement County Line Road “Complete Streets” Project, a one-year term extension;
4. For the City of San Fernando, Contract #ML16075, which provided \$354,000 to install Class I Bikeway, a one-year term extension;
5. For the City of Riverside, Contract #MS16110, which provided \$300,000 to expand CNG stations and modify maintenance facility, reduce the number of dispensers to be added to the Lincoln Station from three to one, add two dispensers to the Acorn Station, and a one-year term extension; and
6. For the Riverside County Transportation Commission, Contract #MS16124, which provided \$253,239 for extended freeway service patrols, a five-month term extension.

### **Received and Approved Final Reports**

The MSRC received and unanimously approved two final reports this month as follows:

1. City of Hermosa Beach, Contract # MS18012, which provided \$36,000 to construct new limited-access CNG station; and
2. City Rent A Bin DBA Serv-Wel Disposal, Contract MS18123, which provided \$200,000 to install new limited-access CNG infrastructure.

### **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 August 29 through October 30, 2019 is attached (*Attachment 2*) for your information.

### **Attachments**

Attachment 1 – Adopted 2020 Meeting Schedule

Attachment 2 – August 29 through October 30, 2019 Contracts Administrator’s Report



## 2020 MEETING SCHEDULE

### TAC Meeting Dates

Thursday, January 9  
(*second Thursday*)

Thursday, February 6

Thursday, March 5

Thursday, April 5

Thursday, May 7

Thursday, June 4

Thursday, August 6

Thursday, September 3

Thursday, October 1

Thursday, November 5

Thursday, December 10  
(*second Thursday*)

### MSRC Meeting Dates

Thursday, January 16

Thursday, February 20

Thursday, March 19

Thursday, April 16

Thursday, May 21

Thursday, June 18

Thursday, August 20

Thursday, September 17

Thursday, October 15

Thursday, November 19

Thursday, December 17

All regularly scheduled MSRC-TAC meetings are held on the first Thursday of every month at 1:30 p.m. in Conference Room CC8, unless otherwise noted. All regularly scheduled MSRC meetings are held on the third Thursday of every month at 2:00 p.m. in Board Conference Room CC8, unless otherwise noted.

Meeting agendas can be viewed on the MSRC's website at <http://www.cleantransportationfunding.org>.

MSRC Agenda Item No. 3

**DATE:** November 21, 2019

**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 August 29 to October 30, 2019.

**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 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 executed. 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 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 executed.

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 executed.

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 executed.

On June 1, 2018, the SCAQMD Governing Board approved six awards under the Local Government Partnership Program, one award under the Natural Gas Infrastructure Program, and one award under the County Transportation Commission Partnership Program. These contracts are with the prospective contractor for signature or executed.

On July 6, 2018, the SCAQMD Governing Board approved nine awards under the Local Government Partnership Program. These contracts are executed.

On September 7, 2018, the SCAQMD Governing Board approved nineteen awards under the Local Government Partnership Program, three awards under the County Transportation Commission Partnership Program, one award under the Major Event Center Transportation Program, and twenty awards under the Natural Gas Infrastructure Program. These contracts are under development, with the prospective contractor for signature, or executed.

On October 5, 2018, the SCAQMD Governing Board approved forty-eight awards under the Local Government Partnership Program and one award under the Hydrogen Infrastructure Program. These contracts are under development, with the prospective contractor for signature, with the SCAQMD Board Chair for signature, or executed.

On November 2, 2018, the SCAQMD Governing Board approved two awards under the Local Government Partnership Program. These contracts are executed.

**2018-21 Work Program**

On April 5, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is executed.

On September 5, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is under development.

**Work Program Status**

Contract Status Reports for work program years with open and/or pending contracts are attached.

***FY 2010-11 Work Program Contracts***

2 contracts from this work program year are open; and 18 are in “Open/Complete” status. 2 contracts closed during this period: KEC Engineering, Contract #MS11055 – Repower 5 Off-Road Vehicles; and Bear Valley Unified School District, Contract #MS11073 – Expand Existing CNG Station.

***FY 2010-11 Invoices Paid***

One invoice in the amount of \$30,000.00 was paid during this period.

***FY 2011-12 Work Program Contracts***

8 contracts from this work program year are open, and 18 are in “Open/Complete” status. 5 contracts closed during this period: City of Redlands, Contract #ML12039 – Purchase 3 Heavy-Duty Natural Gas Vehicles; Murrieta Valley Unified School District, Contract #MS12010 – Construct New Limited-Access CNG Station; Disneyland Resort, Contract #MS12035 – Purchase one Medium-Heavy-Duty Vehicle; 99 Cents Only Stores, Contract #MS12072 – Construct New CNG Station; and Arcadia Unified School District, Contract #MS12074 – Expand Existing CNG Station.

***FY 2011-12 Invoices Paid***

No invoices were paid during this period.

***FYs 2012-14 Work Program Contracts***

21 contracts from this work program year are open, and 30 are in “Open/Complete” status. 2 contracts entered “Open/Complete” status during this period: City of San Fernando, Contract #ML14062 – Expand Existing CNG Station; and City of Duarte, Contract #ML14067 – Purchase 2 Electric Buses.

***FYs 2012-14 Invoices Paid***

One invoice in the amount of \$60,000.00 was paid during this period.

***FYs 2014-16 Work Program Contracts***

49 contracts from this work program year are open, and 29 are in “Open/Complete” status. One contract closed during this period: City of Anaheim, Contract #ML16045 – Maintenance Facility Modifications. 3 contracts passed into “Open/Complete” status during this period: City of Los Angeles, Contract #ML16016 – Purchase 21 Heavy-Duty Natural Gas Vehicles; Los Angeles County Metropolitan Transportation Authority, Contract #MS16113 – Repower up to



125 Transit Buses; and Orange County Transportation Authority, Contract #MS16112 – Repower up to 98 Transit Buses.

*FYs 2014-16 Invoices Paid*

9 invoices totaling \$1,186,261.20 were paid during this period.

***FYs 2016-18 Work Program Contracts***

130 contracts from this work program year are open, and 6 are in “Open/Complete” status. 3 contracts passed into “Open/Complete” status during this period: City of Duarte, Contract #ML18033 – Purchase One Heavy-Duty ZEV; City of Agoura Hills, Contract #ML18040 – Install EV Charging Infrastructure; and City of Los Angeles, Bureau of Street Services, Contract #ML18086 – Install Sixty EV Charging Stations.

18 invoices totaling \$1,516,806.26 were paid during this period.

***Administrative Scope Changes***

8 administrative scope changes were initiated during the period of August 29 to October 30, 2019:

- Banning Unified School District, Contract #ML18112 (Install Limited Access CNG Station) – One-year term extension
- City of Agoura Hills, Contract #ML18040 (Install EV Charging Stations) – Reduce stations from four to two and value from \$50,000 to \$17,914
- County of Los Angeles, Contract #ML14030 (Bicycle Infrastructure & Education) – Three-month term extension
- City of Malibu, Contract #ML18044 (Install EV Charging Stations) – One-year term extension
- City of Torrance, Contract #ML16039 (Install EV Charging Stations) – One-year term extension
- San Bernardino County Transportation Authority, Contract #MS16096 (Install EV Charging Stations) – Extend term to June 30, 2020
- City of Beaumont, Contract #ML18081 (Install EV Charging Stations) – One-year term extension
- City of Highland, Contract #ML18096 (proposed) (Procure Light-Duty ZEV and Install EV Charging Stations) – Increase term one year

***Attachments***

- FY 2007-08 through FYs 2016-18 (except FY 2009-10) Contract Status Reports



## AB2766 Discretionary Fund Program Invoices

August 29 to October 30, 2019

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
<i>2010-2011 Work Program</i>							
10/2/2019	10/17/2019	10/17/2019	10/18/2019	ML11045	City of Newport Beach	1-FINAL	\$30,000.00
<b>Total: \$30,000.00</b>							
<i>2012-2014 Work Program</i>							
9/11/2019	9/24/2019	9/24/2019	9/26/2019	ML14067	City of Duarte	FINAL	\$60,000.00
<b>Total: \$60,000.00</b>							
<i>2014-2016 Work Program</i>							
9/17/2019	9/24/2019	9/24/2019	9/26/2019	MS16086	San Bernardino County Transportation Authority	6	\$119,787.36
10/16/2019	10/17/2019	10/17/2019	10/18/2019	MS16030	Better World Group Advisors	2063	\$13,702.50
9/17/2019	9/24/2019	9/24/2019	9/26/2019	MS16030	Better World Group Advisors	2049	\$9,060.00
9/19/2019	9/24/2019	9/24/2019	9/26/2019	MS16124	Riverside County Transportation Commission	02021	\$133,415.20
9/12/2019	9/24/2019	9/24/2019	9/26/2019	ML16045	City of Anaheim	003191/FIN	\$255,595.08
10/15/2019	10/17/2019	10/17/2019	10/18/2019	ML16016	City of Los Angeles, Department of General Serv	FINAL	\$90,000.00
10/29/2019	11/5/2019	11/5/2019	11/5/2019	ML16054	City of Yucaipa	1-FINAL	\$120,000.00
10/16/2019	10/17/2019	10/17/2019	10/18/2019	MS16029	Orange County Transportation Authority	FA140978	\$61,113.00
10/4/2019	10/17/2019	10/17/2019	10/18/2019	MS16029	Orange County Transportation Authority	FA140882	\$383,588.06
<b>Total: \$1,186,261.20</b>							
<i>2016-2018 Work Program</i>							
10/29/2019	11/5/2019	11/5/2019	11/5/2019	ML18045	City of Culver City Transportation Department	ML18045-01	\$51,000.00
10/29/2019	11/5/2019	11/5/2019	11/5/2019	MS18003	Geographics	21723/2177	\$746.00
9/11/2019	9/24/2019	9/24/2019	9/26/2019	ML18033	City of Duarte	FINAL	\$50,000.00
9/13/2019	9/24/2019	9/24/2019	9/26/2019	MS18003	Geographics	19-21724	\$119.25
10/24/2019	11/5/2019	11/5/2019	11/5/2019	ML18076	City of Culver City Transportation Department	ML18076-1-Fir	\$1,130.00
10/22/2019	11/5/2019	11/5/2019	11/5/2019	ML18127	City of La Puente	19-005	\$7,113.70
9/20/2019	9/24/2019	9/24/2019	9/26/2019	MS18123	City Rent A Bin DBA Serv-Wel Disposal	12113654	\$180,000.00
9/24/2019	9/24/2019	9/24/2019	9/26/2019	ML18020	City of Colton	1	\$35,667.00
10/1/2019	10/17/2019	10/17/2019	10/18/2019	MS18025	Los Angeles County MTA	800072590	\$20,281.70
10/1/2019	10/17/2019	10/17/2019	10/18/2019	MS18025	Los Angeles County MTA	800072591	\$12,224.45
10/4/2019	10/17/2019	10/17/2019	10/18/2019	ML18086	City of Los Angeles Bureau of Street Lighting	1001/FINAL	\$300,000.00

<b>Contract Admin.</b>	<b>MSRC Chair</b>	<b>MSRC Liaison</b>	<b>Finance</b>	<b>Contract #</b>	<b>Contractor</b>	<b>Invoice #</b>	<b>Amount</b>
10/16/2019	10/17/2019	10/17/2019	10/18/2019	MS18023	Riverside County Transportation Commission	02020	\$59,258.85
10/11/2019	10/17/2019	10/17/2019	10/18/2019	MS18025	Los Angeles County MTA	800072593	\$673,729.54
10/15/2019	10/17/2019	10/17/2019	10/18/2019	ML18038	City of Anaheim	2	\$21,659.27
10/15/2019	10/17/2019	10/17/2019	10/18/2019	MS18003	Geographics	19-21674	\$373.00
10/15/2019	10/17/2019	10/17/2019	10/18/2019	MS18003	Geographics	19-21774	\$369.50
10/16/2019	10/17/2019	10/17/2019	10/18/2019	ML18040	City of Agoura Hills	1-Final	\$17,914.00
9/19/2019	9/24/2019	9/24/2019	9/26/2019	MS18024	Riverside County Transportation Commission	02016	\$85,220.00

**Total: \$1,516,806.26**

**Total This Period: \$2,793,067.46**



## FYs 2006-07 Through 2016-18 AB2766 Contract Status Report

11/14/2019

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b><i>FY 2006-2007 Contracts</i></b>									
<b><i>Declined/Cancelled Contracts</i></b>									
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
<b>Total: 27</b>									
<b><i>Closed Contracts</i></b>									
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS07055	City of Culver City Transportation De	7/8/2008	9/7/2014		\$192,000.00	\$192,000.00	Six Nat. Gas Refuse Trucks	\$0.00	Yes
MS07056	City of Whittier	9/5/2008	3/4/2015		\$32,000.00	\$32,000.00	One Nat. Gas Refuse Trucks	\$0.00	Yes
MS07057	CR&R, Inc.	7/31/2008	8/30/2014	6/30/2015	\$896,000.00	\$896,000.00	28 Nat. Gas Refuse Trucks	\$0.00	Yes
MS07058	Better World Group Advisors	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 Sanita	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***

#### ***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
ML08028	City of Santa Monica	9/11/2009	9/10/2016	5/10/2019	\$600,000.00	\$200,000.00	24 CNG Heavy-Duty Vehicles	\$400,000.00	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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
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
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
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
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
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



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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: 62**

**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**

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
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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 2008-2009 Contracts***

#### ***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
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
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
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
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
ML09033	City of Beverly Hills	3/4/2011	5/3/2017	1/3/2019	\$550,000.00	\$550,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	\$0.00	No

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
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
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
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
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: 32**

**Open/Complete Contracts**

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
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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 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
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Total: 1

### 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	Catrac Construction, Inc.				\$500,000.00	\$0.00	Install DECS on Eight Off-Road Vehicles	\$500,000.00	No
MS11084	Ivanhoe Energy Services and Develo				\$66,750.00	\$0.00	Retrofit One H.D. Off-Road Vehicle Under S	\$66,750.00	No
MS11088	Diesel Emission Technologies				\$32,750.00	\$0.00	Retrofit Three H.D. Off-Road Vehicles Under	\$32,750.00	No
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
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
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
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?
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
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
ML11039	City of Ontario, Housing & Municipal	1/27/2012	9/26/2018		\$180,000.00	\$180,000.00	Purchase 6 Nat. Gas H.D. Vehicles	\$0.00	Yes
ML11042	City of Chino	2/17/2012	4/16/2018		\$30,000.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle, Repower	\$0.00	Yes
ML11043	City of Hemet Public Works	2/3/2012	2/2/2019		\$60,000.00	\$60,000.00	Purchase 2 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML11044	City of Ontario, Housing & Municipal	1/27/2012	6/26/2019		\$400,000.00	\$400,000.00	Expand Existing CNG Station	\$0.00	Yes
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
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
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
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
MS11056	Better World Group Advisors	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
MS11065	Temecula Valley Unified School Distr	8/11/2012	1/10/2019		\$50,000.00	\$48,539.62	Expansion of Existing CNG Station	\$1,460.38	No
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
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
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
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
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: 42**

**Closed/Incomplete Contracts**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
ML11032	City of Gardena	3/2/2012	9/1/2018	10/1/2020	\$102,500.00	\$102,500.00	Purchase Heavy-Duty CNG Vehicle, Install	\$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
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
ML11045	City of Newport Beach	2/3/2012	8/2/2018	3/2/2021	\$30,000.00	\$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle	\$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
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
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
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
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019	1/21/2020	\$175,000.00	\$175,000.00	New Limited Access CNG Station	\$0.00	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

**Total: 19**

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	11/23/2021	\$30,000.00	\$0.00	One Heavy-Duty Nat. Gas Vehicles	\$30,000.00	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
ML12057	City of Coachella	8/28/2013	8/27/2019	1/27/2022	\$57,456.00	\$57,456.00	Purchase One Nat. Gas H.D. Vehicle/Street	\$0.00	No
ML12090	City of Palm Springs	10/9/2015	10/8/2021	9/8/2025	\$21,163.00	\$0.00	EV Charging Infrastructure	\$21,163.00	No
ML12091	City of Bellflower	10/5/2018	10/4/2019	1/4/2020	\$100,000.00	\$0.00	EV Charging Infrastructure	\$100,000.00	No
MS12060	City of Santa Monica	4/4/2014	8/3/2017	8/3/2019	\$500,000.00	\$434,202.57	Implement Westside Bikeshare Program	\$65,797.43	No

**Total: 8**

#### **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
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
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
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
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
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



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
ML12056	City of Cathedral City	3/26/2013	5/25/2014		\$25,000.00	\$25,000.00	Regional Street Sweeping Program	\$0.00	Yes
ML12066	City of Manhattan Beach	1/7/2014	4/6/2015		\$5,900.00	\$5,900.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		\$300,000.00	\$211,170.00	Clean Fuel Transit Service to Dodger Stadiu	\$88,830.00	Yes
MS12002	Orange County Transportation Autho	9/7/2012	4/30/2013		\$342,340.00	\$333,185.13	Express Bus Service to Orange County Fair	\$9,154.87	Yes
MS12003	Orange County Transportation Autho	7/20/2012	2/28/2013		\$234,669.00	\$167,665.12	Implement Metrolink Service to Angel Stadiu	\$67,003.88	Yes
MS12005	USA Waste of California, Inc.	10/19/2012	8/18/2013		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12006	Waste Management Collection & Re	10/19/2012	8/18/2013		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
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
MS12012	Rim of the World Unified School Dist	12/20/2012	5/19/2014		\$75,000.00	\$75,000.00	Vehicle Maintenance Facility Modifications	\$0.00	Yes
MS12025	Silverado Stages, Inc.	11/2/2012	7/1/2018		\$150,000.00	\$150,000.00	Purchase Six Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12026	U-Haul Company of California	3/14/2013	3/13/2019		\$500,000.00	\$353,048.26	Purchase 23 Medium-Heavy Duty Vehicles	\$146,951.74	Yes
MS12028	Dy-Dee Service of Pasadena, Inc.	12/22/2012	1/21/2019		\$45,000.00	\$40,000.00	Purchase 2 Medium-Duty and 1 Medium-He	\$5,000.00	Yes
MS12029	Community Action Partnership of Or	11/2/2012	11/1/2018		\$25,000.00	\$14,850.00	Purchase 1 Medium-Heavy Duty Vehicle	\$10,150.00	Yes
MS12031	Final Assembly, Inc.	11/2/2012	11/1/2018		\$50,000.00	\$32,446.00	Purchase 2 Medium-Heavy Duty Vehicles	\$17,554.00	Yes
MS12032	Fox Transportation	12/14/2012	12/13/2018		\$500,000.00	\$500,000.00	Purchase 20 Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12035	Disneyland Resort	1/4/2013	7/3/2019		\$25,000.00	\$18,900.00	Purchase 1 Medium-Heavy Duty Vehicle	\$6,100.00	Yes
MS12036	Jim & Doug Carter's Automotive/VS	1/4/2013	11/3/2018		\$50,000.00	\$50,000.00	Purchase 2 Medium-Heavy Duty Vehicles	\$0.00	Yes
MS12058	Krisda Inc	4/24/2013	1/23/2019		\$25,000.00	\$25,000.00	Repower One Heavy-Duty Off-Road Vehicle	\$0.00	Yes
MS12059	Orange County Transportation Autho	2/28/2013	12/27/2014		\$75,000.00	\$75,000.00	Maintenance Facilities Modifications	\$0.00	Yes
MS12061	Orange County Transportation Autho	3/14/2014	3/13/2017		\$224,000.00	\$114,240.00	Transit-Oriented Bicycle Sharing Program	\$109,760.00	Yes
MS12062	Fraser Communications	12/7/2012	5/31/2014		\$998,669.00	\$989,218.49	Develop & Implement "Rideshare Thursday"	\$9,450.51	Yes
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		\$127,296.00	\$56,443.92	Implement Anaheim Circulator Service	\$70,852.08	Yes
MS12065	Orange County Transportation Autho	7/27/2013	11/30/2013		\$43,933.00	\$14,832.93	Ducks Express Service to Honda Center	\$29,100.07	Yes
MS12068	Southern California Regional Rail Au	3/1/2013	9/30/2013		\$57,363.00	\$47,587.10	Implement Metrolink Service to Autoclub Sp	\$9,775.90	Yes
MS12069	City of Irvine	8/11/2013	2/28/2014		\$45,000.00	\$26,649.41	Implement Special Transit Service to Solar	\$18,350.59	Yes
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
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
MS12076	City of Ontario, Housing & Municipal	3/8/2013	4/7/2015		\$75,000.00	\$75,000.00	Maintenance Facilities Modification	\$0.00	Yes
MS12078	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$73,107.00	Maintenance Facility Modifications - Vernon	\$1,893.00	Yes
MS12081	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$75,000.00	Maintenance Facility Modifications - Santa A	\$0.00	Yes
MS12085	Bear Valley Unified School District	4/25/2013	6/24/2014		\$75,000.00	\$75,000.00	Maintenance Facility Modifications	\$0.00	Yes
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
MS12087	Los Angeles County MTA	8/29/2013	11/28/2015		\$125,000.00	\$125,000.00	Implement Rideshare Incentives Program	\$0.00	Yes



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS12088	Orange County Transportation Autho	12/6/2013	3/5/2016		\$125,000.00	\$18,496.50	Implement Rideshare Incentives Program	\$106,503.50	Yes
MS12089	Riverside County Transportation Co	10/18/2013	9/17/2015		\$249,136.00	\$105,747.48	Implement Rideshare Incentives Program	\$143,388.52	No
MS12Hom	Mansfield Gas Equipment Systems				\$296,000.00	\$0.00	Home Refueling Apparatus Incentive Progra	\$296,000.00	No

**Total: 50**

**Closed/Incomplete Contracts**

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
MS12077	City of Coachella	6/14/2013	6/13/2020		\$225,000.00	\$0.00	Construct New CNG Station	\$225,000.00	No
MS12079	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		\$75,000.00	\$0.00	Maintenance Facility Modifications - Boyle H	\$75,000.00	No
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		\$150,000.00	\$0.00	Install New CNG Infrastructure	\$150,000.00	No

**Total: 4**

**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 Sanit	6/26/2013	5/25/2020	11/25/2021	\$950,000.00	\$950,000.00	32 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML12020	City of Los Angeles, Department of	9/27/2012	3/26/2019	3/26/2020	\$450,000.00	\$450,000.00	15 H.D. Nat. Gas Vehicles	\$0.00	Yes
ML12022	City of La Puente	12/6/2013	6/5/2020		\$110,000.00	\$110,000.00	2 Medium-Duty and Three Heavy-Duty CNG	\$0.00	Yes
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
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
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	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
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
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
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
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		\$150,000.00	\$150,000.00	Construct New CNG Station	\$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
MS12083	Brea Olinda Unified School District	7/30/2015	2/29/2024		\$59,454.00	\$59,454.00	Install New CNG Infrastructure	\$0.00	Yes

**Total: 18**

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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## 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
ML14021	Riverside County Regional Park and	7/24/2014	12/23/2016	9/30/2020	\$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	9/1/2020	\$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	9/1/2020	\$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	7/1/2024	\$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	1/8/2020	\$425,000.00	\$25,000.00	Bicycle Racks, Outreach & Education	\$400,000.00	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
ML14072	City of Cathedral City	8/13/2014	1/12/2021	7/12/2022	\$66,000.00	\$35,089.03	Install EV Charging, Bike Racks & Education	\$30,910.97	No
ML14096	County of Los Angeles Dept of Publi	5/3/2019	12/2/2019		\$150,000.00	\$0.00	San Gabriel BikeTrail Underpass Improveme	\$150,000.00	No
ML14097	County of Los Angeles Internal Servi	9/6/2019	9/5/2020		\$104,400.00	\$0.00	Electric Vehicle Charging Infrastructure	\$104,400.00	No
MS14037	Penske Truck Leasing Co., L.P.	4/7/2017	6/6/2020		\$75,000.00	\$0.00	Vehicle Maint. Fac. Modifications - Carson	\$75,000.00	No
MS14057	Los Angeles County MTA	11/7/2014	10/6/2019	10/6/2020	\$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	\$887,566.17	Implement Various Signal Synchronization P	\$362,433.83	No
MS14076	Rialto Unified School District	6/17/2015	2/16/2022	6/25/2023	\$225,000.00	\$213,750.00	New Public Access CNG Station	\$11,250.00	No
MS14079	Waste Resources, Inc.	9/14/2016	8/13/2022	2/13/2024	\$100,000.00	\$0.00	New Limited Access CNG Station	\$100,000.00	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

**Total: 21**

### 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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
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
ML14055	City of Highland	10/10/2014	3/9/2018	3/9/2019	\$500,000.00	\$489,385.24	Bicycle Lanes and Outreach	\$10,614.76	Yes
ML14056	City of Redlands	9/5/2014	5/4/2016	5/4/2018	\$125,000.00	\$125,000.00	Bicycle Lanes	\$0.00	Yes
ML14065	City of Orange	9/5/2014	8/4/2015		\$10,000.00	\$10,000.00	Electric Vehicle Charging Infrastructure	\$0.00	Yes
ML14070	City of Rancho Cucamonga	9/3/2016	12/2/2018		\$365,245.00	\$326,922.25	Bicycle Trail Improvements	\$38,322.75	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
ML14094	City of Yucaipa	6/9/2017	6/8/2018		\$84,795.00	\$84,795.00	Installation of Bicycle Lanes	\$0.00	Yes
ML14095	City of South Pasadena	1/10/2019	7/9/2019		\$142,096.00	\$134,182.09	Bicycle Trail Improvements	\$7,913.91	Yes
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	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

**Total: 31**

**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
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
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
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

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
<b>Total: 5</b>									
<b>Open/Complete Contracts</b>									
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
ML14019	City of Corona Public Works	12/5/2014	6/4/2020	3/6/2023	\$111,518.00	\$111,517.18	EV Charging, Bicycle Racks, Bicycle Locker	\$0.82	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 Infras., Bicycle L	\$9,639.37	Yes
ML14033	City of Irvine	7/11/2014	2/10/2021	2/10/2022	\$60,000.00	\$60,000.00	Purchase 2 H.D. CNG Vehicles	\$0.00	Yes
ML14034	City of Lake Elsinore	9/5/2014	5/4/2021		\$56,700.00	\$56,700.00	EV Charging Stations	\$0.00	Yes
ML14049	City of Moreno Valley	7/11/2014	3/10/2021		\$105,000.00	\$101,976.09	One HD Nat Gas Vehicle, EV Charging, Bicy	\$3,023.91	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
ML14062	City of San Fernando	3/27/2015	5/26/2021	10/31/2023	\$325,679.00	\$325,679.00	Expand Existing CNG Fueling Station	\$0.00	No
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
ML14067	City of Duarte	12/4/2015	1/3/2023	6/3/2024	\$60,000.00	\$60,000.00	Purchase Two Electric Buses	\$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
MS14075	Fullerton Joint Union High School Di	7/22/2016	11/21/2023		\$300,000.00	\$293,442.00	Expansion of Existing CNG Infrastructure/Ma	\$6,558.00	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
MS14082	Grand Central Recycling & Transfer	12/4/2015	3/3/2023	3/3/2024	\$150,000.00	\$150,000.00	Construct New Public Access CNG Station	\$0.00	Yes
MS14084	US Air Conditioning Distributors	5/7/2015	9/6/2021		\$100,000.00	\$100,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS14090	City of Monterey Park	5/7/2015	5/6/2021		\$225,000.00	\$225,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
<b>Total: 30</b>									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2014-2016 Contracts</b>									
<b>Open Contracts</b>									
ML16006	City of Cathedral City	4/27/2016	4/26/2022		\$25,000.00	\$0.00	Purchase 1 H.D. Nat. Gas Vehicle, Bicycle	\$25,000.00	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	5/19/2025	\$60,000.00	\$0.00	Purchase 3 Medium-Duty and 1 Heavy-Duty	\$60,000.00	No
ML16010	City of Fullerton	10/7/2016	4/6/2023		\$370,500.00	\$27,896.71	Expand Existing CNG Station, EV Charging I	\$342,603.29	No
ML16017	City of Long Beach	2/5/2016	8/4/2023		\$1,445,400.00	\$1,131,400.00	Purchase 50 Medium-Duty, 17 H.D. Nat. Ga	\$314,000.00	No
ML16018	City of Hermosa Beach	10/7/2016	1/6/2023		\$29,520.00	\$23,768.44	Purchase 2 M.D. Nat. Gas Vehicles, Bicycle	\$5,751.56	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
ML16022	Los Angeles Department of Water an	5/5/2017	3/4/2024	9/4/2025	\$360,000.00	\$0.00	Purchase 12 H.D. Nat. Gas Vehicles	\$360,000.00	No
ML16025	City of South Pasadena	6/22/2016	4/21/2023	10/21/2024	\$160,000.00	\$0.00	Purchase H.D. Nat. Gas Vehicle, Expand Ex	\$160,000.00	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	7/10/2020	\$500,000.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$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	9/5/2023	\$32,000.00	\$0.00	Install EV Charging Infrastructure	\$32,000.00	No
ML16040	City of Eastvale	1/6/2017	7/5/2022	7/5/2024	\$110,000.00	\$0.00	Install EV Charging Infrastructure	\$110,000.00	No
ML16041	City of Moreno Valley	9/3/2016	1/2/2021	7/2/2023	\$20,000.00	\$0.00	Install EV Charging Infrastructure	\$20,000.00	No
ML16042	City of San Dimas	4/1/2016	12/31/2019	12/31/2021	\$55,000.00	\$0.00	Install EV Charging Infrastructure	\$55,000.00	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	8/5/2021	\$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	9/30/2020	\$315,576.00	\$0.00	Install Two Class 1 Bikeways	\$315,576.00	No
ML16053	City of Claremont	3/11/2016	7/10/2018	5/10/2020	\$498,750.00	\$0.00	Implement a "Complete Streets" Pedestrian	\$498,750.00	No
ML16057	City of Yucaipa	4/27/2016	1/26/2019	1/26/2020	\$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
ML16069	City of West Covina	3/10/2017	6/9/2021		\$54,199.00	\$0.00	Installation of EV Charging Infrastructure	\$54,199.00	No
ML16070	City of Beverly Hills	2/21/2017	6/20/2023		\$90,000.00	\$0.00	Purchase 3 H.D. Nat. Gas Vehicles	\$90,000.00	No
ML16071	City of Highland	5/5/2017	1/4/2020	1/4/2022	\$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	2/26/2020	\$354,000.00	\$0.00	Install a Class 1 Bikeway	\$354,000.00	No
ML16077	City of Rialto	5/3/2018	10/2/2021	2/2/2023	\$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
ML16122	City of Wildomar	6/8/2018	6/7/2019		\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
ML16126	City of Palm Springs	7/31/2019	7/30/2020		\$40,000.00	\$0.00	Install Bicycle Racks, and Implement Bicycle	\$40,000.00	No
MS16029	Orange County Transportation Autho	1/12/2018	6/11/2020		\$836,413.00	\$526,701.06	TCM Partnership Program - OC Bikeways	\$309,711.94	No
MS16030	Better World Group Advisors	12/19/2015	12/31/2017	12/31/2019	\$271,619.00	\$226,561.68	Programmic Outreach Services to the MSR	\$45,057.32	No
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		\$800,625.00	\$349,377.27	Freeway Service Patrols	\$451,247.73	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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
MS16110	City of Riverside	10/6/2017	2/5/2025		\$300,000.00	\$0.00	Expansion of Existing CNG Station and Main	\$300,000.00	No
MS16115	City of Santa Monica	4/14/2017	7/13/2025		\$870,000.00	\$356,250.00	Repower 58 Transit Buses	\$513,750.00	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	11/30/2026	\$600,000.00	\$14,250.00	Repower 39 and Purchase 1 New Transit Bu	\$585,750.00	No
MS16123	Orange County Transportation Autho	12/7/2018	11/6/2023		\$91,760.00	\$0.00	Install La Habra Union Pacific Bikeway	\$91,760.00	No
MS16124	Riverside County Transportation Co	12/14/2018	12/14/2019		\$253,239.00	\$162,284.40	Extended Freeway Service Patrols	\$90,954.60	No
MS16125	San Bernardino County Transportatio	9/20/2019	11/19/2020		\$1,000,000.00	\$0.00	Traffic Signal Synchronization Projects	\$1,000,000.00	No

**Total: 47**

#### 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
MS16106	City of Lawndale	3/1/2019	11/30/2025		\$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
MS16111	VNG 925 Lakeview Avenue, LLC				\$150,000.00	\$0.00	Construct Public Access CNG Station in Pla	\$150,000.00	No

**Total: 13**

#### Closed Contracts

ML16009	City of Fountain Valley	10/6/2015	2/5/2018	5/5/2019	\$46,100.00	\$46,100.00	Install EV Charging Infrastructure	\$0.00	No
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		\$85,000.00	\$85,000.00	Install Bicycle Lanes	\$0.00	No
ML16020	City of Pomona	4/1/2016	2/1/2018	8/1/2018	\$440,000.00	\$440,000.00	Install Road Surface Bicycle Detection Syste	\$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



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16035	City of Wildomar	4/1/2016	11/1/2017		\$500,000.00	\$0.00	Install Bicycle Lanes	\$500,000.00	No
ML16036	City of Brea	3/4/2016	12/3/2018		\$500,000.00	\$500,000.00	Install a Class 1 Bikeway	\$0.00	Yes
ML16045	City of Anaheim	6/22/2016	8/21/2019		\$275,000.00	\$255,595.08	Maintenance Facility Modifications	\$19,404.92	Yes
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
ML16054	City of Yucaipa	3/26/2016	7/26/2018	10/25/2019	\$120,000.00	\$120,000.00	Implement a "Complete Streets" Pedestrian	\$0.00	Yes
ML16060	City of Cudahy	2/5/2016	10/4/2017		\$73,910.00	\$62,480.00	Implement an "Open Streets" Event	\$11,430.00	No
ML16064	County of Orange, OC Parks	2/21/2017	10/20/2018		\$204,073.00	\$157,632.73	Implement "Open Streets" Events with Vario	\$46,440.27	No
ML16066	City of Long Beach Public Works	1/13/2017	9/12/2018		\$75,050.00	\$63,763.62	Implement an "Open Streets" Event	\$11,286.38	Yes
ML16068	Riverside County Dept of Public Heal	12/2/2016	8/1/2018		\$171,648.00	\$171,648.00	Implement "Open Streets" Events with Vario	\$0.00	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
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	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
MS16092	San Bernardino County Transportatio	2/3/2017	1/2/2019		\$242,937.00	\$242,016.53	Implement a Series of "Open Streets" Event	\$920.47	No
MS16093	Orange County Transportation Autho	9/3/2016	3/2/2018	9/2/2018	\$1,553,657.00	\$1,499,575.85	Implement a Mobile Ticketing System	\$54,081.15	No
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
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	Yes
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: 31**

#### Closed/Incomplete Contracts

ML16005	City of Palm Springs	3/4/2016	10/3/2017		\$40,000.00	\$0.00	Install Bicycle Racks, and Implement Bicycle	\$40,000.00	No
MS16082	Riverside County Transportation Co	9/3/2016	8/2/2018		\$590,759.00	\$337,519.71	Extended Freeway Service Patrols	\$253,239.29	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

**Total: 3**

#### 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
ML16013	City of Monterey Park	12/4/2015	7/3/2022	7/3/2024	\$90,000.00	\$90,000.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	\$0.00	No
ML16016	City of Los Angeles, Department of	2/5/2016	12/4/2022		\$630,000.00	\$630,000.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	\$0.00	No
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		\$49,400.00	\$49,399.00	Install EV Charging Infrastructure	\$1.00	No
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
ML16056	City of Ontario	3/23/2016	9/22/2020	9/22/2021	\$106,565.00	\$106,565.00	Expansion of an Existing CNG Station	\$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		\$21,003.82	\$21,003.82	Installation of EV Charging Infrastructure	\$0.00	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
ML16076	City of San Fernando	2/21/2017	8/20/2021		\$43,993.88	\$43,993.88	Install EV Charging Infrastructure	\$0.00	No
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
MS16087	Burrtec Waste & Recycling Services,	7/8/2016	3/7/2023		\$100,000.00	\$100,000.00	Construct New Limited-Access CNG Station	\$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
MS16097	Walnut Valley Unified School District	10/7/2016	11/6/2022		\$250,000.00	\$250,000.00	Expand CNG Station & Modify Maintenance	\$0.00	No
MS16102	Nasa Services, Inc.	2/21/2017	4/20/2023		\$100,000.00	\$100,000.00	Construct a Limited-Access CNG Station	\$0.00	No
MS16103	Arrow Services, Inc.	2/3/2017	4/2/2023		\$100,000.00	\$100,000.00	Construct a Limited-Access CNG Station	\$0.00	Yes
MS16105	Huntington Beach Union High School	3/3/2017	7/2/2024		\$175,000.00	\$175,000.00	Expansion of Existing CNG Infrastructure	\$0.00	Yes
MS16112	Orange County Transportation Autho	4/14/2017	3/13/2024		\$1,470,000.00	\$1,470,000.00	Repower Up to 98 Transit Buses	\$0.00	No
MS16113	Los Angeles County MTA	5/12/2017	4/11/2024		\$1,875,000.00	\$1,875,000.00	Repower Up to 125 Transit Buses	\$0.00	Yes
MS16114	City of Norwalk	3/3/2017	6/2/2024		\$45,000.00	\$32,170.00	Purchase 3 Transit Buses	\$12,830.00	Yes
MS16116	Riverside Transit Agency	3/3/2017	1/2/2023		\$10,000.00	\$9,793.00	Purchase One Transit Bus	\$207.00	No

**Total: 30**



Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
<b>FY 2016-2018 Contracts</b>									
<b>Open Contracts</b>									
ML18019	City of Hidden Hills	5/3/2018	5/2/2022	5/2/2023	\$49,999.00	\$43,427.00	Purchase Two Light-Duty ZEVs and EVSE	\$6,572.00	No
ML18020	City of Colton	5/3/2018	4/2/2024		\$67,881.00	\$35,667.00	Purchase One Medium-Duty and One Heavy	\$32,214.00	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
ML18028	City of Artesia	6/28/2018	3/27/2025		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18030	City of Grand Terrace	6/28/2018	3/27/2022	3/27/2025	\$45,000.00	\$0.00	Install EVSE	\$45,000.00	No
ML18031	City of Diamond Bar	9/7/2018	11/6/2025		\$73,930.00	\$0.00	Install EVSE, Purchase up to 2-LD Vehicles	\$73,930.00	No
ML18032	City of Arcadia	2/1/2019	4/30/2025		\$24,650.00	\$0.00	Purchase 1 Heavy-Duty Near-ZEV	\$24,650.00	No
ML18034	City of Calabasas	6/8/2018	3/7/2022		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18035	City of Westlake Village	8/8/2018	11/7/2022		\$50,000.00	\$0.00	Install EVSE	\$50,000.00	No
ML18036	City of Indian Wells	8/8/2018	5/7/2023		\$50,000.00	\$0.00	Install EV Charging Station	\$50,000.00	No
ML18037	City of Westminster	6/28/2018	6/27/2024	12/27/2026	\$120,900.00	\$0.00	Install EVSE, Purchase up to 3-LD ZEV & 1-	\$120,900.00	No
ML18038	City of Anaheim	10/5/2018	5/4/2025		\$221,500.00	\$71,659.27	Purchase 5 Light-Duty ZEVs and Install EVS	\$149,840.73	No
ML18039	City of Redlands	6/28/2018	7/27/2024	1/27/2025	\$87,000.00	\$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	\$87,000.00	No
ML18041	City of West Hollywood	8/8/2018	12/7/2023		\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18043	City of Yorba Linda	9/7/2018	12/6/2023		\$87,990.00	\$0.00	Install EV Charging Infrastructure	\$87,990.00	No
ML18044	City of Malibu	8/8/2018	10/7/2022		\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18045	City of Culver City Transportation De	6/28/2018	6/27/2025		\$51,000.00	\$51,000.00	Purchase Eight Near-Zero Vehicles	\$0.00	No
ML18046	City of Santa Ana	11/9/2018	7/8/2026		\$385,000.00	\$0.00	Purchase 6 Light-Duty ZEVs, 9 Heavy-Duty	\$385,000.00	No
ML18047	City of Whittier	8/8/2018	4/7/2026		\$113,910.00	\$0.00	Purchase 5 Heavy-Duty Near-Zero Emission	\$113,910.00	No
ML18048	City of Lynwood	6/28/2018	10/27/2024		\$93,500.00	\$0.00	Purchase Up to 3 Medium-Duty Zero-Emissi	\$93,500.00	No
ML18049	City of Downey	7/6/2018	5/5/2023		\$148,260.00	\$0.00	Install EV Charging Stations	\$148,260.00	No
ML18050	City of Irvine	9/7/2018	8/6/2028		\$330,490.00	\$0.00	Purchase 1 Medium/Heavy-Duty ZEV and In	\$330,490.00	No
ML18051	City of Rancho Cucamonga	3/1/2019	10/31/2025		\$227,040.00	\$0.00	Purchase 9 Light-Duty ZEVs, 2 Med-Duty Z	\$227,040.00	No
ML18052	City of Garden Grove	8/8/2018	10/7/2022		\$53,593.00	\$0.00	Purchase 4 L.D. ZEVs and Infrastructure	\$53,593.00	No
ML18053	City of Paramount	9/7/2018	3/6/2023		\$64,675.00	\$0.00	Install EV Charging Infrastructure	\$64,675.00	No
ML18054	City of La Habra Heights	8/8/2018	4/7/2022		\$9,200.00	\$0.00	Purchase 1 L.D. ZEV	\$9,200.00	No
ML18055	City of Long Beach Fleet Services B	11/29/2018	11/28/2026		\$622,220.00	\$198,581.82	Install EV Charging Stations	\$423,638.18	No
ML18056	City of Chino	3/29/2019	9/28/2023		\$103,868.00	\$0.00	Install EV Charging Infrastructure	\$103,868.00	No
ML18057	City of Carson	10/5/2018	7/4/2023		\$106,250.00	\$0.00	Purchase 5 Zero-Emission Vehicles and Infr	\$106,250.00	No
ML18058	City of Perris	10/12/2018	11/11/2024		\$94,624.00	\$0.00	Purchase 1 Med. H.D. ZEV and EV Chargin	\$94,624.00	No
ML18059	City of Glendale Water & Power	2/1/2019	7/31/2026		\$260,500.00	\$0.00	Install Electric Vehicle Charging Infrastructur	\$260,500.00	No
ML18060	County of Los Angeles Internal Servi	10/5/2018	8/4/2026		\$1,367,610.00	\$0.00	Purchase 29 Light-Duty Zero Emission Vehi	\$1,367,610.00	No
ML18061	City of Moreno Valley	4/9/2019	2/8/2025		\$25,000.00	\$0.00	Purchase 1 Heavy-Duty Near-ZEV	\$25,000.00	No
ML18063	City of Riverside	6/7/2019	1/6/2027		\$383,610.00	\$0.00	Expand Existing CNG Station	\$383,610.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18064	City of Eastvale	11/29/2018	4/28/2026		\$80,400.00	\$0.00	Purchase 2 Light-Duty, One Medium-Duty. Z	\$80,400.00	No
ML18067	City of Pico Rivera	9/7/2018	11/6/2022		\$83,500.00	\$0.00	Instal EVSE	\$83,500.00	No
ML18068	City of Mission Viejo	7/31/2019	6/30/2027		\$125,690.00	\$0.00	Purchase 2 Light-Duty ZEVs, Install EVSE &	\$125,690.00	No
ML18069	City of Torrance	3/1/2019	7/31/2027		\$187,400.00	\$0.00	Purchase 4 Heavy-Duty Near-Zero Emission	\$187,400.00	No
ML18070	City of Lomita	11/29/2018	6/28/2022		\$6,250.00	\$0.00	Purchase 1 Light-Duty ZEV	\$6,250.00	No
ML18071	City of Chino Hills	9/7/2018	10/6/2022		\$30,000.00	\$0.00	Purchase 2 Light-Duty ZEVs and Install EVS	\$30,000.00	No
ML18072	City of Anaheim	12/18/2018	11/17/2026		\$239,560.00	\$0.00	Purchase 9 Light-Duty ZEVs & 2 Med/Hvy-D	\$239,560.00	No
ML18074	City of Buena Park	12/14/2018	6/13/2026		\$107,960.00	\$0.00	EV Charging Infrastructure	\$107,960.00	No
ML18076	City of Culver City Transportation De	10/5/2018	10/4/2023		\$1,130.00	\$1,130.00	Purchase Light-Duty ZEV	\$0.00	No
ML18077	City of Orange	11/2/2018	10/1/2022		\$59,776.00	\$0.00	Four Light-Duty ZEV and EV Charging Infr	\$59,776.00	No
ML18078	County of Riverside	10/5/2018	10/4/2028		\$425,000.00	\$100,000.00	Purchase 17 Heavy-Duty Vehicles	\$325,000.00	No
ML18079	City of Pasadena	12/7/2018	11/6/2023		\$183,670.00	\$100,000.00	EV Charging Infrastructure	\$83,670.00	No
ML18080	City of Santa Monica	1/10/2019	12/9/2023		\$121,500.00	\$0.00	Install EV Charging Stations	\$121,500.00	No
ML18081	City of Beaumont	10/5/2018	10/4/2022		\$31,870.00	\$0.00	EV Charging Infrastructure	\$31,870.00	No
ML18082	City of Los Angeles Bureau of Sanita	8/30/2019	8/29/2028		\$900,000.00	\$0.00	Purchase Medium-Duty Vehicles and EV Ch	\$900,000.00	No
ML18083	City of San Fernando	11/2/2018	11/1/2022		\$20,000.00	\$0.00	Implement Traffic Signal Synchronization	\$20,000.00	No
ML18084	City of South El Monte	10/18/2019	9/17/2023		\$30,000.00	\$0.00	EV Charging Infrastructure	\$30,000.00	No
ML18085	City of Orange	4/12/2019	10/11/2026		\$50,000.00	\$0.00	Purchase Two Heavy-Duty Near-Zero Emiss	\$50,000.00	No
ML18087	City of Murrieta	3/29/2019	3/28/2025		\$143,520.00	\$0.00	Install Four EV Charging Stations	\$143,520.00	No
ML18088	City of Big Bear Lake	11/29/2018	8/28/2020		\$50,000.00	\$0.00	Install Bicycle Trail	\$50,000.00	No
ML18089	City of Glendora	7/19/2019	4/18/2025		\$50,760.00	\$0.00	Purchase a medium-duty ZEV	\$50,760.00	No
ML18090	City of Santa Clarita	5/9/2019	2/8/2023		\$122,000.00	\$0.00	Install Nine EV Charging Stations	\$122,000.00	No
ML18091	City of Temecula	1/19/2019	7/18/2023		\$141,000.00	\$0.00	Install Sixteen EV Charging Stations	\$141,000.00	No
ML18092	City of South Pasadena	2/1/2019	1/31/2025		\$50,000.00	\$0.00	Procure Two Light-Duty ZEVs and Install EV	\$50,000.00	No
ML18093	City of Monterey Park	2/1/2019	2/28/2026		\$25,000.00	\$0.00	Purchase Heavy-Duty Near-ZEV	\$25,000.00	No
ML18094	City of Laguna Woods	7/12/2019	12/11/2024		\$50,000.00	\$0.00	Install Two EV Charging Stations	\$50,000.00	No
ML18095	City of Gardena	11/9/2018	12/8/2024		\$25,000.00	\$0.00	Purchase Heavy-Duty Near-ZEV	\$25,000.00	No
ML18097	City of Temple City	11/29/2018	7/28/2022		\$16,000.00	\$0.00	Purchase Two Light-Duty ZEVs	\$16,000.00	No
ML18098	City of Redondo Beach	2/1/2019	3/31/2023		\$89,400.00	\$0.00	Install Six EV Charging Stations	\$89,400.00	No
ML18099	City of Laguna Hills	3/1/2019	5/31/2023		\$32,250.00	\$0.00	Install Six EV Charging Stations	\$32,250.00	No
ML18101	City of Burbank	2/1/2019	4/30/2024		\$137,310.00	\$0.00	Install Twenty EV Charging Stations	\$137,310.00	No
ML18126	City of Lomita	12/7/2018	1/6/2020		\$26,500.00	\$0.00	Install bicycle racks and lanes	\$26,500.00	No
ML18127	City of La Puente	2/1/2019	2/28/2023		\$27,800.00	\$7,113.70	Purchase One Light-Duty ZEV & Install One	\$20,686.30	No
ML18128	City of Aliso Viejo	8/30/2019	11/29/2023		\$65,460.00	\$0.00	Purchase Two Light-Duty ZEVs and Install S	\$65,460.00	No
ML18129	City of Yucaipa	12/14/2018	3/13/2023		\$63,097.00	\$0.00	Install Six EV Charging Stations	\$63,097.00	No
ML18130	City of Lake Forest	3/1/2019	9/30/2022		\$106,480.00	\$0.00	Install Twenty-One EVSEs	\$106,480.00	No
ML18131	City of Los Angeles, Police Departm	5/3/2019	12/2/2022		\$19,294.00	\$0.00	Purchase Three Light-Duty ZEVs	\$19,294.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18132	City of Montclair	4/5/2019	9/4/2023		\$50,000.00	\$0.00	Install Eight EVSEs	\$50,000.00	No
ML18133	City of Rancho Mirage	12/7/2018	11/6/2020		\$50,000.00	\$0.00	Traffic Signal Synchronization	\$50,000.00	No
ML18134	City of Los Angeles, Department of	5/3/2019	5/2/2028		\$290,000.00	\$0.00	Purchase Five Medium-Duty ZEVs	\$290,000.00	No
ML18136	City of Orange	4/12/2019	8/11/2024		\$42,500.00	\$0.00	Purchase Four Light-Duty ZEVs and Install	\$42,500.00	No
ML18137	City of Wildomar	3/1/2019	5/31/2021		\$50,000.00	\$0.00	Install Bicycle Trail	\$50,000.00	No
ML18138	City of La Canada Flintridge	2/8/2019	5/7/2023		\$50,000.00	\$9,499.90	Install Four EVSEs and Install Bicycle Racks	\$40,500.10	No
ML18139	City of Calimesa	8/30/2019	7/29/2020		\$50,000.00	\$0.00	Install Bicycle Lane	\$50,000.00	No
ML18140	City of Bell Gardens	12/14/2018	12/13/2028		\$50,000.00	\$0.00	Purchase Two Heavy-Duty Near-ZEVs	\$50,000.00	No
ML18142	City of La Quinta	4/24/2019	2/23/2023		\$51,780.00	\$0.00	Install Two EV Charging Stations	\$51,780.00	No
ML18143	City of La Habra	10/18/2019	9/17/2025		\$80,700.00	\$0.00	Install Two EV Charging Stations	\$80,700.00	No
ML18144	City of Fontana Public Works	10/4/2019	12/3/2023		\$269,090.00	\$0.00	Install Twelve EVSEs	\$269,090.00	No
ML18146	City of South Gate	3/1/2019	11/30/2023		\$127,400.00	\$0.00	Purchase Five Light-Duty ZEVs and Install T	\$127,400.00	No
ML18147	City of Palm Springs	1/10/2019	1/9/2024		\$60,000.00	\$0.00	Install Eighteen EV Charging Stations	\$60,000.00	No
ML18153	City of Cathedral City	5/3/2019	4/2/2025		\$52,215.00	\$0.00	Install EV Charging Infrastructure	\$52,215.00	No
ML18155	City of Claremont	7/31/2019	9/30/2023		\$50,000.00	\$0.00	Install EV Charging Infrastructure	\$50,000.00	No
ML18156	City of Covina	2/1/2019	3/31/2023		\$63,800.00	\$0.00	Purchase Four Light-Duty ZEVs and EV Cha	\$63,800.00	No
ML18157	City of Los Angeles Bureau of Street	6/21/2019	5/20/2027		\$85,000.00	\$0.00	Purchase One Medium-Duty ZEV	\$85,000.00	No
ML18160	City of Irwindale	3/29/2019	12/28/2022		\$14,263.00	\$0.00	Purchase Two Light-Duty ZEVs	\$14,263.00	No
ML18161	City of Indio	5/3/2019	10/2/2025		\$50,000.00	\$0.00	Purchase 1 Light-Duty Zero Emission, 1 Hea	\$50,000.00	No
ML18163	City of San Clemente	3/8/2019	12/7/2024		\$85,000.00	\$0.00	Purchase Three Light-Duty ZEVs and EV Ch	\$85,000.00	No
ML18165	City of Baldwin Park	2/1/2019	1/30/2024		\$49,030.00	\$0.00	Expand CNG Station	\$49,030.00	No
ML18167	City of Beverly Hills	3/29/2019	6/28/2025		\$50,000.00	\$0.00	Purchase Two Heavy-Duty Near-Zero Emiss	\$50,000.00	No
ML18168	City of Maywood	3/29/2019	11/28/2022		\$7,059.00	\$0.00	Purchase EV Charging Infrastructure	\$7,059.00	No
ML18169	City of Alhambra	6/14/2019	8/13/2024		\$111,980.00	\$0.00	Install EV Charging Infrastructure	\$111,980.00	No
ML18171	City of El Monte	3/1/2019	4/30/2025		\$119,757.00	\$0.00	Purchase One Heavy-Duty ZEVs and EV Ch	\$119,757.00	No
ML18172	City of Huntington Park	3/1/2019	2/28/2025		\$65,450.00	\$0.00	Purchase One Heavy-Duty ZEV	\$65,450.00	No
ML18173	City of Manhattan Beach	3/29/2019	2/28/2023		\$49,000.00	\$0.00	Purchase Two Light-Duty ZEVs and EV Cha	\$49,000.00	No
ML18176	City of Coachella	3/1/2019	11/30/2024		\$58,020.00	\$0.00	Install EV Charging Stations	\$58,020.00	No
ML18177	City of San Bernardino	6/7/2019		12/6/2026	\$279,088.00	\$0.00	Purchase Medium- and Heavy-Duty Evs and	\$279,088.00	No
ML18178	City of La Puente	11/1/2019	11/30/2025		\$25,000.00	\$0.00	Purchase One Heavy-Duty Near-Zero Emiss	\$25,000.00	No
MS18002	Southern California Association of G	6/9/2017	11/30/2018	10/31/2020	\$2,500,000.00	\$593,455.98	Regional Active Transportation Partnership	\$1,906,544.02	No
MS18003	Geographics	2/21/2017	2/20/2021		\$70,453.00	\$56,225.61	Design, Host and Maintain MSRC Website	\$14,227.39	No
MS18005	Orange County Transportation Autho	1/5/2018	4/30/2019		\$834,222.00	\$834,222.00	Clean Fuel Bus Service to OC Fair	\$0.00	No
MS18006	Anaheim Transportation Network	10/6/2017	2/28/2020		\$219,564.00	\$9,488.22	Implement Anaheim Circulator Service	\$210,075.78	No
MS18009	Penske Truck Leasing Co., L.P.	8/8/2018	12/7/2020		\$82,500.00	\$0.00	Modify Maintenance Facility & Train Technici	\$82,500.00	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
MS18014	Regents of the University of Californi	10/5/2018	12/4/2019		\$254,795.00	\$206,604.79	Planning for EV Charging Infrastructure Inve	\$48,190.21	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS18015	Southern California Association of G	7/13/2018	2/28/2021		\$2,000,000.00	\$0.00	Southern California Future Communities Par	\$2,000,000.00	No
MS18023	Riverside County Transportation Co	6/28/2018	6/27/2021		\$500,000.00	\$119,979.39	Weekend Freeway Service Patrols	\$380,020.61	No
MS18024	Riverside County Transportation Co	6/28/2018	8/27/2021		\$1,500,000.00	\$315,890.00	Vanpool Incentive Program	\$1,184,110.00	No
MS18025	Los Angeles County MTA	11/29/2018	5/31/2019		\$1,324,560.00	\$706,235.69	Special Bus and Train Service to Dodger Sta	\$618,324.31	No
MS18026	Omnitrans	10/5/2018	1/4/2020		\$83,000.00	\$0.00	Modify Vehicles Maintenance Facility and Tr	\$83,000.00	No
MS18027	City of Gardena	11/2/2018	9/1/2026		\$365,000.00	\$0.00	Install New Limited Access CNG, Modify Mai	\$365,000.00	No
MS18029	Irvine Ranch Water District	8/8/2018	10/7/2024		\$185,000.00	\$0.00	Install New Limited Access CNG Station & T	\$185,000.00	No
MS18065	San Bernardino County Transportatio	3/29/2019	8/28/2023		\$2,000,000.00	\$0.00	Implement Metrolink Line Fare Discount Pro	\$2,000,000.00	No
MS18073	Los Angeles County MTA	1/10/2019	2/9/2026		\$2,000,000.00	\$0.00	Purchase 40 Zero-Emission Transit Buses	\$2,000,000.00	No
MS18102	Orange County Transportation Autho	10/4/2019	5/31/2020		\$1,146,000.00	\$0.00	Implement OC Flex Micro-Transit Pilot Proje	\$1,146,000.00	No
MS18103	Orange County Transportation Autho	2/8/2019	9/7/2020		\$642,000.00	\$0.00	Install Hydrogen Detection System	\$642,000.00	No
MS18106	R.F. Dickson Co., Inc.	7/19/2019	1/18/2026		\$265,000.00	\$0.00	Expansion of Existing Infrastructure/Mechani	\$265,000.00	No
MS18108	Capistrano Unified School District	2/1/2019	5/30/2025		\$116,000.00	\$0.00	Expansion of Existing Infrastructure & Train	\$116,000.00	No
MS18110	Mountain View Unified School Distric	2/1/2019	3/31/2025		\$275,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$275,000.00	No
MS18112	Banning Unified School District	11/29/2018	11/28/2024	11/28/2025	\$275,000.00	\$0.00	Install New CNG Infrastructure	\$275,000.00	No
MS18115	City of Commerce	6/7/2019	12/6/2025		\$275,000.00	\$0.00	Expansion of Existing L/CNG Infrastructure	\$275,000.00	No
MS18117	City of San Bernardino	6/7/2019	11/6/2025		\$240,000.00	\$0.00	Expansion of Existing CNG Infrastructure/Me	\$240,000.00	No
MS18118	City of Beverly Hills	3/29/2019	7/28/2025		\$85,272.00	\$0.00	Expansion of Existing CNG Infrastructure	\$85,272.00	No
MS18120	City of Redondo Beach	2/1/2019	9/30/2025		\$275,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$275,000.00	No
MS18122	Universal Waste Systems, Inc.	2/1/2019	3/31/2025		\$200,000.00	\$0.00	Install New Limited Access CNG Infrastructur	\$200,000.00	No
MS18123	City Rent A Bin DBA Serv-Wel Dispo	12/14/2018	2/13/2025		\$200,000.00	\$180,000.00	Install New Limited-Access CNG Infrastructu	\$20,000.00	No
MS18124	County Sanitation Districts of Los An	7/31/2019	2/28/2027		\$275,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$275,000.00	No
MS18125	US Gain	5/9/2019	8/8/2025		\$200,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$200,000.00	No
MS18175	Regents of the University of Californi	6/7/2019	8/6/2025		\$1,000,000.00	\$0.00	Expansion of Existing Hydrogen Station	\$1,000,000.00	No

**Total: 132**

#### Pending Execution Contracts

ML18096	City of Highland				\$70,210.00	\$0.00	Purchase Light-Duty ZEV and Install Three	\$70,210.00	No
ML18100	City of Brea				\$56,500.00	\$0.00	Install Thirteen EV Charging Stations	\$56,500.00	No
ML18135	City of Azusa				\$55,000.00	\$0.00	Purchase Three Light-Duty ZEVs and One H	\$55,000.00	No
ML18141	City of Rolling Hills Estates				\$40,000.00	\$0.00	Purchase One Light-Duty ZEV and Install T	\$40,000.00	No
ML18145	City of Los Angeles Dept of Transpor				\$1,400,000.00	\$0.00	Provide One Hundred Rebates to Purchaser	\$1,400,000.00	No
ML18148	City of San Dimas				\$50,000.00	\$0.00	Implement Bike Share Program	\$50,000.00	No
ML18149	City of Sierra Madre				\$50,000.00	\$0.00	Implement Bike Share Program	\$50,000.00	No
ML18150	City of South El Monte				\$20,000.00	\$0.00	Implement Bike Share Program	\$20,000.00	No
ML18151	County of San Bernardino Departme				\$200,000.00	\$0.00	Purchase Eight Heavy-Duty Near Zero Emis	\$200,000.00	No
ML18152	County of San Bernardino Flood Con				\$108,990.00	\$0.00	Purchase Five Heavy-Duty Near Zero Emissi	\$108,990.00	No
ML18154	City of Hemet				\$30,000.00	\$0.00	Purchase Two Light-Duty ZEV and EV Char	\$30,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18158	City of Inglewood				\$146,000.00	\$0.00	Purchase 4 Light-Duty Zero Emission, 4 Me	\$146,000.00	No
ML18159	City of Rialto				\$135,980.00	\$0.00	Purchase Nine Light-Duty ZEVs and EV Cha	\$135,980.00	No
ML18162	City of Costa Mesa				\$148,210.00	\$0.00	Purchase Four Light-Duty ZEVs and EV Cha	\$148,210.00	No
ML18164	City of Pomona				\$200,140.00	\$0.00	Purchase Three Heavy-Duty ZEVs	\$200,140.00	No
ML18166	City of Placentia				\$25,000.00	\$0.00	Purchase One Heavy-Duty Near-Zero Emiss	\$25,000.00	No
ML18170	City of Laguna Niguel				\$85,100.00	\$0.00	Purchase Two Light-Duty ZEVs and EV Cha	\$85,100.00	No
ML18174	City of Bell				\$25,000.00	\$0.00	Purchase One Heavy-Duty ZEV	\$25,000.00	No
MS18066	El Dorado National				\$100,000.00	\$0.00	Install New Limited-Access CNG Station	\$100,000.00	No
MS18104	Orange County Transportation Autho				\$212,000.00	\$0.00	Implement College Pass Transit Fare Subsi	\$212,000.00	No
MS18107	Huntington Beach Union High School				\$225,000.00	\$0.00	Expansion of Existing Infrastructure	\$225,000.00	No
MS18114	Los Angeles County Department of P				\$175,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$175,000.00	No
MS18116	Los Angeles County Department of P				\$175,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$175,000.00	No
MS18121	City of Montebello				\$70,408.00	\$0.00	Expansion of Existing CNG Infrastructure	\$70,408.00	No

**Total: 24**

#### Declined/Cancelled Contracts

ML18075	City of Orange				\$25,000.00	\$0.00	One Heavy-Duty Vehicle	\$25,000.00	No
MS18013	California Energy Commission				\$3,000,000.00	\$0.00	Advise MSRC and Administer Hydrogen Infr	\$3,000,000.00	No
MS18017	City of Banning				\$225,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$225,000.00	No
MS18018	City of Norwalk	6/8/2018	9/7/2019		\$75,000.00	\$0.00	Vehicle Maintenance Facility Modifications	\$75,000.00	No
MS18109	City of South Gate				\$175,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$175,000.00	No
MS18111	Newport-Mesa Unified School Distric				\$175,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$175,000.00	No
MS18113	City of Torrance				\$100,000.00	\$0.00	Expansion of Existing CNG Infrastructure	\$100,000.00	No
MS18119	LBA Realty Company XI LP				\$100,000.00	\$0.00	Install New Limited-Access CNG Infrastructu	\$100,000.00	No

**Total: 8**

#### Closed Contracts

MS18001	Los Angeles County MTA	6/29/2017	4/30/2018		\$807,945.00	\$652,737.07	Provide Clean Fuel Transit Service to Dodge	\$155,207.93	No
MS18004	Orange County Transportation Autho	8/3/2017	4/30/2019		\$503,272.00	\$456,145.29	Provide Special Rail Service to Angel Stadiu	\$47,126.71	No
MS18008	Foothill Transit	1/12/2018	3/31/2019		\$100,000.00	\$99,406.61	Special Transit Service to LA County Fair	\$593.39	Yes
MS18010	Southern California Regional Rail Au	12/28/2017	7/31/2019		\$351,186.00	\$275,490.61	Implement Special Metrolink Service to Unio	\$75,695.39	Yes
MS18011	Southern California Regional Rail Au	2/9/2018	6/30/2018		\$239,565.00	\$221,725.12	Special Train Service to Festival of Lights	\$17,839.88	Yes
MS18016	Southern California Regional Rail Au	1/10/2019	3/31/2019		\$87,764.00	\$73,140.89	Special Train Service to Auto Club Speedwa	\$14,623.11	No
MS18105	Southern California Regional Rail Au	1/10/2019	6/30/2019		\$252,696.00	\$186,830.04	Special Train Service to the Festival of Light	\$65,865.96	Yes

**Total: 7**

#### Open/Complete Contracts

ML18021	City of Signal Hill	4/6/2018	1/5/2022		\$49,661.00	\$46,079.31	Install EV Charging Station	\$3,581.69	Yes
ML18033	City of Duarte	8/8/2018	2/7/2025		\$50,000.00	\$50,000.00	Purchase 1-HD ZEV	\$0.00	Yes
ML18040	City of Agoura Hills	7/13/2018	6/12/2022		\$17,914.00	\$17,914.00	Install EV Charging Infrastructure	\$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18042	City of San Fernando	6/28/2018	2/27/2024		\$10,000.00	\$10,000.00	Purchase 1 Light-Duty ZEV	\$0.00	Yes
ML18062	City of Beaumont	8/8/2018	9/7/2024		\$25,000.00	\$25,000.00	Purchase 1 Heavy-Duty Near-ZEV	\$0.00	Yes
ML18086	City of Los Angeles Bureau of Street	2/8/2019	4/7/2023		\$300,000.00	\$300,000.00	Install Sixty EV Charging Stations	\$0.00	No

**Total: 6**

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 23

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee held a meeting on Friday, November 15, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Ben Benoit, Chair  
Stationary Source Committee

AD:cr

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### **Committee Members**

Present: Council Member Ben Benoit/Chair (videoconference)  
Senator Vanessa Delgado (Ret.) (videoconference)  
Mayor Judith Mitchell  
Supervisor V. Manuel Perez (arrived at 10:07 a.m. via videoconference)

Absent: Supervisor Janice Hahn  
Supervisor Janice Rutherford

### **Call to Order**

Chair Benoit called the meeting to order at 10:02 a.m.

### **INFORMATIONAL ITEMS:**

#### **1. Update on Proposed Amended Rule 1111 – NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces**

Michael Krause, Planning and Rules Manager, presented an update on the proposed rule amendment for the sale, distribution, and installation of 40 ng/J NO<sub>x</sub> furnaces in elevations at 4,200 feet above sea level or higher.

Angus Lemon, Ingersoll-Rand, supported the amendment, recommended consideration to allow a dual fuel hybrid unit, and requested progress updates as to whether weatherizing furnaces will meet the upcoming compliance date on October 1, 2020. Upon request from Council Member Benoit, Mr. Krause explained that the

dual fuel hybrid units mentioned are comprised of a non-compliant furnace with an electric heat pump. Mr. Krause commented that staff will need to obtain additional information such as use of a compliant furnace since at least one manufacturer already produces a dual fuel hybrid system comprised of a compliant gas furnace with an electric heat pump. Finally, because there would be a need for an analysis and public process, a rule amendment to consider dual fuel hybrid units would not be recommended at this time.

Mayor Mitchell asked for staff to respond to the inquiry regarding the weatherized units. Staff reiterated the commitment to monitor the progress of weatherized units to comply with the lower NOx limit, and report back to Stationary Source Committee in May 2020 along with an update on availability of compliant furnaces for high altitude areas.

*Supervisor Perez arrived at 10:07 a.m.*

## **2. Update on Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants**

Dr. Jillian Wong, Planning and Rules Manager, presented an update on Proposed Rule (PR) 1480 which requires facilities that meet certain criteria to conduct sampling for metal toxic air contaminants. Staff provided an update on issues stakeholders raised at the Set Hearing on November 1, 2019.

Jerry Desmond, Metal Finishing Association of Southern California (MFASC), commented that the concerns that were raised at the Set Hearing have been resolved by recent rule language revisions that address small businesses and the costs, the benchmark concentration methodology, providing for acknowledgement of other sources, and an exit ramp for facilities. Mr. Desmond stated that they do not have any concerns at this point.

Florence Gharibian, Del Amo Action Committee, commented that it was good that South Coast AQMD is tackling this rule and it is important to continue a dialogue with other environmental agencies such as the Regional Water Quality Control Board, Department of Toxic Substances Control (DTSC), Certified Unified Program Agencies, and the Department of Public Health that also have a role in regulating metal finishing shops. She is concerned with how PR 1480 facilities will be prioritized and expressed frustration that there appears to be a lack of readily available information such as the number of affected facilities, proximity to sensitive receptors, and other specific facility information especially since PR 1480 would affect metal recycling and shredding facilities. DTSC should work with the South Coast AQMD to determine the air emissions coming from these industries. She stated it would be helpful to provide information on how other existing rules work with PR 1480.



Mayor Mitchell commented that staff was not aware that there were a number of facilities in Paramount that needed permits and inquired as to whether South Coast AQMD is maintaining a record or an inventory of these facilities. Executive Officer Wayne Natri responded that the South Coast AQMD has initiated a number of programs in the Paramount area, including inventory. Mr. Natri highlighted the use of mobile monitoring in AB 617 communities to screen potential sources of elevated emissions so a detailed quantitative analysis can be conducted afterwards. Mr. Natri also stated that this capability allows staff to quickly respond but is resource intensive, and South Coast AQMD is at the forefront for these types of analyses. Council Member Benoit stated that he was happy to hear about the forward progress of PR 1480 and accomplishments.

**3. Update on Implementation of Rule 1469 – Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations**

Jason Aspell, Compliance and Enforcement Manager, described implementation efforts for Rule 1469, which covered requirements, deadlines, compliance statistics, and next steps.

Mr. Desmond commented that the MFASC supports their members complying with Rule 1469. He also stated that the costs to implement the control requirements of the rule are significant, with some larger facilities spending up to \$250,000, and that some plating processes may move to other areas. He advised that we be aware of the need to protect the air, but also need to encourage manufacturing in an environmentally compliant manner.

Mayor Mitchell asked Mr. Desmond to what extent facilities are using trivalent chromium instead of hexavalent chromium, and if it has reduced costs. Mr. Desmond responded that facilities have been exploring it and said that there are issues with military specifications (mil-spec) and consumer acceptance. Mil-spec processes have not caught up with trivalent chromium technology, and MFASC is engaged with the military on that matter. Also, trivalent chromium has not been meeting consumer satisfaction needs, and MFASC is having discussions on how to address that challenge. Mr. Desmond also stated that the status of fume suppressants has been a challenge.

Ms. Gharibian noted that she made a previous comment in the PR 1480 workshop affirming that the best thing facilities could do would be to comply with the existing programs in place to reduce emissions and avoid additional costs of control. Ms. Gharibian also stated that she raised concerns during the Rule 1469 rulemaking process that enforcement would be difficult with building enclosure provisions if doors are left open. She mentioned that she received one comment from a resident in Paramount stating they had seen a Rule 1469 facility with its doors open. Mr. Aspell responded that facilities must identify the openings that are designed to be left open in the Ongoing Compliance Status and Emissions Report. Staff typically conducts surveillance of the facility prior to entry and can observe these openings, or

staff may observe open doors during an inspection and communicate to the facility to keep doors closed. Mr. Aspell explained that facilities have been using different methods to ensure doors are kept closed such as automatic doors, signage, and special door hinges. Mr. Aspell communicated that if someone sees a facility is not complying with a rule requirement then they should file a complaint with South Coast AQMD.

Ms. Gharibian expressed an additional concern that there may be facilities that are “under the radar” that have not applied for permits. Mr. Nastri responded that outreach to cities and notifying them of violations has assisted in the effort to identify such facilities.

#### **4. Initial Staff Recommendations for use of Polyfluroalkyl Substances (PFAS) Fume Suppressants for Rule 1469**

Susan Nakamura, Assistant Deputy Executive Officer/Planning, Rule Development and Area Sources, presented an update on the results of emissions testing by staff on PFAS in chemical fume suppressants for chromium plating and anodizing facilities. Ms. Nakamura also provided an overview of staff’s initial concept to create a fund to assist smaller facilities to transition away from chemical fume suppressants.

Mr. Desmond commented that the MFASC is engaged with other agencies such as the Water Board, where they are finding that the usage of PFAS is quite small compared to other uses (i.e. airports and landfills). Mr. Desmond said that the MFASC would assist to engage smaller facilities, once identified, to utilize funding to install add-on controls. Ms. Nakamura responded that staff would appreciate the MFASC’s assistance if an incentive program is developed. Mayor Mitchell asked if this issue would come back to the Stationary Source Committee in 90 days. Ms. Nakamura confirmed that it would.

Mr. Nastri stated that our efforts on AB 617 would complement this concept. Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development, and Area Sources, added that in AB 617 there is incentive funding for mobile and stationary sources. CARB is working on guidance, but this could be one of the categories that allows some of the funding to be spent on an incentive program. Dr. Fine commented that one of the things that staff will do in the 90 days is evaluate potential sources of funding. Mayor Mitchell recommended that staff work with Mr. Desmond.

#### **5. Update on Source Test Review Evaluation**

Dr. Jason Low, Assistant Deputy Executive Officer/Science & Technology Advancement, presented a progress update on the Emissions QUAntification and Testing Evaluation (EQUATE) working group that was formed at the direction of the Board during the Reg III – Fees amendment to address streamlining the source test review/approval process and update default emission factors.

Mayor Mitchell asked if the proposed electronic portal would be done by South Coast AQMD. Dr. Low explained that a representative from the Information Management division provided an overview of the electronic portal to stakeholders to gather input for the plan. Mr. Nastri emphasized that the proposed solution is a team effort that involves representatives from all divisions.

Mayor Mitchell commented that she was intrigued by the comparison between the proposed electronic portal and the current permit processing system. She asked if the proposed electronic portal would feature an online tracking system to indicate where a submittal was in the review process. Dr. Low replied that it was the intent and part of the feedback from the working group to include an online tracking system.

Council Member Benoit asked if the online dashboard would include information to indicate the current status of a submittal, level of activity, time estimations, and final processing steps. Dr. Low confirmed that it would include information so that progress can be tracked by stakeholders.

Council Member Benoit asked if the topic would be brought back to the committee. Dr. Low responded that staff will report back to the Stationary Source Committee in June 2020.

Senator Delgado commended staff for their work and progress and commented that the plan would be beneficial

### **WRITTEN REPORTS:**

- 6. Monthly Update of Staff's Work with U.S. EPA on New Source Review Issues for the RECLAIM Transition**
- 7. Home Rule Advisory Group – Bi-Monthly Report**  
The report was acknowledged by the Committee.
- 8. Notice of Violation Penalty Summary**  
The report was acknowledged by the Committee.

### **OTHER MATTERS:**

- 9. Other Business**  
There was no other business.
- 10. Public Comment Period**  
There were no public comments.
- 11. Next Meeting Date**

The next regular Stationary Source Committee meeting is scheduled for Friday, January 24, 2020.

**Adjournment**

The meeting was adjourned at 11:14 a.m.

**Attachments**

1. Attendance Record
2. Monthly Update of Staff's Work with U.S. EPA on New Source Review Issues for the RECLAIM Transition
3. Home Rule Advisory Group – Bi-Monthly Report
4. Draft Notice of Violation Penalty Summary

**ATTACHMENT 1**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
STATIONARY SOURCE COMMITTEE**

**Attendance – November 15, 2019**

Council Member Ben Benoit (videoconference) .....South Coast AQMD Governing Board  
Senator Vanessa Delgado (Ret.) (videoconference) .....South Coast AQMD Governing Board  
Mayor Judith Mitchell.....South Coast AQMD Governing Board  
Supervisor V. Manuel Perez (videoconference) .....South Coast AQMD Governing Board

Florence Gharibian.....Del Amo Action Committee  
Edward Krisnadi.....Montrose  
Rita Loof .....Radtech  
Peter Whittingham .....Whittingham Public Affairs Advisors  
Tammy Yamasaki .....Southern California Edison

Jason Aspell .....South Coast AQMD staff  
Barbara Baird .....South Coast AQMD staff  
Amir Dejbakhsh .....South Coast AQMD staff  
Marian Coleman.....South Coast AQMD staff  
Philip Fine .....South Coast AQMD staff  
Michael Krause .....South Coast AQMD staff  
Jason Low .....South Coast AQMD staff  
Susan Nakamura.....South Coast AQMD staff  
Wayne Nastri.....South Coast AQMD staff  
Sarah Rees .....South Coast AQMD staff  
Jill Whynot.....South Coast AQMD staff  
Jillian Wong .....South Coast AQMD staff

## November 2019 Update on Work with U.S. EPA on New Source Review Issues for the RECLAIM Transition

At the October 5, 2018 Board meeting, the Board directed staff to provide the Stationary Source Committee with a monthly update of staff’s work with U.S. EPA regarding resolving NSR issues for the transition of facilities from RECLAIM to a command and control regulatory structure. The table below summarizes key activities over the past month.

Item	Discussion
Teleconference with U.S. EPA – October 10, 2019	<ul style="list-style-type: none"> <li>● Staff discussed with U.S. EPA the stakeholder comments from the September 12, 2019 working group meetings for RECLAIM and Regulation XIII</li> </ul>
Teleconference with U.S. EPA – October 15, 2019	<ul style="list-style-type: none"> <li>● Staff discussed with U.S. EPA topics proposed by industry for the upcoming meeting with the Regulatory Flexibility Group</li> </ul>
Teleconference with U.S. EPA and the Regulatory Flexibility Group – October 22, 2019	<ul style="list-style-type: none"> <li>● Regulatory Flexibility Group met with U.S. EPA to discuss the following topics regarding the RECLAIM transition               <ul style="list-style-type: none"> <li>○ New BARCT standards                   <ul style="list-style-type: none"> <li>▪ Balancing NOx ammonia limits</li> <li>▪ Triggering NSR for co-pollutants</li> <li>▪ Availability of alternative emission control plans</li> </ul> </li> <li>○ New Source Review and anti-backsliding concerns                   <ul style="list-style-type: none"> <li>▪ Viability of retaining RECLAIM NSR</li> <li>▪ Requiring to demonstrate that emissions remain below final cap</li> <li>▪ NSR holding requirement</li> <li>▪ NSR applicability trigger</li> <li>▪ Methodology for calculating required offsets</li> <li>▪ Use of South Coast AQMD internal bank to satisfy NSR offsets</li> </ul> </li> </ul> </li> </ul>
Teleconference with CARB – November 13, 2019	<ul style="list-style-type: none"> <li>● Staff commenced discussions with CARB regarding the RECLAIM transition</li> </ul>
RECLAIM Working Group Meeting – November 14, 2019	<ul style="list-style-type: none"> <li>● Provided an overview of the meeting with U.S. EPA and the Regulatory Flexibility Group</li> </ul>



# South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4182  
(909) 396-2000 • www.aqmd.gov

## **HOME RULE ADVISORY GROUP**

**Wednesday, July 10, 2019**

## **MEETING MINUTES**

### **MEMBERS PRESENT:**

Mike Carroll (Regulatory Flexibility Group); Curt Coleman (Southern California Air Quality Alliance); Carlo De La Cruz (Sierra Club); Martin Hansberger (Holliday Rock Company); Francis Keeler (California Council for Environmental & Economic Balance); Bill LaMarr (California Small Business Alliance); Bridget McCann (Western States Petroleum Association); Art Montez (AMA International); Lauren Nevitt (Southern California Gas); and David Rothbart (Los Angeles County Sanitation District).

Participated by conference call: Brian Clerico (CARB); Rongsheng Luo (SCAG); Larry Rubio (Riverside Transit Agency); TyRon Turner (Dakota Communications); and Amy Zimpfer (EPA).

### **MEMBERS ABSENT:**

Vice Chair Ben Benoit (South Coast AQMD Governing Board Member); Marc Carrel (Breathe California of Los Angeles County); Michael Downs (Downs Energy); and Jaclyn Ferlita (Air Quality Consultants).

### **OTHER ATTENDEES:**

Susan Stark (Marathon)

### **SOUTH COAST AQMD STAFF:**

Marian Coleman (Deputy Executive Officer, Compliance & Enforcement); Philip Fine (Deputy Executive Officer, PRDAS); Philip Crabbe (Public Affairs Manager); Xiang Li (Air Quality Specialist); Terrence Mann (Assistant Deputy Executive Officer, Compliance & Enforcement); Rafael Reynosa (Senior Enforcement Manager); Ann Scagliola (Administrative Secretary); Victor Yip (Senior Enforcement Manager); and William Wong (Principal Deputy District Counsel).

### **OPENING COMMENTS AND SELF-INTRODUCTIONS**

Vice Chair Ben Benoit was not present, and the meeting was called to order at 10:03 a.m. by Dr. Philip Fine.

### **APPROVAL OF JULY 2018 MEETING MINUTES**

Dr. Fine asked for comments or corrections on the May 8, 2019 meeting minutes. Hearing none, the minutes were approved.

### **EPA AND FEDERAL ACTIVITIES**

Ms. Amy Zimpfer provided updates on recent U.S. Environmental Protection Agency (EPA) and federal activities.

- Full approval proposed for the South Coast AQMD Ozone Plan, and the comment period will close on July 17, 2019.
- Approval proposed for a CARB measure that allows SIP credits for incentives.

- EPA’s new Acting Assistant Administrator for the Office of Air and Radiation is Ann Idsal. <https://www.epa.gov/aboutepa/about-assistant-administrator-epas-office-air-and-radiation>
- Work continues with South Coast AQMD on changes for the RECLAIM program.
- Finalized the Coachella Valley ozone nonattainment area from “Severe-15” to “Extreme” for the 1997 8-hour ozone national ambient air quality standards (NAAQS), effective July 10, 2019.

### **CARB REGULATORY ACTIVITIES**

Mr. Brian Clerico provided updates on proposed and recent regulatory activities. He also invited CARB staff Ms. Angela Csondes and Ms. Nicole Light Densberger to provide to an overview of a significant control measure on the July CARB Board agenda:

- Proposed Control Measure for Ocean-Going Vessels Operating at Berth and At Anchor Regulation (Shore Power).

### **Discussion**

Ms. Frances Keeler inquired if the exceptions listed in the current compliance advisories will be incorporated into the new regulation. Ms. Csondes replied that the advisories will be incorporated into the new regulation.

### **LEGISLATIVE UPDATE**

Mr. Philip Crabbe reported on key legislative updates from the June 14, 2019 Legislative Committee meeting.

#### **Update on Federal Legislative Issues**

South Coast AQMD’s federal legislative consultants each provided a written report on various key Washington, D.C. issues.

- The Diesel Emissions Reduction Act (DERA) program is pending in Congress. The House appropriations bill for the Interior and Environment, which funds programs like DERA, was passed by the House but is still pending in the U.S. Senate.
- The funding from the Targeted Airshed Grant (TAG) program which supports clean air initiatives for non-attainment areas is going to be used to increase funding for the DERA program. South Coast AQMD targeted the California Congressional delegation, key senior staff, Congressional Members from other affected states and businesses to prevent the redirection of TAG funds to DERA.

#### **Update on State Legislative Issues**

South Coast AQMD’s state legislative consultants provided written reports on various key issues in Sacramento.

- The California state budget, worth \$214.8 billion, was passed by the Legislature. Budget trailer bills, that implement policy related to the budget, were also passed including one that allocated \$245 million for incentive funding and \$50 million for AB 617 program implementation, to local air districts statewide.
- Two new state senators were elected: 1) Senator Brian Dahle – District 1; and Senator Lena Gonzalez – District 33.

#### **Update on Legislation Regarding Voting District Authorization for Clean Air**

An update regarding the South Coast AQMD-sponsored Voting District Authorization for Clean Air bill was provided.

- The South Coast AQMD staff continue to meet with stakeholders regarding SB 732 (Allen), including transportation agencies: 1) San Bernardino County Transportation Authority (SBCTA); 2) Riverside County Transportation Commission (RCTC); and 3) Orange County



Transportation Authority (OCTA). Staff held meetings with the Los Angeles County Metropolitan Transportation Authority (LA Metro) and Metrolink.

Recommend Position on State Bills:

SB 216 (Galgiani) Carl Moyer Memorial Air Quality Standards Attainment Program: used heavy-duty truck exchange.

- This bill would, until January 1, 2025, add a used heavy-duty truck exchange program as an eligible project for funding under the Carl Moyer Program. The bill is intended to create an incentive for larger companies – that are more financially equipped – to help smaller companies get older and dirtier trucks off the road by “passing through” a scrappage incentive.
- The bill would allow larger companies to buy a new truck and pass on their used, but still relatively clean trucks onto the smaller company. The smaller company would then either scrap or move out of state its higher emitting older truck and the larger company would receive the incentive.

South Coast AQMD staff recommended amendments to the bill:

- The bill requires that vehicles purchased as part of the truck exchange remain in the state during the vehicles’ entire project life. This requirement would be more stringent than the Carl Moyer program, which only requires at least 51% of the project life. Staff recommended amending the bill to make this requirement consistent with Moyer and state regulations.
- To ensure that the truck exchange results in actual emission reductions, staff recommended clarifying amendments that would:
  - Require that new vehicles purchased as part of the truck exchange meet or emit less than at least one of CARB’s optional low-NOx engine standards; and
  - Require owners of fleets purchasing a new vehicle as part of the program, to sell or otherwise provide their existing vehicle to the owner of a vehicle that is either higher emitting than the vehicle being transferred, or is older, if the trucks are certified at the same emission standard. The higher emitting or older vehicle would be scrapped or permanently moved out of state.

*The Legislative Committee adopted a position of SUPPORT WITH AMENDMENTS on this item.*

**UPDATE REGARDING LITIGATION ITEMS AND RELATED EPA ACTIONS**

Mr. William Wong had no updates for the provided July 2019 status report.

Discussion

Mr. Bill LaMarr inquired if the Sherwin Williams lawsuit was because of non-compliant solvents. Mr. Wong responded that he could not provide details, but there was an interest in reaching a settlement.

**SOUTH COAST AQMD COMPLAINT REPORTING PROGRAM**

Ms. Marian Coleman, Mr. Terrence Mann, Mr. Victor Yip and Mr. Rafael Reynosa, from the Compliance and Enforcement Division, provided presentations on two focused areas of the complaint reporting/investigation process and the Emergency Response Program.

Mr. Yip provided an overview on how complaints are reported through the telephone hotline or the online complaint reporting system, the types of complaints received and number of complaints received annually. He highlighted examples of the types of dust and smoke complaints received, and outlined how odor complaints are investigated and enforced. Also shared was an odor

complaint situation where the use of advanced technology assisted them with a high profile investigation, through the use of an optical gas imaging camera, ambient air sampling equipment and online resources.

Mr. Reynosa shared key points of the South Coast AQMD's Emergency Response Program. The South Coast AQMD is not a First Responder, however as an Emergency Response Team, 24/7 on-scene support and technical expertise is provided to First Responders (local fire departments, state and federal agencies). He explained how the Emergency Response Team responds and operates within the established Unified Incident Command System and outlined how continuous communication and coordination are maintained between Executive Council, Legislative, Public Affairs and Media, Science and Technology Advancement and the Emergency Response staff in the field until the team is released from the scene.

### Discussion

Mr. LaMarr inquired about what has caused the increase in complaints. Ms. Coleman indicated that people have become more aware of the South Coast AQMD, the 1-800-CUT-SMOG complaint line, community outreach efforts, and the ability to file an electronic complaint. Mr. LaMarr indicated that at Community Steering Committee meetings, it has been stated that there is an abundance of unanswered complaints. Mr. Mann indicated that he reached out to the individuals who reported this and found that the South Coast AQMD staff did respond. Ms. Coleman added that a file is maintained to ensure that all complaints are addressed.

Mr. Art Montez inquired about complaints from ethnic communities versus more affluent communities, the level of response levels and how the complaints are mitigated. Ms. Coleman indicated that the inspectors do not go into the communities to seek complaints, and the majority of the complaints are received from Los Angeles communities. Ms. Coleman further explained that heatmaps are used to look for complaint clusters and to concentrate inspectors in problem areas, if necessary. She indicated that Legislative and Public Affairs and Media Division holds meetings in Environmental Justice communities and information is provided on the 1-800-CUT-SMOG complaint line. Mr. Montez requested data that reflects the South Coast AQMD initiatives to the minority Environmental Justice communities, in correlation to the complaints received. Dr. Fine indicated that this information could be provided by the Legislative and Public Affairs and Media Division.

*After the meeting Mr. Montez was contacted and advised to submit a public records request for the requested data, and the public records link was also provided.*

Mr. Carlo De La Cruz asked if there are plans to incorporate the electronic complaint reporting system in the phone app, to file complaints through the app. Ms. Coleman replied that this could be considered.

Mr. De La Cruz inquired if translation assistance is available when someone calls the compliant phone line. Ms. Coleman indicated that the South Coast AQMD has a list of certified bi-lingual employees that can provide assistance when needed.

Ms. Lauren Nevitt inquired about the odor complaint policy and how many complaints were necessary to take action against a facility. Mr. Yip indicated that six to ten verified complaints is a guideline, but there are also exceptions to consider.

Ms. Keeler commented that odor complaints are very difficult to verify and you have to consider that everyone smells the smell differently. Often you arrive on the scene and the odor is no longer occurring. These types of complaints are very complex and time consuming.

Mr. David Rothbart asked if facilities could be notified immediately when odor complaints are received, and expressed their desire to work together to have complaints resolved. Ms. Coleman indicated that most complainants do not want their information disclosed, and the goal is to identify the source of the problem and resolve the complaint.

Mr. TyRon Turner expressed appreciation for the South Coast AQMD online complaint site, and how he has used the information to instruct constituents at neighborhood council meetings on the complaint process.

Mr. Montez inquired about South Coast AQMD's authority to monitor ship emissions, if ships are regulated by EPA. Ms. Coleman indicated that both CARB and EPA regulate ships, and South Coast AQMD also has a rule which allows for the inspection of ships at the berth.

Mr. Montez noted the identified high emissions levels from both ships and locomotives, the burden placed on the manufacturers, and inquired whether the regulatory obligation is being weighed correctly. Dr. Fine acknowledged that overall ships are a major source of NOx emissions. Ms. Coleman indicated that ship emissions have been identified as a major contributor to the odor events, and a program is now in place to conduct surveillance on ships in the Ports or coastal area. Mr. Montez further inquired what EPA or the Federal government are doing about this problem. Ms. Zimpfer provided an outline of the enforcement collaboration and partnership between EPA, South Coast AQMD and the Coast Guard.

Mr. LaMarr commented that he expected to see a presentation on the complaint reporting process, specifically in the area of education. He expressed that if the South Coast AQMD is concerned about the increase in complaints, the Compliance and Enforcement Program should be directed towards the education of the business owners. Ms. Coleman replied that the goal is to increase source education. She indicated that inspectors do provide onsite training to business owners and businesses are always encouraged to call if they have questions. Mr. Wong indicated that he has reviewed many violations and noted the level of direct education provided by the inspectors. Ms. Coleman further indicated that the staff is collaborating with various city business and planning offices to also develop permit application training. She encouraged the Advisory Group to provide input on additional areas of needed source education. Mr. LaMarr suggested holding webinars for business owners. Mr. Crabbe added that businesses can also schedule a no-fault inspection with the Small Business Assistance Group, which is an educational opportunity and no violations are issued.

Mr. Rothbart indicated that companies want to stay in compliance, and suggested a forum where facilities could ask questions on the gray areas of enforcement and permit streamlining.

Ms. Bridget McCann commented that the emergency response presentation was very informative and suggested that sector specific training would be helpful. Dr. Fine expressed that there have been discussions, with the recent refinery fires, to better educate the public in the areas of emergency response. He further expressed that efforts are being made to build on the education and outreach for future AB 617 efforts, flare notification system and emergency response. Ms. Coleman noted that webinars would be a good addition to the training already provided, and the topics could be specific to areas of interest. Ms. Zimpfer emphasized that EPA's compliance staff would also be available continue the collaboration in future webinars and training.

Ms. Susan Stark expressed that there have been discussions about the odors along the coast and reaching out to the marine vessels. She suggested that an informational sheet could be provided to the shipping agents to remind them of their responsibilities and requirements.

## **SUBCOMMITTEE STATUS REPORTS**

### **A. Freight Sustainability (Lauren Nevitt)**

An update was provided on the following item.

- CARB is proposing to discontinue the low-NOx truck vouchers, for the hybrid and zero-emissions truck and bus incentive project (HVIP) voucher incentive program.

### **B. Small Business Considerations (Bill LaMarr)**

No report was provided.

### **C. Environmental Justice and AB 617 Implementation (Curt Coleman)**

An update was provided on the following items.

- Wilmington/Carson/West Long Beach AB 617 Community Steering Committee meeting, July 11, 2019.
- San Bernardino/Muscoy AB 617 Community Steering Committee meeting, July 18, 2019.
- Boyle Heights/East Los Angeles/West Commerce AB 617 Community Steering Committee meeting, July 25, 2019.
- CARB Community Air Grant Guidelines Teleconference, July 11, 2019.

#### Additional Updates

- Dr. Fine provided an update on the AB 617 Community Emissions Reduction Plans.

### **D. Climate Change (David Rothbart)**

An update was provided on the following item.

- CARB's Climate Pollutant Strategy, comment period ending July 17, 2019.

## **REPORT TO AND FROM THE STATIONARY SOURCE COMMITTEE**

Dr. Philip Fine provided a summary of items related to the June and July 2019 meetings.

- Laki Tisopulos has been appointed the new Air Pollution Control Officer at the Ventura Air Pollution Control District;
- Proposed Rule Amendments – 301, 1110.2, 1118, 1407;
- AB 617 Draft Community Emission Reduction Plans and recommendations for Year 2 communities;
- 2018 Annual Report on AB 2588;
- Status Report on Regulation XIII – New Source Review; and
- Air Quality Management Plan consultation meeting on July 19, 2019.

## **OTHER BUSINESS**

There were no comments.

## **PUBLIC COMMENT**

There were no comments.

## **ADJOURNMENT**

The meeting was adjourned at 12:32 am. The next meeting of the Home Rule Advisory Group is scheduled for 10:00 a.m. on November 13, 2019, and will be held at the South Coast AQMD in Conference Room CC-8.

**South Coast Air Quality Management District  
HOME RULE ADVISORY GROUP – Attendance Record – 2019**

	(Term: 1/1/19 - 1/1/21)	1/9	FEB	3/13	APR	5/8	JUN	7/10	AUG	9/11	OCT	11/13	DEC
	Board/Member, Business & Community Reps, SCAQMD Staff												
1	Dr. Joseph Lyou, Chair	X	<b>dark</b>	X	<b>dark</b>		<b>dark</b>		<b>dark</b>	<b>Meeting Cancelled</b>	<b>dark</b>		<b>dark</b>
2	Council Member Ben Benoit, Vice Chair	A		A		A		A					
3	Dr. Clark E. Parker, Sr., Governing Board Member	A		A									
4	Dr. Philip Fine (Agency Member) - SCAQMD	X		X		X		X					
5	Zimpfer, Amy (Agency Member) - EPA <i>Representing Elizabeth Adams</i>	A		T		T*		T					
6	Clerico, Brian (Agency Member) - CARB <i>Representing Richard Corey</i>	T		T		T		T					
7	Chang, Ping (Agency Member) - SCAG <i>Alternate – Rongsheng Luo</i>	T*		X*		A*		T*					
8	Carrel, Marc (Environmental Representative)	T		X		X		A*					
9	Carroll, Mike (Business Representative) <i>Alternate – Robert Wyman</i>	A		A		X		X					
10	Coleman, Curtis (Business Representative) <i>Alternate – Susan Stark</i>	X		X		X		X					
11	De La Cruz, Carlo (Environmental Representative)	T		X		X		X					
12	Keeler, Frances (Business Representative) <i>Alternate – Janet Whittick</i>	T		X*		X*		X					
13	McCann, Bridget (Business Representative) <i>Alternate – Patty Senecal</i>	A*		X		X		X					
14	LaMarr, Bill (Business Representative)	X		X		X		X					
15	McGivney, Dan (Business Representative) <i>Alternate – Lauren Nevitt</i>	A*		X		X		X*					
16	Downs, Michael (Community Representative - McCallon)	A		A		A*		A*					
17	Ferlita, Jaclyn (Community Representative - Lyou)	X		A		A		A					
18	Hansberger, Martin (Community Representative - Rutherford)	X		X		X		X					
19	Montez, Art (Community Representative - Lyou)	A		X		X		X					
20	Rothbart, David (Community Representative - Mitchell)	X		A*		X		X					
21	Rubio, Larry (Community Representative - Ashley)	A*		A*		A*		T					
22	Smith, Larry (Community Representative - Benoit)	A		A*									
23	Turner, TyRon (Community Representative - Burke)	A		X		X		T					

Attendance Codes					
X	Present	T	Teleconference	A	Absence
X*	Alternate in Attendance	T*	Alternate Teleconference Participation	A*	Absence Excused

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**  
**General Counsel's Office**  
**DRAFT**  
**October 2019 Settlement Penalty Report**

**Total Penalties**  
**Civil Settlements: \$101,950.00**  
**MSPAP Settlements: \$33,938.00**  
**Hearing Board Settlements: \$40,000.00**

**Total Cash Settlements: \$175,888.00**  
**Total SEP Value: \$0.00**

**Fiscal Year through 10 / 2019 Cash Total: \$8,528,327.86**  
**Fiscal Year through 10 / 2019 SEP Value Only Total: \$0.00**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>Civil Settlements</b>						
189661	CARNEVALE & SON CONSTRUCTION, INC	1403	10/25/2019	DH	P67467	\$4,050.00
124805	EXIDE TECHNOLOGIES	221 1420.2	10/4/2019	NSF	P67460	\$10,000.00
157359	HENKEL ELECTRONIC MATERIALS, LLC	2004 2012 3002	10/30/2019	NSF	P66212	\$9,000.00
164214	KIBRIYA ENTERPRISES, INC	461	10/22/2019	WBW	P68114 P68117	\$400.00
189871	LA KINGS VALLEY ICE CENTER	1415.1	10/22/2019	DH	P66964	\$2,500.00
187301	MC NOON CRYSTAL IMPORT INC, M&M ELECTRIC	1403 40 CFR 60, QQQ	10/16/2019	KER	P66290	\$1,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
35302	OWENS CORNING ROOFING AND ASPHALT, LLC	2004	10/23/2019	DH	P63689 P66163	\$1,500.00
156737	PARAMOUNT OIL, INC.	203 461 H&S 41960	10/25/2019	MJR	P64666	\$3,500.00
136	PRESS FORGE CO	402 2004 1430 H&S 41700	10/15/2019	NSF	P62084 P65225 P65229 P65859 P66164 P68304	\$42,500.00
152707	SENTINEL ENERGY CENTER LLC	2004(f)(1) 3002(c)(1)	10/22/2019	KER	P66063	\$7,000.00
189629	SIGNET SM, LLC	1403	10/3/2019	DH	P67466	\$1,500.00
106623	SUPERIOR SUPER WAREHOUSE #106	201 203(a) 1415	10/17/2019	DH	P60699 P63942	\$19,000.00

**Total Civil Settlements: \$101,950.00**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>MSPAP Settlements</b>						
186754	ADAME LANDSCAPE INC	203(a)	10/3/2019	GC	P67355	\$600.00
164625	ADVANTAGE MAILING	203 1415	10/17/2019	GC	P65792	\$1,800.00
117435	ALLOY PROCESSING	1469	10/22/2019	GC	P66461	\$500.00
169038	BC TRAFFIC SPECIALIST	403(d)(2)	10/3/2019	GC	P65058	\$1,040.00
129388	BONAKDAR'S CHEVRON/HOSSEIN ENT. INC.	461	10/3/2019	GC	P68108	\$638.00
123702	CALEX ENGINEERING COMPANY	203(a)	10/22/2019	GC	P66773	\$270.00
162886	CELEBRITY CLEANERS	203(b)	10/17/2019	GC	P56746	\$850.00
162896	CELEBRITY CLEANERS	1421	10/17/2019	GC	P56745	\$400.00
117840	CITY OF MONTEBELLO	461(e)(2)	10/17/2019	TF	P63940	\$1,000.00
161604	DYNALECTRIC COMPANY	203	10/3/2019	GC	P67652	\$640.00
169976	FORCE ENVIRONMENTAL INC	1403	10/3/2019	GC	P66459	\$840.00
184544	GOLDEN STATE ENTERPRISES, LLC	461	10/3/2019	GC	P66355	\$600.00
34038	HACIENDA LA PUENTE SCH DIST	461	10/22/2019	GC	P65173	\$850.00
34038	HACIENDA LA PUENTE SCH DIST	461(c)(3)(Q)	10/22/2019	GC	P65855	\$300.00
92863	HARBOR TRUCK BODIES INC	203	10/3/2019	GC	P65176	\$1,360.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
178709	KLONDIKE CONSTRUCTION SERVICES, INC	1403	10/17/2019	TF	P67413	\$2,000.00
95955	MOUNTAIN VIEW USD MADRID JR HIGH SCH				P67415	
11443	LETNER ROOFING CO				P67416	
31727	LA CO., SHERIFF'S DEPT.	461	10/22/2019	TF	P63924	\$800.00
183061	LIMONITE C&C, LLC	461	10/17/2019	TF	P66377	\$400.00
186811	LOYALTY CONSTRUCTION INC	1403	10/17/2019	TF	P66706	\$1,000.00
157743	M & G AUTO BODY	1151	10/22/2019	TF	P63792	\$1,200.00
107149	MARKLAND MANUFACTURING INC	203	10/3/2019	TF	P63099	\$850.00
171258	MURILLO CONSTRUCTION CLEAN UP	1403	10/17/2019	TF	P66421	\$1,000.00
187312	PACIFIC SOUTHWEST BUILDERS INC				P66422	
98196	NICKEY CARDLOCK	461 H&S 41960.2	10/22/2019	TF	P68132	\$750.00
143921	PILOT TRAVEL CENTERS, LLC	461	10/17/2019	TF	P67225	\$800.00
158057	POWER TRIP RENTALS	13 CCR 2460	10/3/2019	TF	P68510	\$800.00
143968	RAFIK'S 76 STATION	461	10/3/2019	TF	P67215	\$850.00
157279	ROSE CLEANERS	1421	10/3/2019	TF	P50745	\$500.00
188903	SBR ROOFING	1403	10/22/2019	TF	P67605	\$800.00
189005	ADR PREFERRED BUSINESS PROPERTIES	40 CFR 60, QQQ			P67606	
6069	STEINER CORP	1146	10/22/2019	TF	P63883	\$1,600.00
18606	STEINER CORP, AMERICAN LINEN	1146	10/22/2019	TF	P66826	\$1,600.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
135965	SUNSTATE EQUIPMENT CO. LLC	203(b)	10/22/2019	TF	P69504	\$1,600.00
149045	TRANCAS OIL COMPANY, INC.	461 H&S 41960	10/22/2019	TF	P68409	\$800.00
185750	TRK DEVELOPMENT	403	10/17/2019	TF	P67555	\$800.00
173196	ULTIMATE AUTO BODY	109 203(b) 1151(e)(1) 1171(c)(1)	10/29/2019	TF	P66785	\$2,000.00
183108	URBAN COMMONS LLC EVOLUTION HOSPITALITY	2004	10/17/2019	TF	P66858	\$1,000.00
10534	YORBA LINDA COUNTRY CLUB	203	10/22/2019	TF	P65188	\$300.00
150423	YOSSI 76, JOSSI J SHIMSHI	201 203	10/22/2019	TF	P67224	\$800.00

**Total MSPAP Settlements: \$33,938.00**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
<b>Hearing Board Settlements</b>						
104234	MISSION FOODS CORPORATION	202 203(b) 1153.1 1303	10/22/2019	KCM	5400-4	\$25,000.00
10966	WEBER METALS INC	402 3002 H&S 41700	10/31/2019	DH	6136-1	\$15,000.00

**Total Hearing Board Settlements: \$40,000.00**

**SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX  
FOR OCTOBER 2019 PENALTY REPORT**

**REGULATION I - GENERAL PROVISIONS**

Rule 109 Recordkeeping for Volatile Organic Compound Emissions

**REGULATION II - PERMITS**

Rule 201 Permit to Construct  
Rule 202 Temporary Permit to Operate  
Rule 203 Permit to Operate  
Rule 221 Plans

**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 1151 Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations  
Rule 1153.1 Emissions of Oxides of Nitrogen from Commercial Food Ovens  
Rule 1171 Solvent Cleaning Operations

**REGULATION XIII - NEW SOURCE REVIEW**

Rule 1303 Requirements

**REGULATION XIV - TOXICS**

Rule 1403 Asbestos Emissions from Demolition/Renovation Activities  
Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems  
Rule 1415.1 Reduction of Refrigerant Emissions from Stationary Refrigeration Systems  
Rule 1420.2 Emission Standards for Lead from Metal Melting Facilities  
Rule 1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations  
Rule 1430 Control of Emissions from Metal Grinding Operations at Metal Forging Facilities  
Rule 1469 Hexavalent Chromium Emissions from Chrome Plating and Chromic Acid Anodizing Operations

**REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)**

Rule 2004 RECLAIM Program Requirements  
Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

**REGULATION XXX - TITLE V PERMITS**

Rule 3002 Requirements for Title V Permits

**CALIFORNIA HEALTH AND SAFETY CODE**

41700 Violation of General Limitations  
41960 Certification of Gasoline Vapor Recovery System  
41960.2 Gasoline Vapor Recovery

**CALIFORNIA CODE OF REGULATIONS**

13 CCR 2460 Portable Equipment Testing Requirements

**CODE OF FEDERAL REGULATIONS**

40 CFR 60, QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 24

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting on Friday, November 15, 2019. The following is a summary of the meeting.

RECOMMENDED ACTION:  
Receive and file.

Joe Buscaino, Chair  
Technology Committee

MMM:JCL:av

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### **Committee Members**

Present: Council Member Joe Buscaino/Chair (videoconference)  
Mayor Judith Mitchell  
Council Member Dwight Robinson

Absent: Supervisor Lisa Bartlett  
Supervisor Janice Hahn

### **Call to Order**

Chair Buscaino called the meeting to order at 12:02 p.m.

### **ACTION ITEMS:**

Council Member Buscaino asked the Committee to take Item #2 on consent. For item #2, Mayor Mitchell commented that she does not have a financial interest or conflict of interest, but is required to identify for the record that she is a Board Member of CARB which is involved in this item.

*(Items were taken out of order)*

## **2. Recognize and Transfer Funds, Execute and Amend Agreements for Installation and Maintenance of Air Filtration Systems, and Reimburse General Fund for Administrative Costs**

The U.S. EPA and CARB are executing four Supplemental Environmental Projects (SEPs) and have asked South Coast AQMD to act as the SEP administrator to install



and maintain air filtration systems at schools in environmental justice communities. South Coast AQMD will also be carrying out its own SEP. These actions are to recognize up to \$316,000 for SEPs from U.S. EPA and CARB and transfer up to \$45,000 from the General Fund for the South Coast AQMD SEP into the Air Filtration Fund (75). These actions are to also execute agreements to install and maintain air filtration systems in an amount not to exceed \$345,200, execute or amend access agreements with local school districts, amend contracts to purchase additional filters using unspent administrative funds, and reimburse the General Fund for administrative costs up to \$15,800 for SEP administration.

Moved by Robinson; seconded by Mitchell; unanimously approved.

Ayes: Buscaino, Mitchell, Robinson

Noes: None

Absent: Bartlett, Hahn

**1. Amend Contracts to Develop and Demonstrate Zero Emissions Drayage Trucks and Provide Project Implementation Assistance for Clean Fuels Projects and Execute Easement for Fleet Chargers**

In March 2016, the Board recognized revenue from CARB and other funding partners and awarded multiple contracts for a Zero Emissions Drayage Truck (ZEDT) Project. In October 2018, the Board amended those contracts to reallocate funds among the project partners; however, an additional reallocation of funds is needed at this time. This action is to authorize the Executive Officer to amend the four project partner contracts and a project implementation assistance contract, as needed, for the ZEDT Project and to redistribute funds among these five contracts as needed to ensure project completion. This action is to also amend a contract for project implementation support of Clean Fuels related projects adding up to \$50,000 from the Clean Fuels Program Fund (31). In addition, in August 2018, staff applied for 30 fleet chargers through Southern California Edison's Charge Ready Program, which requires the host to execute an easement. This action is to authorize the execution of the easement.

Council Member Buscaino asked the Committee to waive the presentation for this item.

Mayor Mitchell commented that she does not have a financial interest or conflict of interest, but is required to identify for the record that she is a Board Member of CARB which is involved in this item.

Council Member Robinson inquired about issues in deploying trucks in revenue service, especially in terms of timely permitting and installation of infrastructure and urged staff to work with local permitting authorities to become stakeholders to create a streamlined permitting process.

Moved by Robinson; seconded by Mitchell; unanimously approved.

Ayes: Buscaino, Mitchell, Robinson

Noes: None

Absent: Bartlett, Hahn

**3. Issue Program Announcement for Combustion Freight and Marine Projects Eligible Under Volkswagen Environmental Mitigation Program**

In November 2018, the Board recognized revenue up to \$150 million to administer and implement two of the five project funding categories for the Volkswagen (VW) Environmental Mitigation Program. This action is to issue the statewide Program Announcement for the first installment of program funds totaling \$30 million for the Combustion Freight and Marine Projects category. A solicitation for the Zero Emission Class 8 Freight and Port Drayage Trucks is planned for spring/summer 2020.

Staff announced that there are on-going discussions with CARB on the draft Program Announcement, especially for newspaper noticing throughout the state. Mayor Mitchell agreed that any administrative issues such as notification issues do not necessitate coming back to the Committee. Mayor Mitchell inquired about outreach support from San Joaquin Valley APCD and Bay Area AQMD. Staff replied that they will partner with the other air districts on outreach, and the Program Announcement will be posted on the websites of CARB, CAPCOA and the three air districts.

Council Member Robinson asked if there will be any minimum mileage requirements for the Volkswagen Program. Staff stated that the projects will be ranked based on cost-effectiveness and mileage is a part of this calculation. Council Member Robinson asked staff to consider that drayage trucks have lower mileage but result in high impacts to AB 617 communities.

Moved by Mitchell; seconded by Robinson; unanimously approved.

Ayes: Buscaino, Mitchell, Robinson

Noes: None

Absent: Bartlett, Hahn

**4. Adopt Resolution, Execute Contracts, Amend Awards, Transfer Funds and Reimburse Administrative Costs for Carl Moyer and Other Programs**

In June 2019, the Program Announcement for the Year 21 Carl Moyer Program closed. This year, in addition to the traditional sources of Carl Moyer SB 1107 and AB 923 funds, funding from the Community Air Protection Program, State Reserve

and FARMER will also be available to fund Carl Moyer projects. In addition, updates to improve the Carl Moyer online application system are necessary. These actions are to: 1) adopt a Resolution recognizing up to \$86 million in Community Air Protection Program funds; 2) execute contracts for Year 21 Carl Moyer Program, SOON Provision, State Reserve, FARMER and Community Air Protection Programs; 3) amend a “Year 20” SOON Provision contract award; 4) authorize the Executive Officer to redistribute the source of funds for these contracts to ensure program liquidation targets are met; 5) amend a contract for the Carl Moyer online application system; 6) transfer \$3 million from the Carl Moyer Program AB 923 Fund (80) to the Voucher Incentive Program Fund (59) for truck replacements; and 7) reimburse administrative costs related to implementing these incentive funds.

Mayor Mitchell commented that she does not have a financial interest or conflict of interest, but is required to identify for the record that she is a Board Member of CARB and a Board Member of the Los Angeles County Sanitation Districts. County which are involved in this item.

Council Member Buscaino commented that he does not have a financial interest or conflict of interest, but is required to identify for the record that he is a Board Member of the L.A. County Sanitation Districts which is involved in this item.

Andrew Delaney, Associates Environmental, commented that the language in the Program Announcement should specify that if the program is oversubscribed, then only projects in Disadvantaged Communities will be considered. He recommended the Committee re-evaluate the language in the Program Announcement to either provide a statement addressing this or issue separate program announcements for each program based on the funding source.

Moved by Mitchell; seconded by Robinson; unanimously approved.

Ayes: Buscaino, Mitchell, Robinson

Noes: None

Absent: Bartlett, Hahn

**5. Execute Contract to Demonstrate Fuel Cell Range-Extended Drayage Trucks**

In April 2017, the Board approved several projects for port handling equipment, including one with Vehicle Velocity Group (VVG), partnering with Efficient Drivetrains, Inc. (EDI), to develop and demonstrate one battery electric and three plug-in hybrid electric drayage trucks. Cummins Inc., which recently acquired EDI, proposes instead to develop and demonstrate four fuel cell range-extended drayage trucks. This action is to execute a contract with Cummins Inc. to develop and demonstrate four fuel cell range-extended drayage trucks in the amount of \$3,568,300 from the Clean Fuels Fund (31), comprised of \$2,985,995 in CEC pass-through revenue and \$582,305 for South Coast AQMD’s cost-share. Cummins Inc.

will provide the additional funds to make up the increased costs of the revised project.

Ranji George, a member of the public, supported the proposal to deploy hydrogen and fuel cell technology for heavy-duty vehicle application and emphasized the need to dedicate more funding to hydrogen technology instead of battery powered vehicles and support the need for battery recycling funding.

Moved by Robinson; seconded by Mitchell; unanimously approved.

Ayes: Buscaino, Mitchell, Robinson

Noes: None

Absent: Bartlett, Hahn

### **DISCUSSION ITEM:**

#### **6. Renewable Transportation Fuel From Pyrolysis**

Staff presented a status report on the Kore Infrastructure project that is intended to demonstrate a commercial scale pyrolysis system that converts various waste biomass feedstock into renewable natural gas and renewable hydrogen.

Mayor Mitchell inquired about the amount of funding South Coast AQMD has given to this project. Staff responded that South Coast AQMD has funded both the commercial and optimization process with a total funding level of \$3.5 million and has paid approximately \$2.5 million to date. Staff added that the scope of the Kore projects has also been revised, with current focus on hydrogen. Mayor Mitchell also asked if pyrolysis produces hydrogen. Staff explained that the pyrolysis technology can produce a gas that can be used to produce hydrogen or convert to other renewable fuels, as the byproduct is biochar, which can be used as a fertilizer supplement.

Council Member Robinson asked what would happen if deadlines are not met. Staff responded that the Board would be apprised of the schedule. Council Member Robinson commented that it appears that Kore has missed other deadlines and hopes that they meet upcoming ones. Staff indicated that this is a demonstration project by a start-up company and that funding is a limiting factor in Kore's ability to perform at a faster pace. Staff plans to continue monitoring progress on a regular basis.

Mayor Mitchell asked about outside funding for this project. Staff responded that Kore has secured SoCalGas and other private funding, and that South Coast AQMD's portion is relatively small compared to the overall project cost. Mayor Mitchell also inquired about potential air quality benefits of this project. Staff explained that production of renewable fuels is vital for light- and heavy-duty

vehicles, especially hydrogen which has a limited supply chain and is currently primarily produced using steam methane reformation.

**OTHER MATTERS:**

**7. Other Business**

Council Member Robinson announced he will no longer be a Board Member and this will be his last meeting with the Technology Committee. He commended staff for the exceptional work.

**8. Public Comment Period**

There were no public comments.

**9. Next Meeting Date**

The next regular Technology Committee meeting is scheduled for Friday, January 24, 2020 at noon.

**Adjournment**

The meeting adjourned at 12:55 p.m.

**Attachment**

Attendance Record

**ATTACHMENT**

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
TECHNOLOGY COMMITTEE MEETING  
Attendance Record – November 15, 2019**

Council Member Joe Buscaino (videoconference) .....	SCAQMD Board Member
Mayor Judith Mitchell .....	SCAQMD Board Member
Council Member Dwight Robinson .....	SCAQMD Board Member
Andy Silva .....	Board Consultant (Rutherford)
Marisa Perez .....	Board Consultant (Mitchell)
Andrew Delaney .....	Associates Environmental
Ranji George .....	Public Member
John McNamara .....	CR&R Environmental Services
Fred Minassian .....	Public Member
Phil Barroca .....	SCAQMD Staff
Naveen Berry .....	SCAQMD Staff
Dana Foist .....	SCAQMD Staff
Ping Gui .....	SCAQMD Staff
Seungbum Ha .....	SCAQMD Staff
Drue Hargis .....	SCAQMD Staff
Lauren Henninger .....	SCAQMD Staff
Joseph Impullitti .....	SCAQMD Staff
Patricia Kwon .....	SCAQMD Staff
Tom Lee .....	SCAQMD Staff
Jason Low .....	SCAQMD Staff
Megan Lorenz .....	SCAQMD Staff
Lisa Mirisola .....	SCAQMD Staff
Wayne Nastri .....	SCAQMD Staff
Walter Shen .....	SCAQMD Staff
Dominic Tung .....	SCAQMD Staff
Alejandra Vega .....	SCAQMD Staff
Donna Vernon .....	SCAQMD Staff
Mei Wang .....	SCAQMD Staff
Vicki White .....	SCAQMD Staff
Fan Xu .....	SCAQMD Staff
Alyssa Yan .....	SCAQMD Staff

## **December 6, 2019 Governing Board Meeting**

### **Item 25 - California Air Resources Board Monthly Report**

CARB's meeting summary was not available; therefore, this item was pulled from consideration.

BOARD MEETING DATE: December 6, 2019

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:** Rule 1111 was amended in 2009 to require Ultra-Low NOx furnaces (14 ng/J) by 2014, and was subsequently amended to extend the compliance date to October 1, 2019 with a mitigation fee. The proposed amended rule would provide an exemption to manufacture, distribute, sell, and install Low-NOx furnaces (40 ng/J) in higher altitudes until October 1, 2020.

**COMMITTEE:** Stationary Source, November 15, 2019; 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 Nastri  
Executive Officer

PMF:SN:BB:MK:GQ:YZ:SW

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**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. and the rule applies to manufacturers, distributors, sellers, and installers of such furnaces. Rule 1111 was amended in 2009 to lower the NOx 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 Ultra Low-NOx emission limit of 14 ng/J. The mitigation fee option for condensing and non-condensing furnaces ended on September 30, 2019.



Six of the seven furnace manufacturers have commercially available Ultra Low-NOx furnaces for elevations up to 4,500 feet above sea level (two manufacturers have furnaces available for elevations up to 5,000 feet). As a result, there are currently no Ultra-Low NOx furnaces available for elevations above 4,500 and 5,000 feet. Four manufacturers have been granted interim product variances that allow Low-NOx furnaces (40 ng/J) to be sold, distributed, or installed above 4,500 feet. Contractors and installers in the mountain communities have commented that certain provisions of the product variance are difficult to implement such as a strict limit at 4,500 feet in communities where the elevation fluctuates between 4,200 and 4,500 feet, the application of the mitigation fee, and other provisions. In addition, some contractors have experienced delays in obtaining Low-NOx furnaces (40 ng/J) from distributors that were apprehensive to distribute Low-NOx furnaces under the variance. This Board letter serves as the staff report for this rule amendment.

### **Public Process**

This issue was discussed at two Board meetings with public testimony and ultimately direction from the Board to assist in resolving the concerns. A Public Workshop was conducted on November 14, 2019. A public consultation meeting was held in Lake Arrowhead on November 21, 2019.

### **Proposed Amended Rule 1111**

Proposed Amended Rule (PAR) 1111 would include a limited exemption from the Ultra Low-NOx (14 ng/J) emission limit that applies to manufacturers, distributors, sellers, and installers of condensing and non-condensing natural gas furnaces. This exemption would apply to furnaces installed at elevations greater than or equal to 4,200 feet above sea level until October 1, 2020. During this interim exemption, furnaces would be required to meet the Low-NOx (40 ng/J) emission limit. PAR 1111 includes recordkeeping requirements for the manufacturer, distributor, and installer to track the distribution, sales, and installations of these furnaces. Verification of the elevation will be based on U.S. Geological Survey data, which is also used by other location sources such as Google Maps, Wikipedia, etc.

Staff is recommending a sunset date of October 1, 2020 to allow manufacturers to conduct high altitude testing, develop kits, and guidance for the installation of furnaces in higher elevations. During the hearings for the product variances, manufacturers stated that it is expected that furnaces for the high elevation areas would be available between May and September 2020. Staff is committed to monitoring the development of furnaces for high elevation areas and will report back to the Stationary Source Committee in May 2020. This report to the Stationary Source Committee will also include an update on the status of commercialization of Ultra Low-NOx weatherized units which have a compliance date of October 1, 2020.

## **Key Issues**

Staff is not aware of any key remaining issues.

## **Comparative Analysis**

Under Health and Safety Code Section 40727.2, the South Coast AQMD is required to perform a comparative written analysis when adopting, amending, or repealing a rule or regulation. The comparative analysis is relative to existing federal or state requirements, existing or proposed South Coast AQMD rules, and air pollution control requirements and guidelines that are applicable to industrial, institutional, and commercial combustion equipment.

The South Coast AQMD is not aware of any state or federal requirements regulating air pollution that are applicable to new or in-use PAR 1111 units. Rule 1111 is also the only South Coast AQMD rule regulating this type of equipment. Because there are no state or federal requirements for PAR 1111 units, the proposed amendments are not in conflict with and do not duplicate any South Coast AQMD, state, or federal requirement.

## **California Environmental Quality Act**

Pursuant to the California Environmental Quality Act (CEQA) and South Coast AQMD Rule 110, the South Coast AQMD, as lead agency for the proposed project, has reviewed PAR 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. South Coast AQMD staff has determined that allowing the installation and operation of 40 ng/J furnaces in the high altitude areas for a limited period of time would result in minimal and temporary NO<sub>x</sub> emission reductions foregone; thus, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. The amendments will result in a one-year delay of 1.35 pounds per day of NO<sub>x</sub> emission reductions. Therefore, the proposed project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. Further, because PAR 1111 will not have statewide, regional or areawide significance, no CEQA scoping meeting is required to be held pursuant to Public Resources Code Section 21083.9(a)(2). A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062, and is included as Attachment C of this Board Letter. 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**

PAR 1111 does not impose any additional requirements and will have no socioeconomic impacts.

**AQMP and Legal Mandates**

Pursuant to Health & Safety Code Section 40460 (a), the South Coast AQMD is required to adopt an AQMP demonstrating compliance with all federal regulations and standards. The South Coast AQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. Rule 1111 implements control measure CMB-03 in the 2007 AQMP and PAR 1111 will result in a one-year delay of 1.35 pounds per day of NOx emissions.

**Resource Impacts**

Existing staff resources are adequate to implement the proposed rule amendments.

**Attachments**

- A. Resolution
- B. Proposed Amended Rule 1111
- C. Notice of Exemption
- D. Comment Letters Received and Responses to Comments
- E. Board Meeting Presentation

## ATTACHMENT A

### RESOLUTION NO.19\_\_\_\_\_

**A Resolution of the South Coast Air Quality Management District (South Coast AQMD) Governing Board determining that Proposed Amended Rule 1111 - Reduction of NO<sub>x</sub> 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 AQMD Governing Board amending Rule 1111 - Reduction of NO<sub>x</sub> Emissions From Natural-Gas-Fired, Fan-Type Central Furnaces.**

**WHEREAS**, the South Coast AQMD 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 South Coast AQMD 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 (South Coast AQMD Rule 110); and

**WHEREAS**, the South Coast 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 South Coast AQMD 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 because allowing an exemption to manufacture, distribute, sell and install condensing or non-condensing natural gas furnaces that can achieve the oxides of nitrogen (NO<sub>x</sub>) emission limit of 40 nanograms per Joule (ng/J) in lieu of the NO<sub>x</sub> emission limit of 14 ng/J in areas with altitudes at or higher than 4,200 feet above sea level until October 1, 2020 would result in minimal and temporary NO<sub>x</sub> emission reductions foregone, and is therefore, exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption; and

**WHEREAS**, the South Coast AQMD 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 and the Board Letter (which serves as the Staff Report), were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, and has taken and considered staff testimony and public comment prior to approving the project; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that no socioeconomic assessment is required under Health and Safety Code Section 40440.8(a) because there are no adverse socio-economic impacts; and further that the proposed amended rule does not “significantly affect air quality or emissions limitations.”

**WHEREAS**, the South Coast AQMD 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 modification in paragraph (g)(5) to change the elevation from 4,500 to 4,200 feet above sea level made to Proposed Amended Rule 1111 since the notice of public hearing was published is 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 change does not impact the delay in emission reductions because estimated emissions covered the same geographical area, (b) the changes do not affect the number or type of sources regulated by the rule because estimated sources were located in the same geographical area, (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 South Coast AQMD 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 Board Letter (which serves as the Staff Report); and

**WHEREAS**, the South Coast AQMD Governing Board has determined that a need exists to amend Rule 1111 to allow an exemption to manufacture, distribute, sell, and install condensing or non-condensing natural gas furnaces that can achieve a NOx emission limit of 40 ng/J in lieu of 14 ng/J in areas with altitudes at or greater than

4,200 feet above sea level until October 1, 2020 to allow ample time for manufacturers to test units than achieve a NOx emission limit of 14 ng/J at high altitudes and develop the necessary guidance; and

**WHEREAS**, the South Coast AQMD Governing Board obtains its authority to adopt, amend, or repeal rules and regulations from Sections, 40000, 40001, 40440, 40702, 40725 through 40728, and 41508 of the California Health and Safety Code; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that there is a problem that needs to be addressed and a need exists to adopt Proposed Amended Rule 1111, because of the unavailability of compliant furnaces for use at high altitudes, is written or displayed so that its meaning can be easily understood by the persons directly affected by it; and

**WHEREAS**, the South Coast AQMD 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 South Coast AQMD 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 South Coast AQMD Governing Board has determined that Proposed Amended Rule 1111 references the following statutes which the South Coast AQMD 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 South Coast AQMD 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**, a public hearing has been properly noticed in accordance with the provisions of Health and Safety Code Section 40725; and

**WHEREAS**, the South Coast AQMD Governing Board has held a public hearing in accordance with all provisions of law; and

**WHEREAS**, the South Coast AQMD 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 South Coast AQMD Governing Board has determined that there is a problem that needs to be addressed and a need exists to adopt Proposed Amended Rule 1111, because of the unavailability of compliant furnaces for use at high altitudes as described in the Board Letter (which serves as the Staff Report); and

**NOW, THEREFORE, BE IT RESOLVED**, that the South Coast AQMD 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) – Common Sense Exemption. This information was presented to the South Coast AQMD 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 South Coast AQMD Governing Board directs staff to provide an update as to development of high altitude furnaces and weatherized furnaces to Stationary Source Committee no later than May 15, 2020; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD 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 South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 1111, as set forth in the Attachment B and incorporated herein by reference.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARDS

## ATTACHMENT B

(Adopted December 1, 1978)(Amended July 8, 1983)(Amended November 6, 2009)  
(Amended September 5, 2014)(Amended March 2, 2018) (Amended July 6, 2018)  
(Amended December 6, 2019)

### **PROPOSED AMENDED RULE 1111. REDUCTION OF NO<sub>x</sub> EMISSIONS FROM NATURAL-GAS- FIRED, FAN-TYPE CENTRAL FURNACES**

(a) Purpose and Applicability

The purpose of this rule is to reduce NO<sub>x</sub> 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<sub>x</sub> 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 NO<sub>2</sub>) 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 NO<sub>2</sub>) 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 CO<sub>2</sub> 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 CO<sub>2</sub> in water-free flue gas, assuming complete combustion and no CO present.

E = AFUE, percent (calculated using Table 2).

Y = volume percent of O<sub>2</sub> 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<sub>x</sub> 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<sub>x</sub> 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: “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](http://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<sub>x</sub> 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.

(5) Condensing and non-condensing natural gas furnaces installed at elevations greater than or equal to ~~4,500~~ 4,200 feet above sea level are exempt from paragraph (c)(4) until October 1, 2020.

(6) The manufacturer of any furnace that elects to use the exemption in paragraph (g)(5) shall record the following information and shall make this information available upon request to the Executive Officer:

(A) Sales date to distributor;

(B) Distributor’s name and full contact information (address and phone number);

(C) Model number; and

(D) Serial number.

(7) The distributor that elects to use the exemption in paragraph (g)(5) shall record the following information and shall make this information available upon request to the Executive Officer:

(A) Sales date to installer;

(B) Installer’s name and full contact information (address and phone number);

(C) Model number; and

(D) Serial number.

(8) The installer that elects to use the exemption in paragraph (g)(5) shall record the following information and shall make this information available upon request to the Executive Officer:

(A) Installation date;

(B) Address of furnace installation;

(C) Model number; and

(D) Serial number.

ATTACHMENT C



**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 (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

South Coast AQMD staff is proposing to amend Rule 1111 to allow an exemption to manufacture, distribute, sell, and install condensing or non-condensing natural gas furnaces that emit no more than 40 nanograms of oxides of nitrogen (NOx) per Joule (ng/J) in lieu of the NOx emission limit of 14 ng/J in areas with altitudes at or higher than 4,200 feet above sea level until October 1, 2020.

The proposed project has been reviewed 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. Since Proposed Amended Rule 1111 would result in minimal and temporary foregone NOx emission reductions, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. If the project is approved, this 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 directed 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. Mr. Shawn Wang is also available at (909) 396-3319 to answer any questions regarding Proposed Amended Rule 1111.

**Date:** November 14, 2019

**Signature:**   
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rules, and Area Sources

**NOTICE OF EXEMPTION FROM THE  
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

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**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 NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces

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**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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).

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**Description of Nature, Purpose, and Beneficiaries of Project:** South Coast AQMD staff is proposing to amend Rule 1111 to allow an exemption to manufacture, distribute, sell, and install condensing or non-condensing natural gas furnaces that emit no more than 40 nanograms of oxides of nitrogen (NO<sub>x</sub>) per Joule (ng/J) in lieu of the NO<sub>x</sub> emission limit of 14 ng/J in areas with altitudes at or higher than 4,200 feet above sea level until October 1, 2020.

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**Public Agency Approving Project:** South Coast Air Quality Management District

**Agency Carrying Out Project:** South Coast Air Quality Management District

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**Exempt Status:**  
CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption

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**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), South Coast AQMD staff, as Lead Agency, has reviewed Proposed Amended 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. Since Proposed Amended Rule 1111 would result in minimal and temporary foregone NO<sub>x</sub> emission reductions of 1.35 pounds per day of NO<sub>x</sub>, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. If the project is approved, this Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside, and San Bernardino counties.

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**Date When Project Will Be Considered for Approval (subject to change):**  
South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

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<b>CEQA Contact Person:</b>	<b>Phone Number:</b>	<b>Email:</b>	<b>Fax:</b>
Mr. Ryan Bañuelos	(909) 396-3479	<a href="mailto:rbañuelos@aqmd.gov">rbañuelos@aqmd.gov</a>	(909) 396-3982

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<b>Regulation Contact Person:</b>	<b>Phone Number:</b>	<b>Email:</b>	<b>Fax:</b>
Mr. Shawn Wang	(909) 396-3319	<a href="mailto:swang@aqmd.gov">swang@aqmd.gov</a>	(909) 396-3324

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**Date Received for Filing:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ *(Signed Upon Board Approval)*  
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

# Attachment D

Comment Letter #1



Residential HVAC  
6200 Troup Highway  
Tyler, TX 75707  
(903)730-4561  
mark.woodruff@irco.com

November 14, 2019

Michael Krause  
Planning and Rules Manager  
Planning, Rule Development and Area Sources  
South Coast AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

Re: Proposed Amended Rule 1111

Dear Mr. Krause:

On behalf of Trane U.S. Inc. (Trane) which is a wholly owned subsidiary of Ingersoll Rand (NYSE:IR) we hereby submit our comments on the proposed amendments to Rule 1111. As you may know, Trane was one of three manufacturers which filed a Petition for Interim Product Variance for high altitude furnaces at the request of its dealers and the South Coast Air Quality Management District (District). While Trane's sales of furnaces for high altitude application in the District constitutes a small fraction of its total sales in California, Trane nevertheless has been extremely concerned about this because the lack of furnaces available for our customers in high altitude areas presents health and safety issues. As such, Trane took on the significant time and expense to pursue the Interim Product Variance which it successfully received after a grueling three-day hearing.

However, during and after the hearing on the Interim Product Variance, given the mandate that the variance be terminated for specific types and sizes of furnaces as they become commercially available (from any Original Equipment Manufacturer (OEM)), it became clear that (1) it would be difficult if not impossible for dealers/installers to track which compliant furnaces would be commercially available; (2) dealers/installers cannot reasonably be expected to piece together a product lineup using the limited available products over various OEMs; and (3) there will always be product gaps because it would be technically and economically infeasible for any OEM to develop a complete line of furnace products (of all types and sizes) for high altitude application in the District.

1-1

*As such, we strongly support amending Rule 1111 to include an exemption for furnaces to be installed at elevations greater than or equal to 4,200 feet above sea level.*

However, given the inevitable product gaps, Trane would suggest another potential path that would meet the District's objective to lower NOx emissions. In June-August 2019, Trane previously presented to the District staff the concept of using dual fuel technology also known as hybrid heating, i.e., pairing a 40 ng/J furnace with a heat pump which would significantly lower the emissions from the furnace. The heat pump would be the primary heating source at milder temperatures, and this would reduce the

1-2

amount of time the furnace would operate. Hybrid heating systems are readily available and have been in use for many years by all manufacturers, in all climates, and at all elevations. Indeed, using heat pumps would support California's policies in support of decarbonization and SB 100 (The 100 Percent Clean Energy Act of 2018) which sets the following goals: achieve 50% renewable energy resources by December 31, 2026, 60% by December 31, 2030, and 100% of total retail sales of electricity from eligible renewable energy and zero-carbon resources by December 31, 2045.

Trane has prepared a white paper summarizing its findings with respect to the NOx emissions reductions which would result from the use of hybrid heating technology. See Attachment A. For even the coldest climate area of the district (Climate Zone 16), use of a hybrid heating system would result in an 83% annual NOx reduction compared to a 65% annual NOx reduction for a ULN furnace:

Climate Zone 16

	NOx (ng/J)	Hrs of Operation	Firing Rate (kBtu/hr)	Output Capacity (kBtu/hr)	Annual NOx (lb)	Annual NOx Reduction %
Low NOx	40	517	60	47.0	2.26	-
Ultra Low NOx	14	517	60	47.0	0.79	65
Dual Fuel	40	87	60	47.0	0.38	83

1-2  
(Con't)

*As such, use of a hybrid heating technology would result in significantly more NOx reductions compared to a ULN furnace. Trane submits that the hybrid heating technology should be considered as an alternate path of compliance (or an additional exemption) for high altitude application.*<sup>1</sup> This would be a practical and beneficial permanent solution given the inevitable gaps in product availability.<sup>2</sup>

With respect to the proposed amendments to Rule 1111, Trane has the following concern about Section (g)(6) of the Rule which states:

- (6) The manufacturer of any furnace that elects to use the exemption in paragraph (g)(5) shall record the following information and shall make this information available upon request to the Executive Officer:
  - (A) Sales date to distributor;
  - (B) Distributor's name and full contact information (address and phone number);
  - (C) Model number; and
  - (D) Serial number.

1-3

This is information that must be collected by Trane's distributors. Trane sells 40 ng/J low NOx furnaces in the District for propane use, and it has no way of knowing or differentiating furnaces for that purpose vs. furnaces for high altitude. Since this information would already be provided under Section (g)(7), Trane respectfully requests that Section (g)(6) be deleted.

In closing, Trane is supportive of all methods of reducing NOx (and other pollutants) in the District and believes that both ULN products as well as hybrid systems would meet the goals of Rule 1111. In high

<sup>1</sup> Note that the NOx emission reduction from dual fuel technology is even higher in warmer climates in the District. An average furnace in the District would operate only 17 hours/year in a dual fuel system which would result in a 90% reduction in NOx emissions compared to a 40 ng/J low NOx furnace on its own.

<sup>2</sup> If the District is interested in this potential alternative path/exemption, Trane can work with the District to develop protocol and proposed language to ensure that dual fuel systems are properly installed and monitored.

altitude applications, there will never be a full line of ULN furnaces to meet all needs and as such, Trane is proposing a solution that would result in even less NOx emissions than the ULN furnaces. Indeed, Ingersoll Rand is committed to finding sustainable solutions that advance the quality of life by creating energy efficient, safe and comfortable environments. To this end, Ingersoll Rand announced in 2014 a roadmap to increase energy efficiency and reduce environmental impact from our operations and product portfolio to result in 20.85 million metric tons of CO2e avoidance globally by 2020. Most recently, Ingersoll Rand was an original signatory to the "We Are Still In" declaration confirming our commitment to stand by plans that align with the targets set by the Paris Agreement regarding reducing carbon emissions to avert the worst effects of climate change.

1-3  
(Con't)

Should you have any questions or would like to discuss hybrid heating technology further, please feel free to contact us.

Sincerely,

*Mark Woodruff*

Mark Woodruff  
Furnace Product Manager



## Attachment A

### Executive Summary - SCAQMD Rule 1111 and Hybrid Heating Systems

South Coast Air Quality Management District's (SCAQMD) Rule 1111, NO<sub>x</sub> Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces, was developed to drive reductions in NO<sub>x</sub> emissions in the residential heating sector. The rule requires that furnaces installed in the district meet an Ultra-Low NO<sub>x</sub> (ULN) emissions limit of 14 ng/J or less, a 65% reduction from the previous low NO<sub>x</sub> requirement. Ingersoll Rand urges the district to consider additional technology solutions that meet NO<sub>x</sub> emissions reduction needs.

#### Hybrid Heating - Dual Fuel Systems

Hybrid heating systems operate in a very similar way as a hybrid car. A hybrid car reduces emissions by operating on electrical power as often as possible and only running the gasoline engine when it absolutely must. A hybrid heating system operates in exactly the same way - by operating on electrical power (as a heat pump) as often as possible and only running the gas furnace when it absolutely must. By Ingersoll Rand's analysis, due to reduced furnace runtimes hybrid systems that combine a 40 ng/J furnace with a heat pump will yield, on average a 90% reduction in NO<sub>x</sub> emissions across all of South Coast, and provide 83% NO<sub>x</sub> reductions even in the coldest areas of South Coast, vs a standalone 40 ng/J furnace. The incremental cost for a homeowner to replace a residential HVAC system with either a hybrid system or a ULN furnace/air conditioner are similar, and the hybrid system yields additional benefits. As such, Ingersoll Rand urges South Coast to consider hybrid heating systems as an alternative compliance option within Rule 1111.

#### Understanding Hybrid Heating Solutions

A hybrid system is similar to a conventional gas furnace/air conditioner system, except that a heat pump is used in place of the air conditioner. In a hybrid configuration, the heat pump will operate as the primary heating source at milder temperatures with low heating demand. When the heat pump is operating, the furnace is shut off, resulting in zero NO<sub>x</sub> emissions. As temperatures get colder and the heat pump does not have the capacity to keep the home warm, the furnace takes over as the auxiliary heating source, in what is called the "switchover temperature". When outdoor temperatures get warmer and the heat pump can again operate effectively, it resumes operation and the furnace is shut off.

As modeled in the figure at right, even in the coldest climate in SCAQMD, the furnace will only operate 87 hours/year in a hybrid system, and the heat pump will operate 430 hours/year.

#### Additional Benefits of Hybrid Systems

Hybrid heating systems represent a highly cost-effective and environmentally friendly heating solution in many applications by leveraging the optimal heating fuel for a given condition. Due to Southern California's predominantly mild winter temperatures, the heat pump will operate the vast majority of the time in a hybrid system. Additionally, the State of California is actively pursuing pathways to building decarbonization, many relying on heat pump deployment, and shifting the market toward hybrid systems will keep customers in SCAQMD at the forefront of this transition. As the state works toward a 100% renewable portfolio standard and economy-wide decarbonization, the benefits of heat pumps will only increase.

#### Ingersoll Rand's Recommendation

Hybrid systems are often a better solution than ULN furnaces for achieving SCAQMD's NO<sub>x</sub> reduction goals. We encourage SCAQMD to allow the sale of 40 ng/J furnaces – only when paired with a new or existing heat pump as part of a hybrid system – through an alternative compliance pathway to Rule 1111, a variance, or another solution. Ingersoll Rand is eager to work with the district to provide effective solutions that benefit its customers in pursuit of SCAQMD's NO<sub>x</sub> reduction goals.

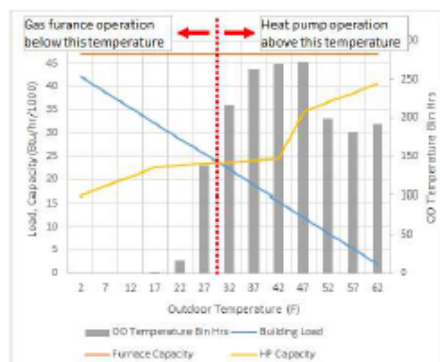


Figure 1: Hybrid Heat Pump modeled operation in SCAQMD territory. Furnace operating hours are shown at left of the red line, and heat pump operating hours are shown at right of the red line.



### **Response to Comment 1-1**

Thank you for your comments.

Staff appreciates the commenter's quick response to address issues with furnace availability for high altitude areas by applying for a product variance and for their support for proposed amended Rule 1111 (PAR 1111).

### **Response to Comment 1-2**

Staff recognizes the opportunities associated with the technology of hybrid gas and electric systems. In order to properly evaluate the potential benefits and impacts associated with this technology, staff will need to conduct further analysis, considering the information provided in Comment Letter 1, Attachment A, and collect input through a public process. Thus, changes to the rule regarding this technology cannot be proposed at this time with this current amendment. Staff also notes that such hybrid systems, if used in the high altitude applications defined in the proposed amendments, will be covered by the high altitude exemption proposed in PAR 1111.

### **Response to Comment 1-3**

Staff recognizes the challenges associated with differentiating the reason for the sale of non-compliant (40 ng/J NO<sub>x</sub>) furnaces, but emphasizes the importance of proper recordkeeping. Traceability of each non-compliant unit sold within the South Coast AQMD jurisdiction is essential in order to assist staff and ensure proper implementation and compliance.



November 22, 2019

Yanrong Zhu  
 Air Quality Specialist  
 South Coast Air Quality Management District  
 21865 Copley Drive  
 Diamond Bar, California 91765-4178

Re: Draft Proposed Amended Rule 1111 Comments

Ms. Zhu:

Johnson Controls, Inc. (JCI) is providing comments on the PAR 1111 revisions as described in the meeting notices attached to SCAQMD’s Planning and Rules Manager Mr. (Michael) Krause’s email of November 6, 2019,

With these comments, JCI wishes to express general support for SCAQMD staff and their efforts to respond to the heating needs of the district’s high altitude consumers. Despite whatever confusion that may have occurred during the rapid response, the district staff should be recognized for achieving a generally workable solution to the high altitude heating need. However, JCI would like to offer additional points for consideration.

1. JCI supports the proposed Rule 1111 changes as summarized by the PAR 1111 informational material presented to the 11/15/19 SCAQMD Stationary Source Committee and as presented at the 11/14/19 Public Workshop and the 11/21/19 Public Consultation Notice meetings. JCI would encourage revising the PAR 1111 currently posted on the SCAQMD website to reflect the rule changes included in the presented informational material. Specific changes suggested include allowing the sale of non-compliant condensing and non-condensing (40 ng/J) furnaces at elevations above 4,200 feet and the elimination of mitigation fees for these same furnaces until October 1, 2020. However, we would encourage the district to limit the mitigation fee waiver to apply only to those OEMs which offer compliant units below 4,200 feet. This would serve a double purpose by rewarding those OEMs which have expended signification resources to achieve the requirement and provide encouragement to achieve compliance to those OEMs not currently compliant. 2-1
2. Further, due to market and technology conditions, JCI believes the end date for compliance with PAR 1111 (should it be adopted) for 14 Ng/J furnaces at elevation above 4,200 feet should be eliminated. A more thorough analysis by SCAQMD will show the benefit to be gained by emissions reductions above 4,200 feet to be de minimus. This combined with the technological challenges and the uncertain ability of certification testing facilities to accurately assess oxides of nitrogen emissions and the availability of services to provide operational testing of Rule 1111 14 Ng/J compliant furnaces above 4,200 feet elevation calls into question the reasonableness of the requirement. 2-2

SCAQMD has recently experienced the negative effects of uncertainty on supply chains and in light of the uncertainty that will result from questionable availability and capability of furnace testing and certification resources and the de minimus reduction of furnace emissions to be realized by high altitude Rule 1111 enforcement of 14 Ng/J compliant furnaces, JCI would recommend that South Coast permit the previous Low NOx, 40 Ng/J compliant models be utilized in applications above 4,200 feet which will increase product availability, improve furnace reliability and lower consumer pricing.

JCI appreciates your consideration of these comments. If you have any questions or require additional information, please contact the undersigned.

Respectfully submitted,

David Stephens, Ph.D., P.E., PEM  
 Director - Global Product Codes & Standards Compliance HVAC  
 Johnson Controls

cc: Michael Krause, Planning and Rules Manager, SCAQMD  
 Gary Quinn, Program Supervisor, SCAQMD

### **Response to Comment 2-1**

Thank you for your comments.

Staff appreciates the commenter's support for proposed amended Rule 1111 (PAR 1111). Currently there are no manufacturers with compliant (14 ng/J NO<sub>x</sub>) furnaces available for altitudes greater than 5,000 feet. The intent of the mitigation fee was to encourage manufacturers to commercialize compliant furnaces, however, the mitigation fee was passed through to the customer. Discussions with contractors and installers in the high altitude areas have requested that the mitigation fee not be applied as they have no control on the availability of the compliant furnaces, and it is their customers that are being impacted. Therefore all furnace manufacturers will not be subject to a mitigation fee.

### **Response to Comment 1-2**

Staff plans to closely monitor and conduct further assessment on the development of high altitude furnaces. The adoption Resolution commits staff to return to the Stationary Source Committee in May 2020 to provide an update to the development and commercialization of compliant furnaces for high altitude areas. Based on the results, staff will make recommendations to either maintain the end date of October 1, 2020 or possibly extend the compliance date for furnaces for high altitude areas. It should be noted that information provided from the four manufacturers who petitioned for interim product variances for high altitude installations have estimated guidance for high altitude installations of compliant (14 ng/J NO<sub>x</sub>) furnaces to be completed between February to September 2020.

# PROPOSED AMENDED RULE 1111 – REDUCTION OF NO<sub>x</sub> EMISSIONS FROM NATURAL GAS-FIRED, FAN-TYPE CENTRAL FURNACES

GOVERNING BOARD MEETING

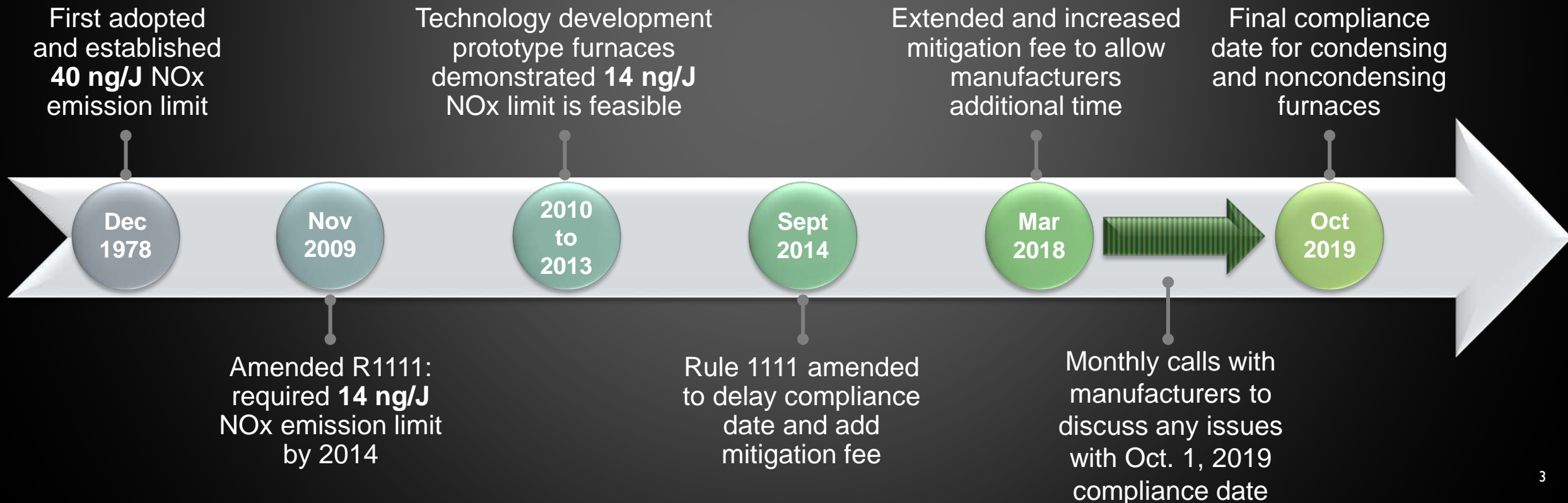
DECEMBER 6, 2019

# Background

- ❑ During November Board meeting, concerns regarding:
  - Availability of compliant (14 ng/J NO<sub>x</sub>) furnaces for high altitude applications
  - Potential public health and safety issues resulting from the lack of available furnaces
- ❑ Purpose of Proposed Amendments
  - Allow additional time for furnace manufacturers to develop high altitude kits and guidance for compliant 14 ng/J units
- ❑ Proposed amendments would result in a one year delay of NO<sub>x</sub> emission reductions of 1.35 lbs/day

# Rule 1111 Background

Rule applies to manufacturers, distributors, sellers, and installers of residential and commercial natural gas-fired fan-type central furnaces



# High Altitude Installations

## September 2019 Manufacturer Confirmation

- Manufacturers confirmed no Ultra-Low NOx furnaces (14 ng/J) available for high elevations (>4,500\*)

## October 1, 2019 Interim Process

- Interim process to allow installation of Low-NOx furnaces (40 ng/J) in elevations >4,500 feet\*

## October 28, 2019 Product Variances In Place

- Product variances allow for the sale, distribution, and installation of Low-NOx (40 ng/J) furnaces in elevations >4,500 feet\*
- To date four product variances have been granted

\* Elevation limits vary by manufacturer, ranges from up to 4,500 feet to up to 5,000 feet above sea level.

# Progress on Development of High Altitude Kits and Guidance for Compliant Furnaces (14 ng/J)

- ❑ Process for high altitude furnaces
  - Test 14 ng/J furnaces at high altitudes (same units available at lower elevations)
  - Develop guidance for high altitude operation
  - Develop high altitude kits (e.g., gas valves for fuel/air ratio), if needed
- ❑ Four manufacturers testified during variance hearings that anticipate guidance/kits to be available between February to September 2020



# Proposed Amendments

- Allow all manufacturers to sell low-NO<sub>x</sub> (40 ng/J NO<sub>x</sub>) furnaces in elevations  $\geq$  4,200 feet above sea level until October 1, 2020
- Require manufacturers, distributors, and installers to track and report the sales and installations of 40 ng/J furnaces
- No mitigation fee

## **Resolution:**

- Provide update on development of high altitude and weatherized furnaces to Stationary Source Committee by May 2020

# Staff Recommendations

## **Adopt Resolution**

- Determine Proposed Amended Rule 1111 is exempt from CEQA
- Amend Rule 1111

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 27

**PROPOSAL:** Determine That Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, Is Exempt from CEQA, and Adopt Rule 1480

**SYNOPSIS:** Proposed Rule 1480 establishes a process to require a facility to conduct ambient monitoring and sampling of metal toxic air contaminants if the facility meets specific criteria. A facility that is designated will be required to submit a Monitoring and Sampling Plan and conduct ambient monitoring and sampling. The proposed rule includes an alternative monitoring and sampling provision where the facility can elect to have the South Coast AQMD conduct ambient monitoring and sampling for a fee. The proposed rule also has monitoring, reporting, and recordkeeping requirements, and provisions to reduce and cease monitoring and sampling provided certain criteria are met.

**COMMITTEE:** Stationary Source, October 18 and November 15, 2019, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Determining that Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Air Toxic Contaminants, is exempt from the requirements of the California Environmental Quality Act; and
2. Adopting Rule 1480 - Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

Wayne Natri  
Executive Officer

PMF:SN:JW:MS

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**Background**

Over the past decade, ambient air monitoring and sampling near certain facilities with metal toxic air contaminants (TACs) such as lead, nickel, arsenic, and hexavalent chromium has revealed air quality issues such as high emitting sources that were uncontrolled, lack of sufficient pollution controls, or compliance issues. Metal TAC emissions are associated with a variety of industrial processes, such as cement production, metal melting operations, metal heating operations, metal finishing

operations such as anodizing, plating, sealing, and spraying, and metal working operations such as grinding, buffing, welding, and plasma arc cutting.

Ambient monitoring and sampling conducted by South Coast AQMD staff since 2009 has identified four facilities with high ambient levels of metal TACs. Based on approved Health Risk Assessments conducted pursuant Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, three of these facilities had estimated cancer risks in excess of 1,000 in a million, which is 10 times the significant risk level of 100 in a million in Rule 1402. In addition to requiring a Health Risk Assessment, Rule 1402 requires these Potentially High Risk Facilities to implement an Early Risk Reduction Plan to quickly implement interim risk reduction measures, and a Risk Reduction Plan to implement permanent risk reduction measures. To ensure public health is protected, the South Coast AQMD continues ambient air monitoring and sampling until permanent pollution controls have been fully implemented and metal TAC emissions are reduced.

Proposed Rule (PR) 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants transfers the responsibility of conducting ambient air monitoring and sampling from the South Coast AQMD to the facility. PR 1480 focuses on facilities with metal TACs which includes arsenic, cadmium, hexavalent chromium, lead, manganese, nickel, and selenium. PR 1480 complements Rule 1402 by requiring monitoring and sampling while the facility conducts a Health Risk Assessment and implements a Risk Reduction Plan under Rule 1402.

### **Public Process**

Development of PR 1480 was conducted through a public process. Staff held 11 working group meetings on May 2, 2018, June 13, 2018, November 28, 2018, February 5, 2019, April 10, 2019, May 23, 2019, August 6, 2019, August 29, 2019, October 8, 2019, October 23, 2019, and October 29, 2019. A Public Workshop was held on October 2, 2019.

### **Proposal**

PR 1480 establishes the designation process which includes an Initial Notice to let the facility know that South Coast AQMD staff is conducting monitoring and sampling near their facility. A Notice of Findings may be sent to notify the facility of the possibility of being designated as a Metal TAC Monitoring Facility and to share the information that South Coast AQMD staff has collected. The designation process allows the facility to submit information to the Executive Officer for consideration prior to designating the facility and accounts for emission reductions associated with enforceable measures the facility elects to implement and adopted rules with future effective compliance dates. If the estimated health risk at a sensitive receptor from the metal TAC emissions from the facility are greater than 100 in a million cancer risk or chronic Hazard Index of 5.0, the facility will be designated a Metal TAC Monitoring Facility and will be required to conduct monitoring and sampling.

A facility that is designated as a Metal TAC Monitoring Facility will be required to submit a Monitoring and Sampling Plan and upon approval will be required to begin monitoring and sampling. The facility has the option to use a third party contractor to conduct the monitoring and sampling or may elect to pay a monthly fee to have South Coast AQMD staff conduct monitoring and sampling under an Alternative Monitoring and Sampling Plan. A Metal TAC Monitoring Facility that has met specific criteria may reduce the frequency of monitoring and sampling from once every three days to once every six days. A Metal TAC Monitoring Facility is relieved from monitoring and sampling under PR 1480 when their Rule 1402 Risk Reduction Plan is fully implemented or when their Rule 1402 Health Risk Assessment is approved, if a Risk Reduction Plan is not needed. To address concerns from stakeholders regarding the cost impact to smaller facilities, PR 1480 includes an exemption from monitoring and sampling requirements for facilities with annual revenues less than \$3 million and less than 25 employees.

### **Key Issues**

Throughout the rulemaking process, staff has worked with stakeholders to address comments and issues such as reducing costs for the alternative monitoring and sampling approach, providing notification that South Coast AQMD is conducting monitoring and sampling, extension of deadlines for responding to notices from the Executive Officer, criteria to designate a facility, recognition of the efforts being made by facilities to comply with toxic rules, acknowledgement of reductions in emissions from the implementation of near-term enforceable measures in the designation process, reducing the staff from 2 to 1 for the alternative approach when feasible, reducing the minimum monitors from 2 to 1, providing options for wind monitoring, recognition of other sources affecting monitoring results, clear exit pathway to discontinue monitoring and sampling, and an exemption for smaller facilities. Staff is not aware of any remaining issues.

### **California Environmental Quality Act**

South Coast AQMD has reviewed the proposed project pursuant to the California Environmental Quality Act (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 and has determined that PR 1480 is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption, CEQA Guidelines Section 15306 – Information Collection, and CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption and is included as Attachment H to this Board letter. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

### **Socioeconomic Assessment**

To estimate the number of facilities that could potentially be designated as Metal TAC Monitoring Facilities under PR 1480, staff used historical data where South Coast AQMD staff has been conducting monitoring and sampling of metal TAC emissions and the facility was designated as a Rule 1402 Potentially Significant Risk Level Facility. Since 2016, there have been three facilities that were designated as Potentially High Risk Level Facilities under Rule 1402. It is assumed that three facilities could potentially be designated under PR 1480 annually. The total annual costs of monitoring and sampling requirements for facilities are estimated to be between \$135,000 to \$246,000 each, assuming two monitors per facility that are measuring hexavalent chromium. The range in cost reflects how quickly a facility would be able to reduce their monitoring and sampling frequency applying the criteria of PR 1480 to actual monitoring data. The socioeconomic analysis includes Rule 1402 implementation costs for preparing a health risk assessment and risk reduction measures. Although these costs are outside of PR 1480, the socioeconomic analysis includes this information to provide an overall estimate of potential facility costs since PR1480 would be implemented in tandem with Rule 1402.

### **AQMP and Legal Mandates**

South Coast AQMD is required to adopt an AQMP demonstrating compliance with all federal regulations and standards. South Coast AQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. PR 1480 is not a control measure of the 2016 AQMP but is needed to transfer the responsibility of monitoring for metal TACs from South Coast AQMD to the facility responsible for the metal TAC emissions, while permanent pollution controls are being installed.

### **Implementation and Resource Impact**

PR 1480 is designed to allow cost recovery by transferring the responsibility of conducting monitoring and sampling from South Coast AQMD to the facility designated as a Metal TAC Monitoring Facility. Additional work will occur for review of plans and reports, investigating elevated readings, and ensuring that monitoring and sampling are done correctly.

### **Attachments**

- A. Summary of Proposal
- B. Key Issues and Responses
- C. Rule Development Process
- D. Key Contacts List
- E. Resolution
- F. Proposed Rule 1480
- G. Final Staff Report Proposed Rule 1480 (including Socioeconomic Impact Assessment)
- H. Notice of Exemption
- I. Rule 1480 Monitoring and Sampling Plan Guidance
- J. Board Meeting Presentation

**ATTACHMENT A**  
**SUMMARY OF PROPOSAL**

Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air  
Contaminants

Purpose

- Require facilities designated by the Executive Officer to conduct monitoring and sampling

Applicability

- Facilities with Metal TAC emissions notified by the Executive Officer with an Initial Notice

Designation Process of a Metal TAC Monitoring Facility

- Initial Notice from Executive Officer to facility that monitoring and sampling is being conducted
- Information Requests which may include access for fence-line monitoring and emissions testing
- Notice of Findings of possible designation with estimated health risk at Sensitive Receptor
- Designation criteria specified in PR 1480

Monitoring and Sampling Plans

- Upon designation must submit and implement either a Basic Monitoring or Sampling Plan or pay a monthly fee for implementation of an Alternative Monitoring and Sampling Plan
- Facility may submit or be required to submit modification to approved Monitoring and Sampling Plans

Reduced Monitoring and Sampling Frequency and/or Monitors

- Specifies process where a facility may modify an approved Monitoring and Sampling Plan to reduce sampling frequency and/or number of monitors, if certain criteria are met
- Must revert to previous sampling frequency if specified criteria are exceeded and can return to Reduced Monitoring and Sampling no more than two times

Monitoring, Recordkeeping and Reporting Requirements

- Submit monthly reports to the Executive Officer
- Maintain housekeeping, maintenance, construction and demolition activities, throughput records, wind speed and direction data, calibration records, monitoring data, plans, and chain of custody records for three years and made available upon request by the Executive Officer
- Notify the Executive Officer upon three consecutive exceedances of four times the Benchmark Concentration and missed sampling days

Discontinuation of Monitoring and Sampling

- Upon receiving notification from the Executive Officer that the required Risk Reduction Plan under Rule 1402 has been fully implemented or if a the Health Risk Assessment is approved, if a Risk Reduction Plan is not required

Exemptions

- Lead emissions subject to ambient air monitoring as required by Rule 1420 series rules
- Hexavalent chromium emissions subject to ambient air monitoring as required by Rule 1156 – Further Reductions of Particulate Emissions
- Facilities with 25 or fewer employees and average annual gross receipts of three million dollars (\$3,000,000) or less, averaged over the previous three years

**ATTACHMENT B**  
**KEY ISSUES AND RESPONSES**

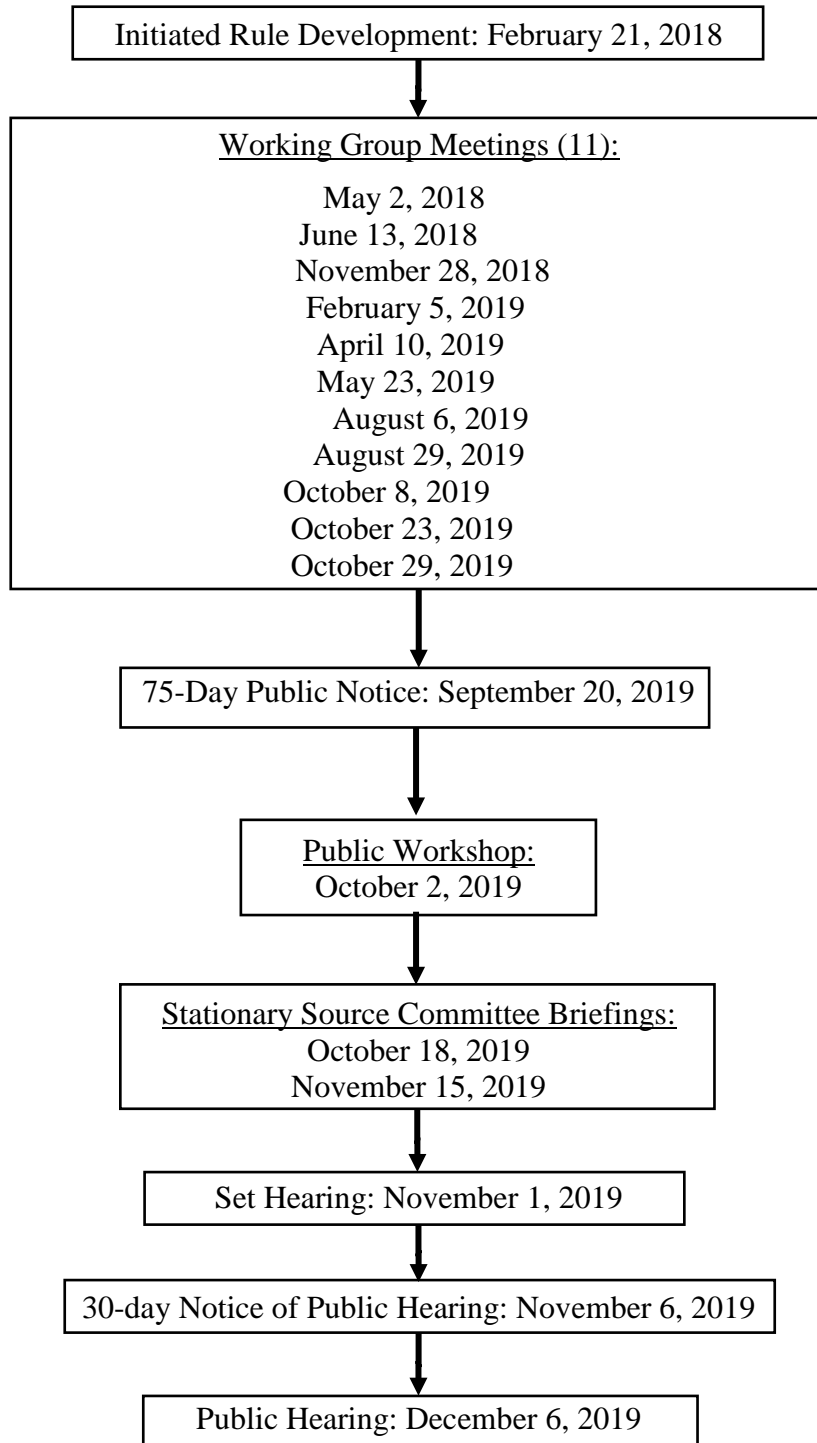
Proposed Rule 1480 — Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

Through the rulemaking process staff has worked with stakeholders to address a variety of issues. Staff is not aware of any key remaining issues.



**ATTACHMENT C  
RULE DEVELOPMENT PROCESS**

**Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air  
Contaminants**



**Twenty one (21) months spent in rule development.**

**One (1) Public Workshop.**

**Eleven (11) Working Group Meetings.**

**ATTACHMENT D**  
**KEY CONTACTS LIST**

- A&A Ready Mix Concrete
- AAA Plating & Inspection
- Aircraft X-ray Laboratories
- AirKinetics
- Almega Environmental
- Alta Environmental
- Arconic
- Arroyo Insurance Services
- Atlas Pacific
- Boeing Company
- Burns & McDonnell
- Cal Electroplating
- California Communities Against Toxics
- California Metals Coalition
- California Safe Schools
- California Small Business Alliance
- City of Los Angeles
- Commercial Metals Company
- Concorde Battery
- Cooper Environmental
- Del Amo Action Committee
- Desmond & Desmond
- Dixon Hard Chrome
- E.M.E.
- Electro Adapter
- Electrolizing
- Embee Processing
- Exponent
- Gerdau
- Griswold Industries
- Hughes Bros. Aircrafters
- K&L Anodizing
- Kerimida
- Los Angeles County Department of Public Health
- Los Angeles County Sanitation District
- Mattco Forge
- Metal Finishing Association of Southern California
- Metal Surfaces
- Morrell's Electroplating
- National Association of Surface Finishing
- Ramboll Environment and Health
- SA Recycling
- SLR International
- Shimadzu Precision
- Sierra Alloys TSI Titanium
- Sierra Aluminum
- Techni-Cast
- Total Clean
- Trojan Battery
- TST
- Vista Metals
- Weber Metals
- Yorke Engineering

## ATTACHMENT E

RESOLUTION NO. 19-\_\_\_\_\_

**A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants is exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board Adopting Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants.**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that Proposed Rule 1480 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 South Coast AQMD 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 Rule 1480 pursuant to such program (South Coast AQMD Rule 110); and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that 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 Rule 1480 is determined to be exempt from CEQA; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that, because Proposed Rule 1480 would only require very minor physical changes to occur at affected facilities as a result of complying with the proposed requirements to install monitoring equipment and conduct monitoring and sampling and these activities would not be expected to adversely affect any environmental topic area, it can be seen with certainty that there is no possibility that the proposed project may have any significant adverse effects on the environment, and is therefore, exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15306 – Information Collection because Proposed Rule 1480 will require basic data collection, research and resource evaluation activities which will not result in a serious or major disturbance to an environmental resource; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the proposed project is also categorically exempt from CEQA requirements pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for the Protection of the Environment, because Proposed Rule 1480 is designed to further protect or enhance the environment by identifying areas with elevated concentrations of metal TACs; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions; and

**WHEREAS**, South Coast AQMD staff has prepared a Notice of Exemption for the proposed project, that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

**WHEREAS**, Proposed Rule 1480 and supporting documentation, including but not limited to, the Notice of Exemption and the Final Staff Report, which includes the Socioeconomic Impact Assessment, were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, as well as has taken and considered staff testimony and public comment prior to approving the project; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D)(i) of the Administrative Code), that the modifications to Proposed Rule 1480 since the notice of public hearing was published add clarity that meets the same air quality objective and are not so substantial as to significantly affect the meaning of the proposed 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 the information contained in the notice of public hearing, and (d) the consideration of the range of CEQA alternatives is not applicable because Proposed Rule 1480 is exempt from CEQA; and

**WHEREAS**, Proposed Rule 1480 is an ambient air monitoring rule for metal toxic air contaminants and will be not be submitted for inclusion into the State Implementation Plan; and

**WHEREAS**, the South Coast AQMD staff conducted a Public Workshop regarding Proposed Rule 1480 on October 2, 2019; and

**WHEREAS**, Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1480 is needed to require facilities to conduct monitoring and sampling when the estimated health risks from their operations significantly impact sensitive receptors; and

**WHEREAS**, the South Coast AQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Sections Health and Safety Code Sections 40000, 40001, 40702, 40725 through 40728, 41510, 41511, 41512, 41512.5, 41700, 42303, 42708; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1480 is written or displayed so that the meaning can be easily understood by the persons directly affected by it; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1480 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1480 will not impose the same requirements as any existing state or federal regulations and is necessary and proper to execute the powers and duties granted to, and imposed upon, South Coast AQMD; and

**WHEREAS**, the South Coast AQMD Governing Board, in adoption Rule 1480, references the following statutes which the South Coast AQMD hereby implements, interprets, or makes specific: California Health and Safety Code Section 39656 et seq. (toxic air contaminants), 40001 (non-vehicular air pollution), 40702 (adopt regulations & execute duties), 41510 (right of entry), 41511 (rules to require source to determine emissions), 41512 (fees), 41512.5 (fees), 41700 (nuisance), 42303 (requests for information), 42708 (authority to require

monitoring), and Federal Clean Air Act Section 116 (Retention of State authority); and

**WHEREAS**, the SCAQMD Governing Board finds that Proposed Rule 1480 fall within one or more of the categories specified in Health and Safety Code Section 40727.2(g) and, therefore, comply with Health and Safety Code Section 40727.2(a); and

**WHEREAS**, the South Coast AQMD specifies that the Planning and Rules Manager of Rule 1480 is the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of the proposed rule is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that the Socioeconomic Impact Assessment, as contained in the Final Staff Report, of Proposed Rule 1480 is consistent with the March 17, 1989 Governing Board Socioeconomic Resolution for rule adoption; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that Proposed Rule 1480 will result in increased costs to affected facilities, yet are considered to be reasonable, with a total annualized cost as specified in the Socioeconomic Impact Assessment, as contained in the Final Staff Report; and

**WHEREAS**, the South Coast AQMD Governing Board has considered the Socioeconomic Impact Assessment and has made a good faith effort to minimize such impacts; and

**WHEREAS**, a public hearing has been properly noticed in accordance with all provisions of Health and Safety Code Section 40725; and

**WHEREAS**, the South Coast AQMD Governing Board has held a public hearing in accordance with all provisions of law.

**WHEREAS**, stakeholders requested that staff provide the Governing Board with an update on implementation of key aspects of the rule two years from the date of adoption.

**NOW, THEREFORE BE IT RESOLVED**, the South Coast AQMD Governing Board directs staff to return to the Stationary Source Committee within two years from the date of adoption to provide an update on implementation of Rule 1480.

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that Proposed Rule 1480 is exempt from CEQA pursuant to CEQA Guidelines Section 15061 (b)(3) – Common Sense Exemption, CEQA Guidelines Section 15306 – Information Collection, and CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. No exceptions to the application of the categorical exemptions set forth in CEQA Guidelines Section 15300.2 – Exceptions, apply to the proposed project. This information was presented to the South Coast AQMD Governing Board, whose members reviewed, considered, and approved the information therein prior to acting on Proposed Rule 1480; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Rule 1480 as set forth in the attached, and incorporated herein by reference.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARDS

## ATTACHMENT F

(PR 1480 December 6, 2019)

### **PROPOSED RULE 1480. AMBIENT MONITORING AND SAMPLING OF METAL TOXIC AIR CONTAMINANTS**

(a) Purpose

The purpose of this rule is to require an owner or operator of a facility that is designated by the Executive Officer as a Metal TAC Monitoring Facility pursuant to paragraph (d)(7) to conduct Monitoring and Sampling.

(b) Applicability

This rule applies to an owner or operator of a facility with Metal TAC emissions that receives an Initial Notice pursuant to paragraph (d)(1).

(c) Definitions

- (1) AMBIENT AIR means outdoor air.
- (2) BENCHMARK CONCENTRATION is the Metal TAC concentration at a monitor that represents the Reduced Risk Level at a Sensitive Receptor that is calculated using the methodology in Appendix 2 and is specified in the notification from the Executive Officer that the facility has been designated as a Metal TAC Monitoring Facility pursuant to paragraph (d)(8).
- (3) CANCER RISK is the estimated probability of a potential maximally exposed individual contracting cancer as a result of exposure to Metal TAC(s) for Sensitive Receptor locations calculated pursuant to the most recently approved Risk Assessment Procedures referenced in Rule 1401–New Source Review of Toxic Air Contaminants at the time the analysis is performed.
- (4) ENFORCEABLE MEASURE is a measure that reduces or eliminates emissions of Metal TAC(s) and is real, permanent, quantifiable, and enforceable by the Executive Officer.
- (5) INDIVIDUAL SUBSTANCE CHRONIC HAZARD INDEX is as defined in Rule 1401.
- (6) MAXIMUM EXPECTED GROUND LEVEL CONCENTRATION means the greatest concentration of a specific Metal TAC from a facility as determined by air dispersion modeling calculations and emission



estimates from Metal TAC sources and fugitive Metal TAC sources, meteorology, and other factors.

- (7) METAL(S) OF CONCERN means the specific Metal TAC(s) that are contributing to the exceedance of the Significant Risk Level at a Sensitive Receptor, as determined pursuant to subparagraph (d)(7)(D).
- (8) METAL TOXIC AIR CONTAMINANT or METAL TAC means a metal air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health as listed by Office of Environmental Health Hazard Assessment.
- (9) METAL TAC MONITORING FACILITY means a facility that meets the criteria in paragraph (d)(7).
- (10) MONITORING AND SAMPLING means ambient air monitoring that is designed to measure concentrations of Metal TAC(s) from a facility and is conducted by an owner or operator of the facility, Executive Officer, or third party contractor.
- (11) REDUCED RISK LEVEL means a Cancer Risk that is 25 in one million and a total Individual Substance Chronic Hazard Index that is 3.0 for all target organ systems based on Metal TAC emissions from a facility.
- (12) SCHOOL means any public or private school, including juvenile detention facilities with classrooms, used for the education of more than 12 children at the school in kindergarten through grade 12. School also means an Early Learning and Developmental Program by the U.S. Department of Education or any state or local early learning and development programs such as preschools, Early Head Start, Head Start, First Five, and Child Development Centers. A school does not include any private school in which education is primarily conducted in private homes. The term includes any building or structure, playground, athletic field, or other area of school property.
- (13) SENSITIVE RECEPTOR means any residence including private homes, condominiums, apartments, and living quarters; schools as defined in paragraph (c)(12); daycare centers; and health care facilities such as hospitals or retirement and nursing homes. Sensitive Receptor includes long-term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

- (14) **SIGNIFICANT RISK LEVEL** means a Cancer Risk that is 100 in one million or a total Individual Substance Chronic Hazard Index that is 5.0 for any target organ system based on Metal TAC emissions from a facility.
  - (15) **VALID SAMPLE** for the purposes of Monitoring and Sampling for this rule is a monitoring sample that was collected and analyzed pursuant to an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan.
- (d) **Designation of a Metal TAC Monitoring Facility**
- (1) The Executive Officer may issue an Initial Notice that the Executive Officer is conducting Monitoring and Sampling to an owner or operator of a facility.
  - (2) After an Initial Notice is issued to an owner or operator of a facility, the Executive Officer may issue an Information Request, if additional information is needed to determine if a facility meets the criteria specified in paragraph (d)(7) to designate the facility as a Metal TAC Monitoring Facility. No later than the date specified in an Information Request, an owner or operator of a facility shall comply with all Information Requests from the Executive Officer, which may require:
    - (A) Conducting emissions testing and/or sample analyses, or providing the Executive Officer access to the facility to conduct such activities;
    - (B) Allowing the Executive Officer to conduct Monitoring and Sampling of Metal TAC(s) near or at the fenceline within a facility for a limited duration; and
    - (C) Providing material usage, manifests, emissions testing results, and other records for any Metal TAC(s).
  - (3) At least 30 days and no later than 180 days following the issuance of an Initial Notice or 180 days following the due date specified in the most recent Information Request, whichever is later, the Executive Officer may issue a Notice of Findings to an owner or operator of a facility that the facility may be designated as a Metal TAC Monitoring Facility pursuant to paragraph (d)(7), which will include:
    - (A) Results of Monitoring and Sampling of Metal TAC(s) with information on each individual sample including the Metal TAC(s)

- monitored, concentration of each Metal TAC, the date(s) and sample location(s);
- (B) Results of data collected from any Information Request in paragraph (d)(2);
  - (C) Findings that the facility has equipment or processes with Metal TAC emissions and those Metal TAC emissions are capable of being released into the ambient air ; and
  - (D) Highest health risk value at a Sensitive Receptor that exceeds the Significant Risk Level based on the Metal TAC emissions from the facility, location of the Sensitive Receptor with the highest health risk value, and the percent that each Metal TAC contributes to the highest health risk value, based on air dispersion modeling.
- (4) No later than 30 days from the date of the Notice of Findings, an owner or operator of a facility shall either:
- (A) Respond in writing to the Executive Officer that no additional information will be provided;
  - (B) Submit additional information pursuant to paragraph (d)(5) to the Executive Officer for consideration prior to determining if the owner or operator of a facility meets the criteria specified in paragraph (d)(7); or
  - (C) Notify the Executive Officer in writing that additional information referenced in subparagraph (d)(4)(B) will be submitted no later than 90 days from the date of the Notice of Findings.
- (5) An owner or operator of a facility that elects to submit additional information pursuant to subparagraph (d)(4)(B) shall provide evidence to show that the facility would not meet the criteria specified in paragraph (d)(7), by submitting the following:
- (A) Additional data to substantiate that some or all Metal TAC emissions from equipment or processes at the facility of the owner or operator are not contributing to the Metal TACs at ambient monitors or to exceeding the Significant Risk Level at any Sensitive Receptor;
  - (B) A written list of Enforceable Measures specifying the equipment, process, and actions, and that the Enforceable Measures have been implemented that reduce or eliminate Metal TAC emissions;

- (C) A written list of Enforceable Measures of equipment or processes that will be implemented within 90 days of the Notice of Findings that will reduce or eliminate Metal TAC emissions that meets the following criteria:
    - (i) Permit to Construct has been issued;
    - (ii) Equipment will be installed no later than 60 days after the date of the Notice of Findings; and
    - (iii) Equipment will be routinely operated no later than 90 days after the Notice of Findings;
  - (D) A written list of equipment or sources that are subject to a rule that is within Regulation XIV – Toxics and Other Non-Criteria Pollutants, for which the equipment or source meets the following criteria:
    - (i) The Regulation XIV rule has a provision with a final compliance date, that will result in Metal TAC emission reductions for a specific piece of equipment or source, that will occur after the Notice of Findings was issued;
    - (ii) All interim compliance dates have been met for any provision referenced in clause (d)(5)(D)(i); and
    - (iii) Steps have been taken to ensure that any interim compliance date will be met for any provision referenced in clause (d)(5)(D)(i), where the interim compliance date will occur after the submittal of additional information required pursuant to paragraph (d)(6);  
or
  - (E) Information to substantiate that the Metal TAC emissions detected by Monitoring and Sampling described in the Notice of Finding are not attributed to the facility that includes:
    - (i) Date(s) of the monitoring sample(s) in dispute;
    - (ii) Location of the monitor where the monitoring sample was collected;
    - (iii) Description of the alleged cause(s) and source(s) of the Metal TAC emissions including time frame and location; and
    - (iv) Evidence demonstrating that the cause(s) and source(s) of the Metal TAC emissions is not attributed to the facility.
- (6) No later than 90 days from the date of the Notice of Findings, an owner or operator of a facility that submitted a written notice to the Executive

Officer pursuant to subparagraph (d)(4)(C) shall submit any additional information to the Executive Officer for consideration or respond in writing to the Executive Officer that no additional information will be provided.

- (7) The Executive Officer will consider information and data collected by the Executive Officer and data provided by the owner or operator of a facility pursuant to subparagraph (d)(4)(B). The facility shall be designated as a Metal TAC Monitoring Facility if:
  - (A) The facility has equipment or processes with Metal TAC(s) emissions;
  - (B) The Metal TAC(s) emissions are capable of being released into the ambient air;
  - (C) The facility has been designated as a Potentially High Risk Level Facility under Rule 1402; and
  - (D) Based on the Metal TAC emissions from the facility, the Executive Officer finds that the Significant Risk Level has been exceeded for any Sensitive Receptor using air dispersion modeling and the Risk Assessment Procedures referenced in Rule 1401, taking into account the following to the extent available:
    - (i) Results of Metal TAC emissions testing and sampling analyses;
    - (ii) Results of Monitoring and Sampling;
    - (iii) Records of Metal TAC material usages, manifests, and other records;
    - (iv) Information provided pursuant to paragraphs (d)(3), (d)(4), (d)(5), and (d)(6);
    - (v) Verification of the reduction or elimination of Metal TACs associated with implementation of Enforceable Measures provided in subparagraph (d)(5)(B), Enforceable Measures that will be implemented within 90 days of the Notice of Findings provided in subparagraph (d)(5)(C), and provisions in a Regulation XIV rule with a future effective final compliance date provided in subparagraph (d)(5)(D), provided all interim compliance dates have been met; and
    - (vi) Other information available to the Executive Officer.
- (8) The Executive Officer will notify an owner or operator of a facility in writing if the facility has or has not been designated as a Metal TAC

Monitoring Facility pursuant to paragraph (d)(7). If the facility is designated as a Metal TAC Monitoring Facility, the notification shall include:

- (A) Information that demonstrates the facility met the criteria specified in paragraph (d)(7);
  - (B) Location of Sensitive Receptors that exceed the Significant Risk Level and the estimated health risk values;
  - (C) Metals of Concern;
  - (D) The equipment and processes that are contributing to exceeding the Significant Risk Level at the Sensitive Receptors;
  - (E) The initial number, type, and approximate location of the Metal TAC monitor(s) and wind monitor required to conduct Monitoring and Sampling; and
  - (F) Benchmark Concentration for each Metal of Concern and identification of the corresponding monitor.
- (9) An owner or operator of a facility that is designated as a Metal TAC Monitoring Facility pursuant to paragraph (d)(7) shall:
- (A) No later than 30 days after receiving a notice from the Executive Officer, submit a draft Basic Monitoring and Sampling Plan pursuant to subdivision (e); and
  - (B) No later than the date specified in the approval letter for the Basic Monitoring and Sampling Plan or within 30 days, if no date is specified in the approval letter, implement the approved Basic Monitoring and Sampling Plan and comply with the Monitoring and Sampling requirements pursuant to subdivision (f).
- (e) Monitoring and Sampling Plans
- (1) An owner or operator of a Metal TAC Monitoring Facility that is required to prepare a draft Basic Monitoring and Sampling Plan pursuant to paragraph (d)(9) or subparagraph (g)(2)(B), or a draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan pursuant to subparagraph (h)(1)(A) or (h)(4)(A) shall submit:
    - (A) A list of all equipment and processes that use or emit Metals of Concern with operating schedules and operating conditions;
    - (B) Any source test or emissions screening test reports of equipment and processes listed in subparagraph (e)(1)(A);

- (C) A map of the facility that identifies the location of:
  - (i) All equipment and processes listed in subparagraph (e)(1)(A);
  - (ii) Air pollution control devices and stacks;
  - (iii) Buildings;
  - (iv) Building openings;
  - (v) Storage of any materials that contain Metals of Concern;
  - (vi) Points of vehicle egress and ingress;
  - (vii) Property boundary of the facility;
  - (viii) Areas within the property boundary of the facility that are publicly accessible; and
  - (ix) Nearest Sensitive Receptors in all directions;
- (D) Any other process or emission information the Executive Officer requests in writing;
- (E) Information regarding the collection of wind data to meet the requirements of paragraph (f)(8) including:
  - (i) A list of all equipment to be used to collect wind speed and direction data; or
  - (ii) An explanation of reasons why wind data may not be collected, such as the availability of wind speed and direction data from a representative location taking into account topography or the owner or operator of a Metal TAC Monitoring Facility elects not to monitor wind speed and direction;
- (F) Number and locations of the sampling sites that meet the requirements in paragraph (f)(2);
- (G) A list of all equipment to be used for Monitoring and Sampling to meet the requirements of subdivision (f);
- (H) Sampling and data collection information to meet the requirements of subdivision (f):
  - (i) Operating procedures and maintenance schedule of the Monitoring and Sampling equipment to meet the requirements in paragraph (f)(4);
  - (ii) Sampling schedule that meets the requirements in paragraph (f)(3); sample collection, sample retrieval, and sample analysis that meet the requirements in paragraph (f)(5); sample storage that meets the requirements in paragraph (f)(6); and, for discrete samples, a chain of custody document;

- (iii) Quality assurance plan for Monitoring and Sampling activities;
    - (iv) Make-up missing sample procedures; and
    - (v) Metals of Concern and/or surrogate of Metals of Concern to be sampled; and
  - (I) The company name(s), location, and contact information that will be conducting:
    - (i) Sample collection and sample retrieval;
    - (ii) Sample analysis;
    - (iii) Sample storage;
    - (iv) Maintenance of Monitoring and Sampling equipment; and
    - (v) Set-up of Monitoring and Sampling equipment.
- (2) An owner or operator of a Metal TAC Monitoring Facility that is required to prepare a draft Alternative Monitoring and Sampling Plan pursuant to paragraph (g)(1) shall submit information in subparagraphs (e)(1)(A) through (e)(1)(E). An owner or operator of a Metal TAC Monitoring Facility that elects to have the Executive Officer collect wind data need not submit information in clause (e)(1)(E)(i).
- (3) The Executive Officer will notify an owner or operator of a Metal TAC Monitoring Facility in writing whether the draft Basic or Alternative Monitoring and Sampling Plan is approved. Approval of a draft Basic Monitoring and Sampling Plan will be based on information submitted pursuant to paragraph (e)(1) that meets the requirements of subdivision (f) and approval of a draft Alternative Monitoring and Sampling Plan will be based on information submitted pursuant to paragraph (e)(2).
- (4) Within 30 days of receiving a letter from the Executive Officer that states the draft Basic or Alternative Monitoring and Sampling Plan is not approved and that specifies all deficiencies, the owner or operator of a Metal TAC Monitoring Facility shall submit a revised draft Basic or Alternative Monitoring and Sampling Plan.
  - (A) The Executive Officer will notify an owner or operator of a Metal TAC Monitoring Facility in writing whether the revised draft Basic or Alternative Monitoring and Sampling Plan is approved. Approval of the revised draft Basic or Alternative Monitoring and Sampling Plan submitted pursuant to paragraph (e)(4) will be based on whether the deficiencies in meeting the requirements of subdivision (f) have been addressed.



- (B) If an owner or operator of a Metal TAC Monitoring Facility receives a denial letter from the Executive Officer that the revised draft Basic Monitoring and Sampling Plan is not approved, the owner or operator shall within seven days after the date of the denial letter:
  - (i) Permanently cease operating equipment and processes that may be contributing to Metals of Concern specified in subparagraph (d)(8)(D), request to inactivate or cancel the associated permit(s) and/or application(s), and notify the Executive Officer in writing; or
  - (ii) Meet the requirements of subdivision (g) for Alternative Monitoring and Sampling and notify the Executive Officer in writing. The revised draft Basic Monitoring and Sampling Plan will be modified by the Executive Officer and be approved as an Alternative Monitoring and Sampling Plan.
- (C) If an owner or operator of a Metal TAC Monitoring Facility receives a denial letter from the Executive Officer that the revised draft Alternative Monitoring and Sampling Plan is not approved, the revised draft will be modified by the Executive Officer and be approved as an Alternative Monitoring and Sampling Plan.
- (5) The Executive Officer will notify an owner or operator of a Metal TAC Monitoring Facility in writing whether the draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan is approved. Approval will be based on information submitted pursuant to paragraph (e)(1) that meets the requirements of subdivision (f) and the following criteria:
  - (A) If only one Metal of Concern is specified in paragraph (d)(8), an owner or operator of a Metal TAC Monitoring Facility shall demonstrate that the average concentration of the Metal of Concern did not exceed the Benchmark Concentration for the 30 consecutive calendar days preceding the submittal of the Reduced Basic or Reduced Alternative Monitoring and Sampling Plan;
  - (B) If more than one Metal of Concern is specified in paragraph (d)(8), an owner or operator of a Metal TAC Monitoring Facility shall demonstrate either:
    - (i) The average concentration of each Metal of Concern did not exceed its respective Benchmark Concentration for the 30

- consecutive calendar days preceding the submittal of the Reduced Basic or Reduced Alternative Monitoring and Sampling Plan; or
- (ii) The estimated health risk associated with all Metals of Concern from the facility are below the Reduced Risk Level for any Sensitive Receptor using air dispersion modeling and Risk Assessment Procedures referenced in Rule 1401 or an alternative approach approved by the Executive Officer;
- (C) The measures identified in an approved Early Action Reduction Plan pursuant to Rule 1402 – Control of Toxic Air Contaminants from Existing Sources or Enforceable Measures is being implemented; and
  - (D) The owner or operator of a Metal TAC Facility did not previously have more than one approved Reduced Monitoring and Sampling Plan.
- (6) Within 30 days of receiving a letter from the Executive Officer that states the draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan is not approved and that specifies all deficiencies, an owner or operator of a Metal TAC Monitoring Facility shall either notify the Executive Officer that a revised draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan will not be submitted or submit a revised draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan.
- (A) The Executive Officer will notify an owner or operator of a Metal TAC Monitoring Facility in writing whether the revised draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan submitted pursuant to paragraph (e)(6) is approved. Approval will be based on whether the deficiencies in the letter have been addressed.
  - (B) If an owner or operator of a Metal TAC Monitoring Facility receives a denial letter from the Executive Officer that the revised draft Reduced Basic Monitoring and Sampling Plan is not approved, the owner or operator shall continue to implement the most recently approved Basic Monitoring and Sampling Plan pursuant to subparagraph (d)(9)(B).

- (C) If an owner or operator of a Metal TAC Monitoring Facility receives a denial letter from the Executive Officer that the revised draft Reduced Alternative Monitoring and Sampling Plan is not approved, the owner or operator shall continue paying fees for Monitoring and Sampling based on the most recently approved Alternative Monitoring and Sampling Plan pursuant to subparagraph (g)(1)(C).
- (7) Prior to implementing any changes that would result in a modification to the information submitted in the most recently approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan pursuant to paragraph (e)(1) or (e)(2), an owner or operator of a Metal TAC Monitoring Facility shall modify and submit a draft Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan.
- (8) No later than 30 days after receiving written notification from the Executive Officer that modification(s) to an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan are needed to meet the requirements of subdivision (f), the owner or operator of a Metal TAC Monitoring Facility shall modify and submit a draft Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan that incorporates the required modifications in the written notice.
  - (A) The Executive Officer will notify the owner or operator of a Metal TAC Monitoring Facility of approval pursuant to paragraphs (e)(3) and (e)(5).
  - (B) If the draft Basic or Alternative Monitoring and Sampling Plan is not approved by the Executive Officer, the owner or operator shall follow the provisions in paragraph (e)(4).
  - (C) Within 30 days of receiving a letter from the Executive Officer that states the draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan submitted pursuant to paragraph (e)(8) is not approved and that specifies all deficiencies, the owner or operator of a Metal Monitoring Facility shall submit a revised draft Reduced Monitoring and Sampling Plan.
    - (i) The Executive Officer will notify an owner or operator of a Metal TAC Monitoring Facility in writing whether the revised

draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan submitted pursuant to paragraph (e)(8) is approved. Approval will be based on whether the deficiencies in the letter have been addressed.

- (ii) If an owner or operator of a Metal TAC Monitoring Facility receives a denial letter from the Executive Officer that the revised draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan submitted pursuant to paragraph (e)(8) is not approved, the revised draft will be modified by the Executive Officer and be approved as a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan.
- (9) The evaluation of a Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall be subject to plan fees specified in Rule 306 – Plan Fees.
  - (10) The preparation of an Alternative Monitoring and Sampling Plan to meet the requirements of clause (e)(1)(E)(i) and subparagraphs (e)(1)(F) through (e)(1)(I) shall be subject to the fees:
    - (A) Pursuant to Rule 306—~~Plan Fees~~; or
    - (B) Pursuant to Appendix 1 of this rule, if Rule 306 does not list the fees for preparing an Alternative Monitoring and Sampling Plan.
- (f) Monitoring and Sampling Requirements
    - (1) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall maintain the most recently approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan to include all equipment and processes that emit Metal TAC(s) and represents current operating conditions at the Metal TAC Monitoring Facility.
    - (2) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall install Metal TAC monitors and conduct Monitoring and Sampling at a minimum of one site that is based on the Maximum Expected Ground Level Concentration of the Metals of Concern.

- (3) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall collect one Valid Sample from midnight-to-midnight, or on the timeframe specified in the most recently approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan, at each site provided the total sampling time is no less than 23 hours and no greater than 25 hours:
  - (A) At least once every three days on a schedule approved by the Executive Officer for Metals of Concern;
  - (B) At least once every six days on a schedule approved by the Executive Officer for Metals of Concern for a facility on a reduced monitoring and sampling frequency pursuant to subdivision (h); or
  - (C) On a date specified in a written notice from the Executive Officer in lieu of a normally scheduled date that is an atypical sampling day.
- (4) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall operate and maintain sampling equipment in accordance with U.S. EPA methods or other appropriate methods approved by the Executive Officer in the Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan.
- (5) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall collect and analyze each Valid Sample in accordance with U.S. EPA methods or other appropriate methods approved by the Executive Officer in the Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan. An owner or operator of a Metal TAC Monitoring Facility shall maintain a record of the chain of custody for discrete Valid Samples and analyze the Valid Samples in a laboratory that follows the methodology for ambient air monitoring analysis for discrete Valid Samples approved by the Executive Officer in the Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan.
- (6) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall:

- (A) Retain and properly store Valid Samples collected for six months from the sample date or other time period approved by the Executive Officer in the approved Monitoring and Sampling Plan, unless the entire filter media is digested and consumed;
  - (B) Retain and properly store the solution rendered from the acid extraction of a filter sample used for metals sample analysis, for six months from the sample date or other time period approved by the Executive Officer in the approved Monitoring and Sampling Plan, unless the solution was consumed during analysis; and
  - (C) Retain the chain of custody records for three years from the sample date for discrete Valid Samples.
- (7) Within five business days from the request by Executive Officer, an owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall provide:
- (A) Valid Samples, unless the entire filter media is digested and consumed; or
  - (B) Solution rendered from the acid extraction of a filter sample used for metals sample analysis, unless the solution was consumed during prior analysis.
- (8) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall continuously record wind speed and direction, if required in an approved Monitoring and Sampling Plan.
- (9) An owner or operator of a Metal TAC Monitoring Facility with an approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan shall not miss collecting a Valid Sample, unless the Valid Sample was not collected due to a mechanical failure, including a power outage, as determined by the Executive Officer, for more than one day over any 30 consecutive calendar days from each monitor approved by the Executive Officer.
- (10) An owner or operator of a Metal TAC Monitoring Facility shall not conduct any activities that have the potential to damage or bias the samples.
- (g) Alternative Monitoring and Sampling

- (1) An owner or operator of a Metal TAC Monitoring Facility that elects to have the Executive Officer conduct Monitoring and Sampling in lieu of meeting the requirements of subparagraph (d)(9)(B) or pursuant to clause (e)(4)(B)(ii) shall:
  - (A) No later than 30 days after receiving a notice from the Executive Officer, submit a draft Alternative Monitoring and Sampling Plan pursuant to paragraph (e)(2) unless a Basic Monitoring and Sampling Plan was submitted pursuant to subparagraph (d)(9)(A);
  - (B) Provide access to the facility for the Executive Officer or its third-party contractor to conduct Monitoring and Sampling; and
  - (C) No later than the date specified in the approval letter, the owner or operator of a Metal TAC Monitoring Facility that elects to have the Executive Officer conduct Monitoring and Sampling pursuant to paragraph (g)(1) shall pay the operating and maintenance fees to the South Coast AQMD for the Executive Officer to conduct Monitoring and Sampling pursuant to the approved Alternative Monitoring and Sampling Plan:
    - (i) Pursuant to Regulation III Rule 301 ~~—~~ ~~Permitting and Associated Fees~~; or
    - (ii) Pursuant to Appendix 1 of this rule, if Regulation III Rule 301 does not list the fees for Monitoring and Sampling.
- (2) An owner or operator of a Metal TAC Monitoring Facility that has an approved Alternative Monitoring and Sampling Plan that elects to begin conducting Monitoring and Sampling in lieu of the Executive Officer conducting Monitoring and Sampling shall:
  - (A) Notify the Executive Officer that the owner or operator has elected to conduct Monitoring and Sampling pursuant to subparagraph (d)(9)(B);
  - (B) Submit a draft Basic Monitoring and Sampling Plan for approval pursuant to subdivision (e); and
  - (C) Meet the requirements of subparagraph (d)(9)(B).
- (3) An owner or operator of a Metal TAC Monitoring Facility that is conducting Monitoring and Sampling pursuant to subparagraph (d)(9)(B) and elects to have the Executive Officer conduct Monitoring and Sampling shall:

- (A) Notify the Executive Officer that the owner or operator has elected to have the Executive Officer conduct Monitoring and Sampling in lieu of meeting the requirements of paragraph (d)(9)(B);
  - (B) Submit a draft Alternative Monitoring and Sampling Plan for approval pursuant to subdivision (e); and
  - (C) Meet the requirements of subparagraphs (g)(1)(B) and (g)(1)(C).
  
- (h) **Reduced Monitoring and Sampling Frequency and/or Monitors**
  - (1) An owner or operator of a Metal TAC Monitoring Facility implementing an approved Basic Monitoring and Sampling Plan that meets the criteria in subparagraphs (e)(5)(A) through (e)(5)(C) and elects to reduce the Monitoring and Sampling frequency, from once every three days to once every six days and/or to reduce the number of monitors, shall:
    - (A) Submit a draft Reduced Basic Monitoring and Sampling Plan for approval pursuant to subdivision (e); and
    - (B) No sooner than the date specified in the approval letter for the Reduced Basic Monitoring and Sampling Plan, implement the approved Reduced Basic Monitoring and Sampling Plan and comply with the Monitoring and Sampling requirements pursuant to subdivision (f).
  - (2) If the concentration of three consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern, the owner or operator of a Metal TAC Monitoring Facility shall notify the Executive Officer by:
    - (A) Calling 1-800-CUT-SMOG within 24-hours of receiving the third Valid Sample result and provide:
      - (i) Facility name;
      - (ii) Identification of the monitor with corresponding Valid Sample;
      - (iii) Date of each exceedance;
      - (iv) Valid Sample concentrations; and
    - (B) Submitting a written report within three calendar days of calling the Executive Officer, pursuant to subparagraph (h)(2)(A), that provides an explanation of the cause(s) of the exceedances, to the extent known.
  - (3) If an owner or operator of a Metal TAC Monitoring Facility receives notification from the Executive Officer that the concentration of three



consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern and, that after taking into consideration the information provided in subparagraphs (h)(2)(A) and (h)(2)(B), the Executive Officer determines that the exceedances were attributed to the Metal TAC Monitoring Facility, the owner or operator shall:

- (A) Resume collecting one Valid Sample, at each site, at least once every three days no later than the next scheduled sampling day; and
  - (B) Implement the Executive Officer-provided Basic Monitoring and Sampling Plan that is based on the information in the most recently approved Reduced Basic Monitoring and Sampling Plan and comply with the Monitoring and Sampling requirements pursuant to subdivision (f).
- (4) An owner or operator of a Metal TAC Monitoring Facility with an approved Alternative Monitoring and Sampling Plan that meets the criteria in subparagraphs (e)(5)(A) through (e)(5)(C) and elects to reduce the sampling frequency from once every three days to once every six days and/or to reduce the number of monitors shall:
- (A) Submit a draft Reduced Alternative Monitoring and Sampling Plan for approval pursuant to subdivision (e); and
  - (B) No later than the date specified in the approval letter for the Reduced Alternative Monitoring and Sampling Plan, pay fees for the reduced sampling frequency and/or reduced number of monitors as specified in the approved Reduced Alternative Monitoring and Sampling Plan.
- (5) The Executive Officer will notify the owner or operator of a Metal TAC Monitoring Facility, subject to subparagraph (h)(4)(B), if the concentration of three consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern. The owner or operator of a Metal TAC Monitoring Facility electing to provide the Executive Officer information to substantiate that the exceedances are not attributed to the facility, shall submit a written report within three calendar days of receiving notification from the Executive Officer and provide an explanation of the cause(s) of the exceedances, to the extent known.

- (6) If an owner or operator of a Metal TAC Monitoring Facility, subject to subparagraph (h)(4)(B), receives notification from the Executive Officer that the concentration of three consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern and, that after taking into consideration the information provided in paragraph (h)(5), the Executive Officer determined that the exceedances were attributed to the Metal TAC Monitoring Facility, the owner or operator shall:
  - (A) Pay fees for collecting one Valid Sample, at each site, at least once every three days no later than the next scheduled sampling day; and
  - (B) Allow the Executive Officer to conduct Monitoring and Sampling pursuant to the Executive Officer-provided Alternative Monitoring and Sampling Plan that is based on the information in the most recently approved Reduced Alternative Monitoring and Sampling Plan.
  
- (i) **Monitoring, Recordkeeping, and Reporting Requirements**
  - (1) Effective upon start of Monitoring and Sampling pursuant to subdivision (f), an owner or operator of a Metal TAC Monitoring Facility shall electronically submit a report to the Executive Officer, using a format approved by the Executive Officer, by the 21st of each month. The report shall include the results of the Valid Sample analysis for the Metals of Concern and the wind monitoring data, if applicable, for the preceding month in a format approved by the Executive Officer that includes the following:
    - (A) Valid Sample collection date;
    - (B) Valid Sample collection location;
    - (C) Individual Valid Sample concentrations; and
    - (D) Consecutive 30 calendar day rolling average concentrations.
  - (2) An owner or operator of a Metal TAC Monitoring Facility shall maintain the following records for a minimum of three years and make the records available to the Executive Officer upon request:
    - (A) Housekeeping activities;
    - (B) Maintenance activities;
    - (C) Construction and demolition activities;

- (D) Throughput records of metals used in any operations capable of generating emissions of Metals of Concern;
  - (E) Wind speed and direction data, if required in an approved Monitoring and Sampling Plan;
  - (F) Calibration records of Metal TAC monitors and wind monitors, if required in an approved Monitoring and Sampling Plan;
  - (G) Raw data, monthly reports pursuant to paragraph (i)(1), and calculations used to calculate Metal TAC concentrations;
  - (H) Most recently approved Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan with the accompanying approval letter; and
  - (I) Chain of custody records.
- (3) If the concentration of three consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern, the owner or operator of a Metal TAC Monitoring Facility shall notify the Executive Officer by:
- (A) Calling 1-800-CUT-SMOG within 24 hours of receiving the third Valid Sample result and provide the information specified in subparagraphs (h)(2)(A) and (h)(2)(B); and
  - (B) Submitting a written report within three calendar days of calling the Executive Officer, pursuant to subparagraph (i)(3)(A), that provides an explanation of the cause(s) of the exceedances, to the extent known.
- (4) An owner or operator of a Metal TAC Monitoring Facility shall notify the Executive Officer by calling 1-800-CUT-SMOG within two hours of knowing that a Valid Sample was not or will not be collected from any approved monitor and provide:
- (A) Facility name;
  - (B) Identification of the monitor;
  - (C) Date of the occurrence;
  - (D) Reason why a sample was not collected or the collected sample did not meet the definition of a Valid Sample to the extent known;
  - (E) Repair date or anticipated repair date to the extent known, if the cause was due to mechanical failure of an approved monitor; and
  - (F) If the mechanical failure was due to a power outage, provide the duration of the power outage and the reason to the extent known.

(5) Within seven days following notification to the Executive Officer pursuant to paragraph (i)(4), an owner or operator of a Metal TAC Monitoring Facility shall electronically submit to the Executive Officer, using a format approved by the Executive Officer, copies of documentation of any required repairs or replacement due to mechanical failure of an approved monitor. The Executive Officer may extend this deadline as needed based upon the repair date.

(j) **Discontinuation of Monitoring and Sampling**

Upon receiving notification from the Executive Officer that the required Risk Reduction Plan under Rule 1402 has been fully implemented or if a Risk Reduction Plan is not required, that the Health Risk Assessment under Rule 1402 has been approved, the facility shall no longer be designated as a Metal TAC Monitoring Facility and no longer subject to paragraph (d)(9).

(k) **Exemptions**

(1) Lead emissions subject to ambient air monitoring as required by Rule 1420 – Emissions Standard for Lead, Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities, or Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities, shall not be subject to this rule.

(2) Hexavalent chromium emissions subject to ambient air monitoring as required by Rule 1156 – Further Reductions of Particulate Emissions, shall not be subject to this rule.

(3) Upon verification by the Executive Officer, an owner or operator of a facility that is independently owned and operated with average annual gross receipts of three million dollars (\$3,000,000) or less, averaged over the previous three years, and 25 or fewer employees shall be exempt from the provisions of this rule, except paragraphs (d)(1) and (d)(2). No later than 60 days after receiving an Initial Notice pursuant to paragraph (d)(1), the owner or operator of a facility shall provide:

(A) Information that the facility is independently owned or operated;

(B) Tax returns for the previous three years or other documentation approved by the Executive Officer to demonstrate the gross

receipts averaged over the previous three years is three million dollars or less; and

- (C) U.S. Internal Revenue Service Form 941 – Employer’s Quarterly Federal Tax Return for the previous three years or other documentation approved by the Executive Officer to demonstrate the number of employees is 25 or fewer full-time or part-time employees.

**Appendix 1: South Coast AQMD Monitoring and Sampling Fees**

## 1. Principle

This fee is applicable to all facilities that elect to have the South Coast AQMD conduct Monitoring and Sampling. The fees in this Appendix shall no longer be in effect when ~~Regulation III Rule 306~~ includes these fees. The fees include monitoring equipment, material, labor, sample retrieval, sample analysis, construction and other associated fees. An owner or operator shall be responsible for the fees for Monitoring and Sampling from the date specified in the Alternative or Reduced Alternative Monitoring and Sampling Plan. South Coast AQMD typically deploys two field staff members to perform field work due to potential hazards encountered in the field. During the review of an Alternative Monitoring and Sampling or Reduced Alternative Monitoring and Sampling Plan, the Executive Officer will evaluate and determine if it is appropriate to have only one field staff member to conduct Monitoring and Sampling at the Metal TAC Monitoring Facility. A Metal TAC Monitoring Facility would be notified of the Executive Officer's decision at the time of approval of the Alternative or Reduced Alternative Monitoring and Sampling Plan. The Executive Officer's decision on the number of field staff members needed will be based on the following factors:

1. Height of the monitor
2. Use of a ladder
3. Sampling schedule
4. Access to the facility
5. Safety concerns

## 2. Preparation of an Alternative Monitoring and Sampling Plan

An owner or operator shall be responsible for \$6,000, which are the fees associated with the preparation of an Alternative Monitoring and Sampling Plan to meet the requirements of clause (e)(1)(E)(i) and subparagraphs (e)(1)(F) through (e)(1)(I).

## 3. Monitoring and Sampling Fee

- A. The monthly fees listed in Table 1 – Alternative or Reduced Alternative Monitoring and Sampling Plan Monthly Monitoring Fees list the fees for a specific monitor and each additional monitor required by the Executive Officer to conduct Monitoring and Sampling.

**Table 1 – Alternative or Reduced Alternative Monitoring and Sampling Plan  
Monthly Monitoring Fees**

	Number and Type of Monitor	Sampling Frequency			
		1 in 3 Days		1 in 6 Days	
		2 Staff	1 Staff	2 Staff	1 Staff
Base	1 - Metal TAC Monitor - Hexavalent Chromium	\$10,000	\$6,500	\$5,000	\$3,500
	1 - Metal TAC Monitor – Non-Hexavalent Chromium	\$5,500	\$3,500	\$3,000	\$2,000
	1 - Metal TAC Monitor – Hexavalent Chromium & 1 - Metal TAC Monitor – Non-Hexavalent Chromium	\$13,000	\$8,500	\$6,500	\$4,500
Additional	1- Metal TAC Monitor - Hexavalent Chromium	\$4,000	\$3,500	\$2,500	\$2,000
	1- Metal TAC Monitor – Non-Hexavalent Chromium	\$2,500	\$2,000	\$1,500	\$1,000

- B. The fees for a wind monitor are \$500 per month, if the owner or operator of a Metal TAC Monitoring Facility elects to have the South Coast AQMD collect wind speed and direction data to meet the requirements of paragraph (f)(8).
- C. If the Executive Officer contracts Monitoring and Sampling with a third-party contractor, the fees would be specified by the third-party contractor.
- D. The number, type, and location of the monitors is initially specified in subparagraph (d)(8)(E) and stated in the Alternative or Reduced Alternative Monitoring and Sampling Plan.
- E. Pursuant to paragraph (e)(8), the Executive Officer may require the owner or operator to submit a draft Alternative or Reduced Alternative Monitoring and Sampling Plan to modify the number, type, and/or location of the monitors needed to conduct Monitoring and Sampling based on new information from the date the facility was designated a Metal TAC Monitoring Facility.

4. Payment Deadline

The operating and maintenance fees shall be billed on a monthly basis with payments due on or before the end of the month for which Monitoring and Sampling is required

and include any other unpaid operating and maintenance fees. If the operating and maintenance fee is not paid in full within 60 calendar days of its due date, a 10 percent surcharge shall be imposed.

**5. Pro-rated Payments**

- A. If Monitoring and Sampling will no longer be required to be conducted by the Executive Officer or if the sampling frequency is modified in the middle of a month, an owner or operator shall pay fees at a prorated amount.
- B. If the number and/or type of monitors is modified in the middle of a month, an owner or operator shall pay fees at a prorated amount.



**Appendix 2: Methodology for Calculating Benchmark Concentration**

## 1. Principle

This appendix provides a methodology for calculating the Benchmark Concentration for a Metal of Concern. The Benchmark Concentration will be the higher of the either (1) Ratio Concentration; or (2) Estimated Risk Concentration. The Benchmark Concentration calculation is specific for each facility and each Metal of Concern and would be specified in the designation letter pursuant to (d)(8)(F).

## 2. Health Risk at a Sensitive Receptor

Pursuant to subparagraph (d)(7)(D), one of the criteria to designate a facility as a Metal TAC Monitoring Facility is the estimated health risk based on the Metal TAC emissions from the facility exceeds the Significant Risk Level for any Sensitive Receptor using air dispersion modeling and Risk Assessment Procedures referenced in Rule 1401. The highest estimated cancer and non-cancer health risk at a Sensitive Receptor must be calculated and compared to the Significant Risk Level. A facility meets this criteria if the cancer or non-cancer health risk at a Sensitive Receptor exceeds the Significant Risk Level. The following provides additional guidance in determining the highest estimated health risk at a sensitive receptor:

- If the cancer and non-cancer health risk exceeds the Significant Risk Level at a sensitive receptor, both health risk values must be used to determine the Benchmark Concentrations;
- The Executive Officer may determine a facility exceeds the Significant Risk Level based on some or all of the sources of Metal TAC emissions from the facility;
- In the absence of facility specific information, use of source-specific emission factors and control efficiencies will be applied using good engineering practices; and
- Configuration of equipment, building openings, operating parameters, throughput, and material usage will be based on information provided by the operator, permit conditions, inspection reports, and observations by the Executive Officer.

### 3. Ratio Concentration

The Ratio Concentration is the highest 30 consecutive day average concentration of monitoring and sampling prior to designation as a Metal TAC Monitoring Facility divided by the ratio of the highest health risk at the Sensitive Receptor and the Reduced Risk Level. If the highest estimated health risk at the Sensitive Receptor exceeds both the cancer and non-cancer Significant Risk Level, then the Ratio Concentrations for both cancer and non-cancer risks will need to be calculated and the higher of the two Ratio Concentrations will be used. The Ratio Concentration is calculated by taking the highest 30 consecutive calendar day average concentration and dividing it by the Ratio, as described in the following formula:

$$\frac{\text{Highest 30 Consecutive Day Average Concentration}}{\text{Ratio (Cancer or Non-cancer)}}$$

#### 3a. Calculating the Ratio

The Ratio (Cancer) is calculated by dividing the highest cancer risk at the Sensitive Receptor by the cancer risk of the Reduced Risk Level. Similarly, a Ratio (Non-cancer) is calculated by dividing the highest non-cancer Hazard Index at the Sensitive Receptor by the non-cancer Hazard Index of the Reduced Risk Level. The Ratio formula is:

$$\frac{\text{Sensitive Receptor Health Risk from Facility (Cancer Risk or Hazard Index)}}{\text{Reduced Risk Level (Cancer Risk of 25 in one million or Hazard Index of 3.0)}}$$

#### 3b. Determining the Highest 30 Consecutive Day Average Concentration

The highest 30 consecutive day average concentration is the highest average concentration of a Metal TAC during any consecutive 30 days of monitoring and sampling that was conducted by the Executive Officer at a monitor identified in the Notice of Findings. This concentration would be based on monitoring and sampling that is conducted prior to designation as a Metal TAC Monitoring Facility.

### 4. Estimated Risk Concentration

The Estimated Risk Concentration is the sum of the concentration representing the Reduced Risk Level and the Basin-wide background concentration from the most recent Multiple Air Toxics Exposure Study (MATES) for the Metal TAC. If the highest estimated health risk at the Sensitive Receptor exceeds both the cancer and non-cancer Significant Risk Level, then the Estimated Risk Concentrations for both cancer and non-cancer risks will need to be calculated and the higher of the two ratios will be used. Using the Risk Assessment Procedures referenced in Rule 1401, the concentration is

calculated using the Reduced Risk Level (cancer risk of 25 in one million or chronic Hazard Index of 3.0). The Estimated Risk Concentration formula is:

Reduced Risk Level concentration + Basin-wide background from MATES

5. Benchmark Concentration

The Benchmark Concentration is the higher of the Ratio Concentration or the Estimated Risk Concentration. It will be specified for each Metal of Concern in the designation letter provided to the Metal TAC Monitoring Facility pursuant to subparagraph (d)(8)(F).

6. Alternative Methodology for Establishing the Benchmark Concentration for Multiple Metal TAC Monitoring Facilities

The Executive Officer may utilize an alternative methodology for establishing a Benchmark Concentration that better represents the Metals of Concern that are emitted from a facility and captured by their downwind monitor, when there are multiple facilities that have emissions of the same Metals of Concern. The alternative methodology shall establish a Benchmark Concentration that is representative of the Reduced Risk Level at a sensitive receptor for each Metal of Concern taking into account facilities that are in close proximity that have the same Metals of Concern. The Executive Officer will use an alternative methodology if:

- A. There is one or more facilities that are within 1,000 feet of the owner or operator's Metal TAC Monitoring Facility, where the distance is measured fenceline to fenceline of each facility;
- B. Each facility referenced in (6)(A) of this appendix has been issued an Initial Notice pursuant to paragraph (d)(1); and
- C. The Executive Officer has emissions data that the facility or facilities referenced in (6)(A) of this appendix has equipment or sources within the facility with the same Metals of Concern as those emitted by the Metal TAC Monitoring Facility.

## ATTACHMENT G

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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### Final Staff Report

### Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

December 2019

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Planning, Rule Development and Area Sources  
Philip M. Fine, Ph.D.

#### Assistant Deputy Executive Officer

Planning, Rule Development and Area Sources  
Susan Nakamura

#### Planning and Rules Manager

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GOVERNING BOARD**

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Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT  
Council Member, Wildomar  
Cities of Riverside County

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County of Orange

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Governor's Appointee

**EXECUTIVE OFFICER:**

WAYNE NASTRI

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**TABLE OF CONTENTS**

<b>CHAPTER 1: BACKGROUND .....</b>	<b>1-1</b>
INTRODUCTION .....	1-1
SOUTH COAST AQMD AMBIENT AIR MONITORING .....	1-1
PROCESS TO IDENTIFY SOURCES .....	1-3
<i>Step 1: Identify the Facility or Facilities Possibly Contributing to Metal TAC Emissions</i> .....	1-3
<i>Step 2: Within the Facility, Identify the Source or Sources</i> .....	1-4
<i>Step 3: Determine if Sources are Capable of Generating Emissions</i> .....	1-4
<i>Step 4: Determine if Emissions Can be Released to the Ambient Air</i> .....	1-4
<i>Ambient Air Monitoring Efforts that Used the Four-Step Process</i> .....	1-5
MECHANISMS TO ADDRESS HIGH CONCENTRATIONS OF METAL TACS .....	1-7
ESTIMATED HEALTH RISKS .....	1-7
2015 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT (OEHHA) RISK ASSESSMENT METHODOLOGY .....	1-9
RULE 1402 POTENTIALLY HIGH RISK LEVEL FACILITY .....	1-9
EXISTING RULES WITH METAL TAC MONITORING REQUIREMENTS .....	1-10
<i>Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing         Facilities</i> .....	1-10
<i>Rules 1420, 1420.1, and 1420.2 – Emissions Standards for Lead</i> .....	1-11
<i>Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants</i> ..	1-11
AMBIENT AIR MONITORING TECHNOLOGY .....	1-11
NEED FOR PROPOSED RULE 1480 .....	1-13
AFFECTED INDUSTRIES .....	1-14
PUBLIC PROCESS .....	1-14
<b>CHAPTER 2: SUMMARY OF PROPOSED RULE 1480.....</b>	<b>2-1</b>
OVERALL APPROACH.....	2-1
PROPOSED RULE 1480 .....	2-2
<i>Purpose – Subdivision (a)</i> .....	2-2
<i>Applicability – Subdivision (b)</i> .....	2-2
<i>Definitions – Subdivision (c)</i> .....	2-2
<i>Designation of a Metal TAC Monitoring Facility – Subdivision (d)</i> .....	2-2
<i>Monitoring and Sampling Plan – Subdivision (e)</i> .....	2-8
<i>Monitoring and Sampling Requirements – Subdivision (f)</i> .....	2-14

<i>Alternative Monitoring and Sampling – Subdivision (g)</i> .....	2-16
<i>Proposed Rule 1480 Fees</i> .....	2-16
<i>Reduced Monitoring and Sampling Frequency and/or Monitors – Subdivision (h)</i> .....	2-25
<i>Monitoring, Recordkeeping, and Reporting Requirements – Subdivision (i)</i> .....	2-26
<i>Discontinuation of Monitoring and Sampling – Subdivision (j)</i> .....	2-26
<i>Exemptions – Subdivision (k)</i> .....	2-27
<i>South Coast AQMD Monitoring and Sampling Fees – Appendix 1</i> .....	2-27
<i>Methodology for Calculating Benchmark Concentration – Appendix 2</i> .....	2-29
<b>CHAPTER 3: IMPACT ASSESSMENT</b> .....	<b>3-1</b>
AFFECTED SOURCES .....	3-1
EMISSIONS IMPACT .....	3-1
CALIFORNIA ENVIRONMENTAL QUALITY ACT .....	3-1
SOCIOECONOMIC IMPACT ASSESSMENT .....	3-2
<i>Affected Facilities and Industries</i> .....	3-2
<i>Compliance Cost Assumptions</i> .....	3-4
<i>Cost Estimate for Facilities Historically Exceeding PR 1480 Triggers in South Coast AQMD Special Monitoring Surveillance</i> .....	3-6
<i>Caveats to the Cost Estimate</i> .....	3-7
<i>Rule 1402 Compliance Costs for PR 1480 Affected Facilities</i> .....	3-8
DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727.....	3-9
<i>Requirements to Make Findings</i> .....	3-9
<i>Necessity</i> .....	3-9
<i>Authority</i> .....	3-9
<i>Clarity</i> .....	3-10
<i>Consistency</i> .....	3-10
<i>Non-Duplication</i> .....	3-10
<i>Reference</i> .....	3-10
COMPARATIVE ANALYSIS .....	3-10
<b>APPENDIX A: RESPONSE TO COMMENTS</b> .....	<b>A-1</b>
<b>APPENDIX B: ITEMIZATION OF MONTHLY FEES FOR MONITORING AND SAMPLING</b> .....	<b>B-1</b>

## **CHAPTER 1: BACKGROUND**

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### INTRODUCTION

### SOUTH COAST AQMD AMBIENT AIR MONITORING

### PROCESS TO IDENTIFY SOURCES

Step 1: Identify the Facility or Facilities Possibly Contributing to Air Issue

Step 2: Within the Facility, Identify the Source or Sources

Step 3: Determine if Sources are Capable of Generating Emissions

Step 4: Determine if Emissions Can be Released to the Ambient Air

Ambient Air Monitoring Efforts that Used the Four-Step Process

### MECHANISMS TO ADDRESS HIGH CONCENTRATIONS OF METAL TACS

### ESTIMATED HEALTH RISKS

### 2015 OFFICE OF ENVIRONMENTAL HUMAN HEALTH ASSESSMENT (OEHHA) RISK ASSESSMENT METHODOLOGY

### RULE 1402 POTENTIALLY HIGH RISK LEVEL FACILITY

### EXISTING RULES WITH METAL TAC MONITORING REQUIREMENTS

Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities

Rules 1420, 1420.1, and 1420.2 – Emissions Standards for Lead

Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

### AMBIENT AIR MONITORING TECHNOLOGY

### NEED FOR PROPOSED RULE 1480

### AFFECTED INDUSTRIES

### PUBLIC PROCESS



## INTRODUCTION

Ambient air monitoring samples the air to measure concentrations of criteria pollutants, and gaseous and particulate toxic air contaminants (TACs). Over the past decade, ambient air monitoring near certain facilities with metal TACs such as lead, nickel, arsenic, and hexavalent chromium has identified air quality issues that were not previously known or revealed compliance issues with existing air quality requirements. In some situations, air quality issues have resulted in elevated health risks that have impacted residents, students, and other sensitive receptors surrounding these facilities. When the South Coast Air Quality Management District (South Coast AQMD) initiates ambient air monitoring and identifies a specific air quality issue, action is taken to implement interim measures to reduce the health risk to the community. However, it can take many months to several years until a facility has fully implemented permanent pollution controls to reduce the health risk to the surrounding community. To ensure public health is protected, the South Coast AQMD continues ambient air monitoring until permanent pollution controls have been fully implemented and TAC emissions are stabilized.

Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants (PR 1480) is designed to transfer the responsibility of conducting ambient air monitoring and sampling to the facility that is posing the health risk. PR 1480 establishes the process to notify and designate a facility to conduct ambient air monitoring. PR 1480 complements Rule 1402 – Control of Toxic Air Contaminants from Existing Sources which requires implementation of a risk reduction plan for facilities with health risks above a specified threshold. Under PR 1480 a facility can cease monitoring and sampling after implementation of measures in a Rule 1402 Risk Reduction Plan. PR 1480 will provide additional vigilance, over those facilities that have elevated health risks, to alert the South Coast AQMD to address emissions that may occur before permanent pollution controls are implemented.

PR 1480 focuses on metal TACs which include arsenic, cadmium, hexavalent chromium, lead, manganese, nickel, and selenium. Based on approved Health Risk Assessments conducted through the AB 2588 program, three facilities had estimated cancer risk that were in excess of 1,000 in a million, which is 10 times the Significant Risk Level threshold of 100 in a million. When these types of situations are identified, additional monitoring is needed to allow the South Coast AQMD to become aware of health risks and take appropriate action to protect public health until permanent pollution controls are fully implemented and emissions from toxic air contaminants from the facility are stable.

## SOUTH COAST AQMD AMBIENT AIR MONITORING

The South Coast AQMD conducts ambient air monitoring and sampling to measure criteria pollutants for state and federal air quality requirements. In addition, through the Multiple Air Toxics Exposure Study<sup>1</sup> (MATES) ambient monitors are placed throughout the South Coast Air Basin to monitor and sample over 30 gaseous and particulate TACs. Criteria pollutant air monitoring and the MATES monitoring programs are generally used to monitor regional levels of specific pollutants, so monitors are not placed near a specific facility. Regional ambient air

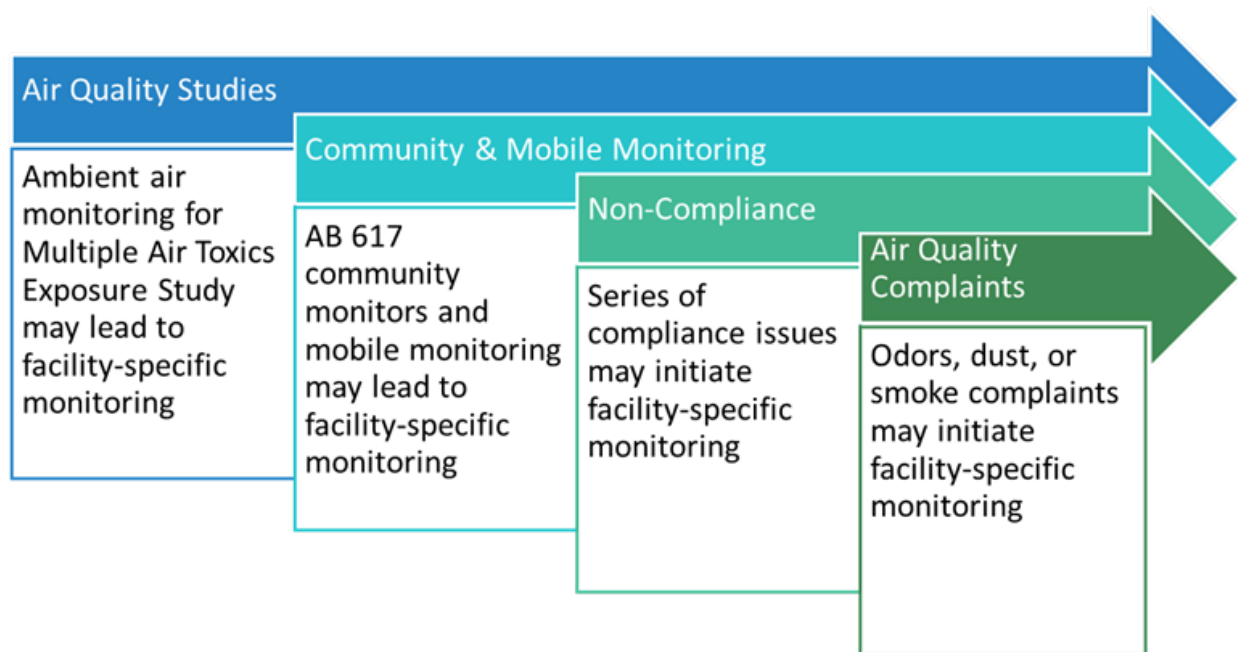
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<sup>1</sup> More information on MATES can be found at <https://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies>

monitoring of TACs through the MATES program has led to the identification of facilities with elevated metal TAC emissions.

In addition to regional monitoring, the South Coast AQMD also conducts source-oriented ambient air monitoring, where mobile measurements are made nearby facilities and/or ambient air monitors are placed near or at a specific facility or near a group of facilities. The South Coast AQMD has initiated ambient air monitoring near facilities based on MATES monitoring, public complaints about a specific air quality issue, concerns for non-compliance issues, and community monitoring efforts. Figure 1-1 shows various possible reasons why the South Coast AQMD may initiate facility-specific ambient air monitoring.

**Figure 1-1**  
**Various Pathways to Initiate Facility-Specific Ambient Air Monitoring**



Although PR 1480 does not prioritize facilities or various pathways to initiate facility-specific ambient air monitoring, certain South Coast AQMD monitoring efforts have general timeframes and prioritizations. The MATES program provides periodic ambient air monitoring. MATES I was conducted in 1987 and staff has initiated work for MATES V. AB617 was authored by Assembly Member Cristina Garcia to address the disproportionate impacts of air pollution in environmental justice communities. The AB617 program requires local air districts to take specific actions to reduce air pollution and toxic air contaminants from commercial and industrial sources through the identification of communities each year that are targeted for Community Emissions Reduction Plans and/or Community Air Monitoring Plans. The locations and types of pollutants being monitored is unique to each AB617 community and is determined with input from community representatives and other stakeholders. Non-compliance and community complaints that lead to air monitoring efforts can become high priority projects for the South Coast AQMD if elevated levels of toxic air contaminants are identified. Initial odor complaints in the city of Paramount led to ambient monitoring near a forging facility. In addition, the South Coast AQMD expanded

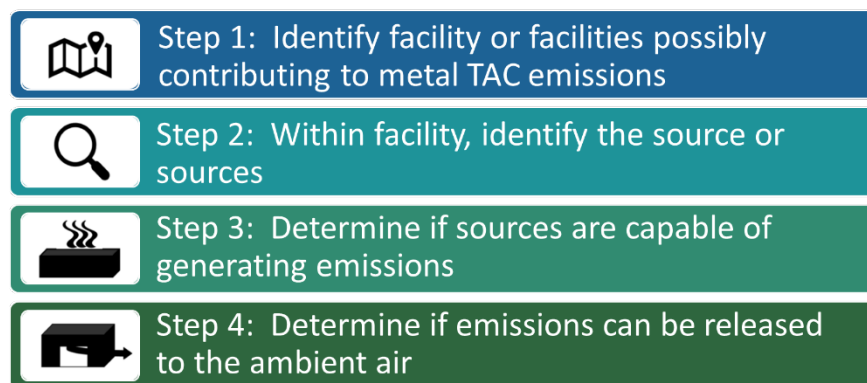
monitoring in the industrial portion of Paramount in 2016, which led to facility-specific monitoring near a metal heat treating facility and chromic acid anodizing and plating facility.

## PROCESS TO IDENTIFY SOURCES

Metal TACs are particulates, and unlike VOCs and other gaseous TACs, can be deposited and repeatedly entrained into the air as fugitive emissions, increasing the risk of exposure. The particulates may be created through various industrial processes, such as cement production, metal melting operations, anodizing and plating operations, and different types of metal working. Multiple incidents have occurred in the last several years where metal TACs were detected from existing sources, where some of these sources were not known to have metal TAC emissions that could substantially impact ambient levels.

The South Coast AQMD staff has used a Four-Step Process to identify a facility or facilities that are contributing to elevated levels of metal TAC emissions in the ambient air. The Four-Step Process includes: 1) identifying the facility or facilities possibly contributing to metal TAC emissions; 2) identifying the possible source or sources of emissions such as the equipment or process within the facility; 3) determining if the particular source is capable of generating emissions; and 4) determining if emissions can be released to the ambient air (see Figure 1-2).

**Figure 1-2**  
**Four-Step Process Identification Process**



### Step 1: Identify the Facility or Facilities Possibly Contributing to Metal TAC Emissions

When elevated levels of ambient metal TACs are identified through MATES, community monitoring, mobile monitoring, or air quality complaints, the South Coast AQMD works to locate the facility or facilities that are possibly contributing to metal TAC emissions. There are a variety of tools used to identify the facility or facilities that could potentially contribute to the air quality issue such as using ambient monitors to better pinpoint the location of a facility or facilities, facility inspections and site visits of facilities in surrounding areas to identify any facilities that can potentially contribute to the air quality issue and eliminate facilities that are not conducting operations related to the air quality issue, and glass plate samples near a facility or facilities as part of the process to assess if there are airborne contaminants localized near a facility or its operation.

**Step 2: Within the Facility, Identify the Source or Sources**

After a facility or facilities are identified, the source or sources such as equipment, processes, and/or operations within the facility that could potentially contribute to the air quality issue are identified. There are a variety of tools that South Coast AQMD staff uses to identify the source or sources that could potentially contribute to the air quality issue such as a more detailed facility inspection, and analysis of bulk samples, such as liquid or solid samples. A more detailed facility inspection than described in Step 1 includes, but is not limited to, inspection of permitted and unpermitted equipment or processes, inspection of pollution control equipment, observations of housekeeping practices, review of processes, review of operating and purchasing records, review of previous inspection reports, etc. During the facility inspection, staff is assessing the location of equipment and processes such as: is the equipment or process inside or outside a building, and if the equipment or process is located in a building, is the equipment or process in close proximity to a building opening such as a door or window where there can be a cross-draft, vents, fans, etc. where emissions from the equipment or process can escape the building. Bulk samples such as dust samples on surfaces in and around the facility, ducting, and roof tops and liquid samples of tanks can be taken to identify if there is the presence of specific metal TAC.

**Step 3: Determine if Sources are Capable of Generating Emissions**

The next step is to determine whether the source or sources at the facility are capable of generating emissions. Emissions testing such as a screening or source testing quantifies emissions. Assessment of specific parameters of pollution controls such as collection efficiency, differential pressure monitors across a filter, and visual inspection of pollution controls are also conducted to check whether pollution controls are properly operating. Improper operation or poor maintenance of pollution controls, or lack of pollution controls can lead to elevated ambient levels of metal TAC emissions. The collection efficiency of pollution control equipment can be measured using a hot-wired anemometer to measure the air velocities from the source to the pollution controls. A smoke test or visual observations can also be used to qualitatively determine that emissions from the source are directed toward the pollution control and are not escaping outside of the collection zone of the control device, as well as verify that uncontrolled emissions are not being influenced by air flow cross-drafts from building openings, fans, or other sources. Pressure monitors that measure the differential pressure across a filter in the pollution control system are also used to identify a breach or clog in filter media. Static pressure gauges may also be used to ensure that there is sufficient negative pressure in the duct of the control device to collect the emissions. Lastly, additional inspections steps on the control device may include a visual test or inspection of the pollution controls checks to determine that filters are properly situated, verification that there are no leaks or breaches in filter media, and that the proper filter media is being utilized; slots or make-up air openings for collection devices are not clogged or blocked; and there are no gaps or openings in the ducting.

**Step 4: Determine if Emissions Can be Released to the Ambient Air**

The purpose of this step is to determine if emissions identified in Step 3 have the ability to be released to the ambient air. Although a source may use a metal TAC in their operations, it is possible that there is no mechanism for that metal TAC to be released because the material is contained in a closed container and proper housekeeping provisions are practiced. This step combines information collected in Steps 2 and 3 with visual observations about the operations.

The location of the operation can be critical. Equipment or a process that is being conducted outdoors with no pollution controls allows the emissions to be directly emitted in the open air. If a source is located within a building, openings such as vents, doors, and other openings can create cross-drafts where emissions can escape and be released to the ambient air. Poor housekeeping where metal particulate is generated can be tracked in and around the facility and re-entrained into the ambient air from dry sweeping, compressed air, or other mechanisms. Placement of upwind and downwind ambient air monitors near the facility can be used to confirm the source of ambient air monitoring results.

### **Ambient Air Monitoring Efforts that Used the Four-Step Process**

The South Coast AQMD has utilized a variety of approaches and methods, including this Four-Step Process, to identify facilities and their sources during ambient air monitoring efforts. Table 1-1 summarizes ambient air monitoring near a cement manufacturing facility, three plating and anodizing facilities, a metal heat treating facility, and a metal forging facility that was conducting metal grinding. A variety of different tools were used, such as glass plate samples, ambient air monitoring near the facility, liquid and solid samples, site inspections, and emissions screening and source testing. All of the facilities listed in Table 1-1 have implemented additional measures and pollution controls to reduce emissions.

**Table 1-1**  
**Summary of Applications of the Four-Step Process**

<b>Facility (Metal TAC)</b>	<b>Results of Four-Step Process</b>	<b>How Emissions Addressed</b>
Cement manufacturing facility in Riverside (Hexavalent Chromium)	<ul style="list-style-type: none"> <li>• Samples of gray clinker storage piles—a loose, dry material consisting of various calcium silicates used in Portland cement manufacturing showed high levels of hexavalent chromium</li> <li>• Observed periodic fugitive dust emissions from the large unprotected storage piles</li> <li>• Dust from the clinker storage piles were a main contributor to elevated hexavalent chromium levels</li> </ul>	<ul style="list-style-type: none"> <li>• Rule 1156 was amended to require ambient air monitoring and controls</li> </ul>
Metal plating and anodizing facilities in Newport Beach, Paramount, and Long Beach (Hexavalent Chromium)	<ul style="list-style-type: none"> <li>• Large door openings, vents, and fans allowed hexavalent chromium emissions from anodizing and other tanks to leave the building</li> <li>• Uncontrolled heated sodium dichromate seal tank were a source of previously unknown high ambient levels of hexavalent chromium</li> <li>• Cross-drafts near chromic acid anodizing process allowed emissions to leave the building and interfered with collection efficiency of pollution controls</li> <li>• Poor housekeeping; contaminated spray booth stacks and roofs</li> </ul>	<ul style="list-style-type: none"> <li>• Order for Abatement</li> <li>• Risk Reduction Plan under Rule 1402</li> <li>• Amendments to Rule 1469</li> </ul>
Metal heat treating facility in Paramount (Hexavalent Chromium)	<ul style="list-style-type: none"> <li>• Hexavalent chromium emitted from furnaces with chromium workpieces or from other sources within the furnaces converted to hexavalent chromium</li> <li>• Hexavalent chromium was dispersed during fan cooling</li> <li>• Some cooling operations were conducted outside</li> <li>• Samples showed hexavalent chromium in quench tank – water from quench tank circulated through cooling tower</li> <li>• Mist from cooling tower contained hexavalent chromium</li> <li>• Large openings and vents in building allowed emissions to escape into the ambient air</li> <li>• Poor housekeeping</li> </ul>	<ul style="list-style-type: none"> <li>• Order for Abatement</li> <li>• Risk Reduction Plan under Rule 1402</li> <li>• Proposed Rule 1435</li> </ul>
Grinding operation at metal forging facility in Paramount (Nickel)	<ul style="list-style-type: none"> <li>• Sampling found metal grinding operations emitted high levels of metal particulate emissions</li> <li>• Large openings, modest housekeeping led to fugitive dust emissions</li> <li>• Pollution controls did not provide sufficient collection efficiency</li> </ul>	<ul style="list-style-type: none"> <li>• Implemented voluntary measures</li> <li>• Development of Rule 1430</li> </ul>

## **MECHANISMS TO ADDRESS HIGH CONCENTRATIONS OF METAL TACS**

Once the source or sources that are contributing to high concentrations of metal TACs at a facility are identified, corrective actions are needed to reduce metal TACs and reduce the health risk to the surrounding community. There are various mechanisms available to South Coast AQMD to address the source of the elevated concentrations and health risks, and achieve emissions reductions. The specific mechanisms used depend on the magnitude of the estimated health risk and whether the air quality issue is unique to the facility such as non-compliance with existing rules or is universal to other facilities with similar sources or operations. Another consideration is after the adoption of a new or amended rule, if a facility is in the process of complying with a new rule requirement within the allowable deadlines, but air pollution controls are not yet installed. Generally the South Coast AQMD staff will work directly with a facility to discuss the air quality issue. The South Coast AQMD may issue Notices to Comply or Notices of Violation, pursue Orders for Abatement, develop new rules or amendments to existing rules to address the air quality issue, and utilize Rule 1402.

In extreme cases where facilities are found to be causing imminent and substantial endangerment to public health or welfare, California Assembly Bill 1132 - passed by the state legislature and signed by the governor in 2017 - gives Air Pollution Control Officers the authority to issue interim orders for abatement that would take effect immediately, pending abatement hearings before the hearing board of the air district. To date, the South Coast AQMD has not issued such an order. In most cases when staff identifies compliance issues with permit conditions or rule requirements, a notice for corrective action is issued to the facility which if followed will bring an immediate reduction in associated metal TAC emissions, sometimes without any need for long-term changes to control other sources of the metal TAC emissions.

## **ESTIMATED HEALTH RISKS**

Under Rule 1402, the South Coast AQMD can require facilities to prepare a health risk assessment (HRA) to estimate their facility-wide health risk. Facilities where the South Coast AQMD had conducted ambient air monitoring have had some of the highest health risks since the implementation of Rule 1402. Under Rule 1402, a significant health risk level is when the Maximum Individual Cancer Risk is greater than one hundred in one million ( $100 \times 10^{-6}$ ) or a total acute or chronic Hazard Index (HI) of five (5.0) for any target organ system at any receptor location. The estimated health risk depends on a variety of factors such as the specific metal TAC, the level of emission controls of the metal TACs, building and stack parameters, meteorology conditions, and the proximity to off-site workers or residential and sensitive receptors. At facilities where ambient air monitoring has been conducted, cancer risks have been found to be well over the significant health risk level, with some facilities having a health risk more than 10 times the significant health risk level.

Under Rule 1402, facilities with health risks above the action risk level which is a Maximum Individual Cancer Risk of twenty-five in one million ( $25 \times 10^{-6}$ ), 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 are required to implement risk reduction measures through an approved Risk Reduction Plan. Facilities with high health risk have implemented risk reduction measures to reduce their health risk, generally well below the Action

Risk Level under Rule 1402. Table 1-2 shows the decreases in health risk to sensitive receptors after facilities implement their risk reduction measures.

**Table 1-2**  
**Health Risks to Sensitive Receptors from Facilities Identified Using Ambient Air Monitoring Data**

<b>Facility (Primary Metal TAC)</b>	<b>Initial Cancer Risk*<sup>2</sup></b>	<b>Cancer Risk* After Risk Reduction Measures</b>
Lead battery recycling facility in Vernon (Arsenic)	<ul style="list-style-type: none"> <li>• 22 in one million (based on a 2012 HRA)</li> </ul>	<ul style="list-style-type: none"> <li>• Not Available – Facility closed down</li> </ul>
Cement manufacturing facility in Riverside (Hexavalent Chromium)	<ul style="list-style-type: none"> <li>• 400-500 in one million based on 2.65 ng/m<sup>3</sup> adjacent to the facility in late 2007</li> </ul>	<ul style="list-style-type: none"> <li>• Not Available – Facility voluntarily shut down equipment and then closed down</li> </ul>
Metal plating and anodizing facility in Newport Beach (Hexavalent Chromium)	<ul style="list-style-type: none"> <li>• 1,502 in one million (based on 2013 HRA, recalculated using 2015 OEHHA guidelines)</li> </ul>	<ul style="list-style-type: none"> <li>• 15-20 in one million in approved HRA; adjusted by Executive Officer from initial value of 0.8 in one million</li> </ul>
Metal plating and anodizing facility in Paramount (Hexavalent Chromium)**	<ul style="list-style-type: none"> <li>• 931 in one million (based on 2016 HRA)</li> </ul>	<ul style="list-style-type: none"> <li>• First Risk Reduction Plan rejected; revised Risk Reduction Plan under review</li> </ul>
Metal plating and anodizing facility in North Long Beach (Hexavalent Chromium)**	<ul style="list-style-type: none"> <li>• 441 in one million (based on air dispersion modeling)</li> </ul>	<ul style="list-style-type: none"> <li>• 129 in one million on approved HRA</li> </ul>
Metal heat treating facility in Paramount (Hexavalent Chromium)**	<ul style="list-style-type: none"> <li>• 1,900 in one million (based on 2016 HRA)</li> </ul>	<ul style="list-style-type: none"> <li>• &lt; 1.0 in one million in approved Risk Reduction Plan</li> </ul>
Grinding operation at metal forging facility in Paramount (Nickel)	<ul style="list-style-type: none"> <li>• 15.4 in one million (based on 2012 HRA)</li> </ul>	<ul style="list-style-type: none"> <li>• Risk reduction measures not required; Risk &lt; 25 in one million</li> </ul>

\* Health Risks from HRAs include all Toxic Air Contaminants

\*\* Facility designated Potentially High Risk Level Facility under Rule 1402

<sup>2</sup> More information regarding the approved Health Risk Assessments for these facilities can be found on South Coast AQMD's AB 2588 website located here: <http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/health-risk-assessment>.



## **2015 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT (OEHHA) RISK ASSESSMENT METHODOLOGY**

Health risk assessments under Rule 1402 are conducted pursuant to the “Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments” prepared by the Office of Environmental Health Hazard Assessment (OEHHA) and approved on March 6, 2015 referred to herein as the “2015 OEHHA Guidelines”<sup>3</sup>. The 2015 OEHHA Guidelines incorporates age sensitivity factors which increases cancer risk estimates to residential and sensitive receptors by approximately three times, and more than three times in some cases depending on whether the TAC has multiple pathways of exposure in addition to inhalation. Many metal TACs have multiple pathways of exposure. The estimated health risk for hexavalent chromium for a residential and sensitive receptor increased by a factor of approximately three. Under the 2015 OEHHA Guidelines, even though the toxic emissions from a facility have not increased, the estimated cancer risk to a residential receptor will increase. Cancer risks for offsite worker receptors are similar between the existing and revised methodology because the methodology for adulthood exposures remains relatively unchanged. Unless noted on Table 1-2, health risk assessments conducted prior to 2015 used the 2003 OEHHA Guidelines which did not include the age sensitivity factors. Estimated health risks for residential and sensitive receptors would be substantially higher if the 2015 OEHHA Guidelines were applied.

### **RULE 1402 POTENTIALLY HIGH RISK LEVEL FACILITY**

In October 2016, the South Coast AQMD amended Rule 1402 to include provisions for Potentially High Risk Level Facilities. Under Rule 1402, a Potentially High Risk Level Facility is a facility that has a likely potential to either exceed or has exceeded the Significant Risk Level under Rule 1402. A facility designated as a Potentially High Risk Level Facility must submit an Early Action Reduction Plan within 90 days of being designated. The purpose of the Early Action Reduction Plan is to identify interim risk reduction measures that can be implemented quickly to address the high health risk. Potentially High Risk Level Facilities must also submit their Health Risk Assessment and Risk Reduction Plan, concurrently, and within 180 days of being designated to expedite the process. Under Rule 1402, Potentially High Risk Level Facilities must implement risk reduction measures as quickly as feasible and no longer than two years from the date the Risk Reduction Plan is approved. Risk reduction measures are the permanent and enforceable pollution controls and measures that are needed to ensure the facility maintains a health risk below the Action Risk Level. Beginning with the designation of a facility as a Potentially High Risk Level Facility, implementation of measures in the Risk Reduction Plan can take two to three years, depending on the length of time needed to approve or modify the Health Risk Assessment and Risk Reduction Plan. Table 1-3 summarizes the key components in PR 1480 and Rule 1402.

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<sup>3</sup> The 2015 OEHHA Guidelines can be found here: <https://oehha.ca.gov/air/crnrr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0>.

**Table 1-3**  
**Summary of Key Components of PR 1480 Metal TAC Monitoring Facility and Rule 1402**  
**Potentially High Risk Level Facility**

	<b>PR 1480</b>	<b>Rule 1402</b>
<b>Designation Process For</b>	Metal TAC Monitoring Facility	Potentially High Risk Level Facility
<b>Types of TACs</b>	Metal TACs	All TACS
<b>Health Risks Analyzed</b>	Cancer Risk and Non-cancer Chronic Hazard Index	Cancer Risk, Non-cancer Chronic Hazard Index, and Non-cancer Acute Hazard Index
<b>Receptor Types</b>	Sensitive Receptors	All receptor types - Sensitive Receptors and Worker Receptors
<b>Risk Threshold</b>	<b>Significant Risk Level</b> Cancer Risk = 100 in one million Chronic Hazard Index = 5.0	<b>Significant Risk Level</b> Cancer Risk = 100 in one million Chronic Hazard Index = 5.0 Acute Hazard Index = 5.0
<b>When can a Facility be Designated?</b>	Based on Metal TAC emissions from the facility, the Executive Officer finds that the Significant Risk Level has been exceeded using air dispersion modeling and Risk Assessment Procedures referenced in Rule 1401	Executive Officer makes the determination that emissions data, ambient data, or data from previously approved HRA indicates that facility has a likely potential to either exceed or has exceeded the Significant Risk Level

### **EXISTING RULES WITH METAL TAC MONITORING REQUIREMENTS**

South Coast AQMD has existing rules that include ambient air monitoring requirements for cement manufacturing (Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities), lead from metal melting and battery recycling (Rule 1420 series), and soil handling (Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants). However there are many rules with emission requirements for Metal TACs that do not have ambient air monitoring requirements, such as chrome plating and anodizing (Rule 1469 – Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations), chromium spraying operations (Rule 1469.1 – Spraying Operations Using Coatings Containing Chromium), non-chromium metal melting (Rule 1407 – Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Ferrous Metal Melting Operations), and metal forging (Rule 1430 – Control of Emissions from Metal Grinding Operations at Metal Forging Facilities). PR 1480 is designed to be a comprehensive Metal TAC monitoring and sampling rule for facilities that are not yet covered.

#### **Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities**

Particulate matter emissions, including hexavalent chromium, are created during the cement manufacturing process. Rule 1156 requires ambient air monitoring that follows a Compliance Monitoring Plan. Plans have a minimum of three fence-line monitors for hexavalent chromium with a 24-hour sample taken at a 1 in 3 day frequency with a 30-day rolling average threshold limit

of 0.20 ng/m<sup>3</sup>. If there is no exceedance of the threshold limit, which is based on a 90-day rolling average, the sampling frequency may be reduced to 1 in 6 days. If there is an exceedance of the threshold limit, the frequency reverts back to 1 in 3 days. Rule 1156 includes provisions to control and minimize metal TAC emissions.

### **Rules 1420, 1420.1, and 1420.2 – Emissions Standards for Lead**

Rule 1420.1 - Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities, requires lead emissions, as well as arsenic emissions from large battery recycling facilities to be monitored. In addition, Rule 1420.2 - Emission Standards for Lead from Metal Melting Facilities, requires large lead facilities to monitor ambient levels of lead. Rule 1420 - Emission Standards for Lead, requires facilities to monitor if they are designated by the Executive Officer. Ambient air monitoring is conducted to ensure attainment and maintenance of the NAAQS for lead. Rule 1420 requires metal melting or lead processing facilities to meet a 30-day rolling average lead ambient air concentration of 0.150 µg/m<sup>3</sup> until December 31, 2020, and the limit will be lowered to 0.100 µg/m<sup>3</sup> starting on January 1, 2021. The ambient air concentration limit for lead for large lead-acid battery recyclers under Rule 1420.1 is currently 0.100 µg/m<sup>3</sup>. Rule 1420.1 also has a 24-hr average limit of 10 ng/m<sup>3</sup> for arsenic. These rules also include provisions to control and minimize fugitive lead-dust emissions. Rule 1420 requires ambient air monitoring once every six calendar days, while Rule 1420.1 requires both lead and arsenic samples be collected daily. The sampling frequency for Rule 1420.2 begins with a daily commission period for the first 30 days and transitions to a sampling frequency of once every six days. The sampling frequency increases to once every three days if the ambient air concentration over 30 consecutive days is between 0.100 and 0.150 µg/m<sup>3</sup> and to daily if it exceeds 0.150 µg/m<sup>3</sup>.

### **Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants**

As a surrogate for the TACs within the soils, dust emissions from earth-moving activities that contain TACs are required for some operations to be monitored using PM10 monitors. These emissions are generated during excavation, grading, handling, treating, stockpiling, transferring, and removal of soils from a site. Rule 1466 includes provisions to control and minimize TAC emissions.

## **AMBIENT AIR MONITORING TECHNOLOGY**

In prior investigations and existing rules, as discussed earlier, South Coast AQMD either utilized or required the use of source-oriented monitoring that identified concentrations of a metal toxic air contaminant. The monitor used depended on the pollutant measured, location of the facility, area available to site a monitor, and other variables. For example, during the Paramount investigation, BGI OMNIs were used as they are portable battery operated samplers that could be deployed on power poles when the only metal toxic air contaminant to be measured was hexavalent chromium. The monitors used to satisfy monitoring requirements in existing rules and for investigations have been mostly stationary and provide a daily integrated sample. Table 1-4 summarizes the stationary monitors that have been used to satisfy rule requirements or for investigations that provide a daily integrated sample.

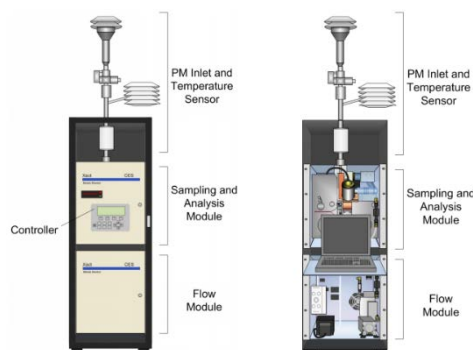
**Table 1-4**  
**Types of Air Monitors Used by South Coast AQMD**

Type	BGI OMNI	BGI PQ100	Xonteck 924	Tisch HiVol
Cost	~\$4,800	~\$6,700	~\$24,000	~\$7,000
Filter Media	<ul style="list-style-type: none"> <li>•Cellulose</li> <li>•Teflon</li> </ul>	<ul style="list-style-type: none"> <li>•Cellulose</li> <li>•Teflon</li> </ul>	<ul style="list-style-type: none"> <li>•Quartz</li> <li>•Cellulose</li> </ul>	<ul style="list-style-type: none"> <li>•Glass Fiber</li> <li>•Quartz</li> </ul>
Mount Option	<ul style="list-style-type: none"> <li>•Pole</li> <li>•Stand</li> </ul>	<ul style="list-style-type: none"> <li>•Tripod</li> <li>•Stand</li> </ul>	<ul style="list-style-type: none"> <li>•Stands</li> </ul>	<ul style="list-style-type: none"> <li>•Stand</li> </ul>
Pollutant Analyzed	<ul style="list-style-type: none"> <li>•Multi-metal</li> <li>•Cr<sup>+6</sup></li> </ul>	<ul style="list-style-type: none"> <li>•Multi-metal</li> <li>•Cr<sup>+6</sup></li> </ul>	<ul style="list-style-type: none"> <li>•Multi-metal</li> <li>•Cr<sup>+6</sup></li> </ul>	<ul style="list-style-type: none"> <li>•Multi-metal</li> </ul>
Power Source	<ul style="list-style-type: none"> <li>•AC, DC and solar</li> <li>•Recharge if pole mounted</li> </ul>	<ul style="list-style-type: none"> <li>•AC, DC and solar</li> </ul>	<ul style="list-style-type: none"> <li>•AC</li> </ul>	<ul style="list-style-type: none"> <li>•AC</li> </ul>
Flow Rate	<ul style="list-style-type: none"> <li>•Set at 5 L/minute (Not Adjustable)</li> </ul>	<ul style="list-style-type: none"> <li>•2 L/minute - 25 L/minute</li> <li>•Typically set at 12 L/minute</li> </ul>	<ul style="list-style-type: none"> <li>•0 – 30 L/minute</li> <li>•Typically set at 12 L/minute</li> </ul>	<ul style="list-style-type: none"> <li>•1100-1700 L/minute</li> </ul>
Key Characteristics	<ul style="list-style-type: none"> <li>•Portable</li> <li>•Suitable for fence-line monitoring</li> <li>•1 Filter</li> <li>•Retrieve entire unit for analysis</li> <li>•Used in Paramount and Compton</li> </ul>	<ul style="list-style-type: none"> <li>•Portable</li> <li>•1 filter</li> <li>•Used in Compton and at Newport Beach</li> </ul>	<ul style="list-style-type: none"> <li>•Permanent</li> <li>•4 filters (sequential or parallel)</li> <li>•Monitor multiple compounds simultaneously</li> <li>•Used at Rule 1156 cement facilities and for MATES<sup>1</sup> and NATTS<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>•Permanent</li> <li>•Hi-Volume</li> <li>•1 filter</li> <li>•Used for Rules 1420, 1420.1 and 1420.2</li> </ul>

<sup>1</sup> Multiple Air Toxics Exposure Study

<sup>2</sup> National Air Toxics Trends Stations

In addition to the stationary monitors that take an integrated daily sample, South Coast AQMD has utilized continuous emission monitoring and mobile surveys to identify or measure concentrations of metal toxic air contaminants. This approach to monitoring has not previously been used to satisfy existing rule requirements; however, it has been used in other applications, such as identifying facilities or areas with elevated ambient concentrations that may require further investigations.



Schematic of the Cooper Environmental Services Xact 625

Cooper Environmental Services, LLC (Cooper) is a vendor of multi-metals monitoring technology with monitors that utilize x-ray fluorescence (XRF) to determine concentrations of a specific list of metal compounds. After satisfactory evaluation tests, the South Coast AQMD purchased two Cooper Environmental Services Xact 625 units for continuous multi-metals monitoring. These monitors have been used to determine compliance with a Rule 1402 Risk Reduction Plan for a facility and has assisted in source identification by correlating metals concentrations to wind speed and direction.

One challenge in operating the Xact monitor in remote locations is that it requires to be operated in a temperature controlled environment such as an air conditioned shed. While the Xact monitor can measure multiple metal toxic air contaminants, it cannot measure hexavalent chromium. This continuous ambient air monitoring system has been reviewed by U.S. EPA through its Environmental Technology Verification Program<sup>4</sup>. The report concluded that that the daily average Xact 625 results were highly correlated and in close quantitative agreement with the reference inductively coupled plasma mass spectrometry (ICP-MS) analysis results for most of the six metals analyzed (calcium, copper, manganese, lead, selenium, and zinc), and that the Xact 625 achieved data completeness of over 95%. As part of additional evaluation tests to determine the suitability of the Xact monitor in mobile applications an Xact 625 monitor was temporarily installed in a specialized vehicle and used to identify hotspots and pinpoint areas for further investigation or placement of fixed monitoring sites.

### NEED FOR PROPOSED RULE 1480

Under PR 1480, the responsibility of ambient air monitoring would be transferred to the facility that is posing the health risk. PR 1480 is needed to ensure that ambient levels near facilities with significant risk levels are being monitored. Operations with metal TAC emissions can have significant fugitive emissions and monitoring near facilities has shown high levels of metal TACs. As previously discussed, some facilities have had cancer risks that were well above 1,000 in a million, more than 10 times the Rule 1402 Significant Risk Level threshold. When a Potentially High Risk Level Facility is identified through Rule 1402, it can take two to three years to install permanent pollution controls and measures required by the Risk Reduction Plan. During this interim period, ambient air monitoring can monitor emissions from the facility to ensure metal TAC emissions are not increasing. In addition, the ambient air monitoring data is a tool that can be used to verify reductions of metal TAC emissions during the implementation of the Early Action Reduction Plan as well as the Risk Reduction Plan. Additionally, the elevated levels alert the South Coast AQMD of certain activities that may generate emissions.

PR 1480 does not require measures to reduce emissions, but instead would provide information regarding emissions. The primary means in which metal TAC emissions would be reduced is through the requirements of Rule 1402 under the provisions for a Potentially High Risk Level Facility. The facility would be designated pursuant to Rule 1402 and PR 1480 if health risks exceed

<sup>4</sup> Cooper Environmental Services LLC. Xact 625 Particulate Metals Monitor. Kelly, T., Dindal, A., & McKernan, J., Columbus, OH: U.S. Environmental Protection Agency. September 2012.

the Significant Risk Level for metal TACs. Since metal TACs are a subgroup of all TACs evaluated under Rule 1402, the criteria set forth in PR 1480 will affect a subset of sources potentially designated as Potentially Significant Risk Level Facilities under Rule 1402. PR 1480 focuses on residential and sensitive receptors and only metal TACs while Rule 1402 focuses on residential, sensitive and worker receptors and all TACs listed under Rule 1401 – New Source Review of Toxic Air Contaminants. In other words, PR 1480 has a narrower focus.

PR 1480 will provide a consistent approach, implementation, and uniformity for required metal TAC Monitoring and Sampling across several universes of metal working or processing industries. PR 1480 would require the facility to conduct metal TAC monitoring and sampling until the Risk Reduction Plan under Rule 1402 is implemented or it is determined that a Risk Reduction Plan is not needed, whichever is sooner.

### **AFFECTED INDUSTRIES**

PR 1480 will affect facilities that emit metal TACs and contribute to a high health risk at a sensitive receptor. It is unknown the type or the number of facilities that will be affected by this proposed rule. Types of operations with potential metal TAC emissions include:

- Chromic acid anodizing and chromium plating facilities;
- Metal grinding and buffing operations;
- Metal melting facilities
- Forges and other hot metal working facilities
- Welding and hot cutting operations (not using a lubricant)
- Metal heat treaters
- Cement manufacturers
- Concrete batch plants
- Scrapyards and recyclers that process metal and/or concrete
- Chromium-containing coating operations
- Leather tanneries

### **PUBLIC PROCESS**

Development of PR 1480 is being conducted through a public process. A PR 1480 Working Group has been formed to provide the public and stakeholders an opportunity to discuss important details about the proposed rule and provide South Coast AQMD staff with input during the rule development process. The PR 1480 Working Group is composed of representatives from businesses, environmental groups, public agencies, and consultants. South Coast AQMD has held 11 working group meetings at the South Coast AQMD Headquarters in Diamond Bar. The meetings were held on May 2, 2018, June 13, 2018, November 28, 2018, February 5, 2019, April 10, 2019, May 23, 2019, August 6, 2019, August 29, 2019, October 8, 2019, October 23, 2019, and October 29, 2019. In addition, a Public Workshop was held on October 2, 2019 to present the proposed rule and receive public comment.

## **CHAPTER 2: SUMMARY OF PROPOSED RULE 1480**

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### OVERALL APPROACH

#### PROPOSED RULE 1480

Purpose – Subdivision (a)

Applicability – Subdivision (b)

Definitions – Subdivision (c)

Designation of a Metal TAC Monitoring Facility – Subdivision (d)

Monitoring and Sampling Plan – Subdivision (e)

Monitoring and Sampling Requirements – Subdivision (f)

Alternative Monitoring and Sampling – Subdivision (g)

Proposed Rule 1480 Fees

Reduced Monitoring and Sampling Frequency and/or Monitors – Subdivision (h)

Monitoring, Recordkeeping, and Reporting Requirements – Subdivision (i)

Discontinuation of Monitoring and Sampling – Subdivision (j)

Exemptions – Subdivision (k)

South Coast AQMD Monitoring and Sampling Fees – Appendix 1

Methodology for Calculating Benchmark Concentration – Appendix 2

## OVERALL APPROACH

PR 1480 establishes the process to designate a facility as a Metal TAC Monitoring Facility, and after a facility is designated, requirements to conduct ambient air monitoring for Metal TACs. The requirements include submittal of a Monitoring and Sampling Plan, conducting ~~Metal TAC Monitoring and Sampling~~, and reporting of the monitoring data to the Executive Officer.

Both PR1480 and Rule 1402 include provisions for the designation of facilities as a Metal TAC Monitoring Facility and a Potentially High Risk Level Facility, respectively. The criteria set forth in PR 1480 will affect a subset of sources designated as Potentially High Risk Level Facilities under Rule 1402. Both designations are based on when the cancer risk is equal to or greater than one hundred in one million ( $100 \times 10^{-6}$ ) or the hazard index is equal to or greater than five (5.0) for any target organ system. Where they differ is that PR 1480 focuses on sensitive receptors and only metal TACs and Rule 1402 focuses on residential, sensitive, and worker receptors and all TACs listed in Rule 1401.

Since the universe of affected facilities under PR 1480 is a subset of Rule 1402, a facility subject to the ~~Metal TAC Monitoring and Sampling~~ requirements of PR 1480 would also be required to reduce the TAC emissions as part of an Early Action Reduction Plan and Risk Reduction Plan under Rule 1402. Additionally a facility can implement voluntary measures to reduce TAC emissions. A facility would cease ~~Metal TAC Monitoring and Sampling~~ after the facility has fully implemented the required Rule 1402 Risk Reduction Plan, or the date of the approved Health Risk Assessment if it is determined that a Risk Reduction Plan was not required. Implementation of the Risk Reduction Plan would take into account implementation of all measures in the Plan as well as other requirements that may be specified in a rule or permit condition that are needed to ensure the facility meets the risk reduction requirements under Rule 1402.

Only three facilities have been designated Potentially High Risk Level Facilities since this provision was added to Rule 1402 in 2016. All three facilities had cancer risks well over the Significant Risk Level due to metal TAC emissions. The South Coast AQMD has been conducting ambient air monitoring for metal TACs for several years during the implementation of Rule 1402 to ensure that metal TAC emissions do not increase and to alert the Executive Officer of elevated emissions that may be caused by certain equipment, processes, or activities at these facilities. PR 1480 would transfer the responsibility of the Monitoring and Sampling to the facility responsible for the emissions until the facility fully implements its Rule 1402 Risk Reduction Plan or their Rule 1402 Health Risk Assessment is approved, if a Risk Reduction Plan was not required. PR 1480 will complement Rule 1402 by providing the required Monitoring and Sampling for the relatively small number of facilities that pose the greatest health risks to the surrounding Sensitive Receptors due to Metal TACs.

The following provides a general description of the requirements of PR 1480. For specific rule language, please refer to PR 1480.



**PROPOSED RULE 1480****Purpose – Subdivision (a)**

The purpose of the proposed rule is to require facilities that have been designated by the Executive Officer as a Metal TAC Monitoring Facility to conduct Monitoring and Sampling. A Metal TAC Monitoring Facility is a facility that meets the designation criteria discussed in paragraph (d)(7).

**Applicability – Subdivision (b)**

PR 1480 applies to facilities that have Metal TAC emissions where a Metal TAC is a metal air pollutant as defined in paragraph (c)(8). This rule applies to the owner or operator of any facility that receives an Initial Notice pursuant to paragraph (d)(1). The Executive Officer will issue the Initial Notice to inform the facility that Monitoring and Sampling is being conducted.

**Definitions – Subdivision (c)**

PR 1480 includes definitions for specific terms. Several of the definitions are based on definitions from existing South Coast AQMD rules with slight modifications, while other definitions are unique to PR 1480. For certain definitions, additional clarification is provided in this chapter where the definition is used within a specific provision. Please refer to PR 1480 subdivision (c) for definitions used in the proposed rule.

**Designation of a Metal TAC Monitoring Facility – Subdivision (d)**

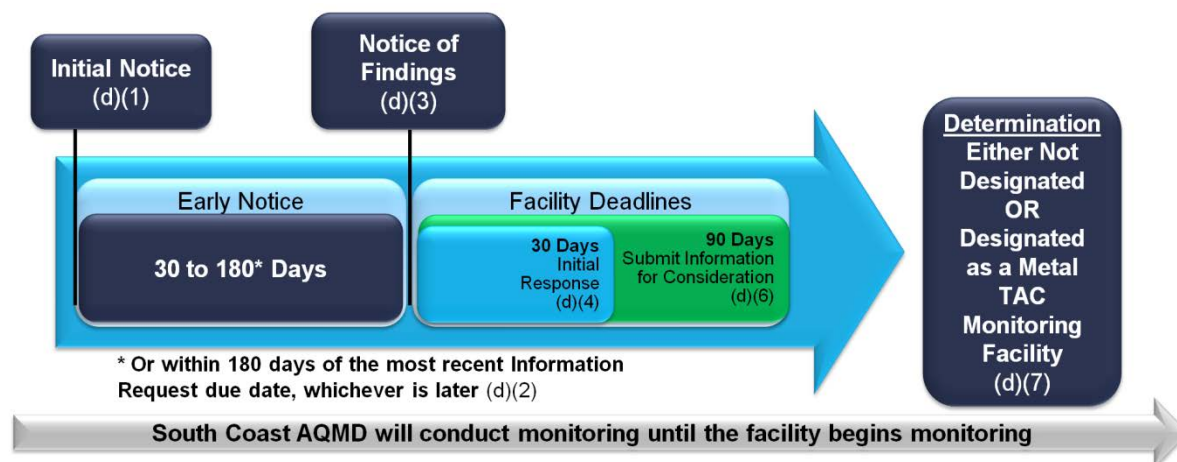
Subdivision (d) establishes the process to designate a facility as a Metal TAC Monitoring Facility. A Metal TAC Monitoring Facility that meets the criteria specified in paragraph (d)(7) will be required to conduct monitoring and sampling of specific Metal TACs.

The designation process begins when, in the course of its investigations, the Executive Officer has reason to believe that a facility may be emitting elevated levels of Metal TACs. The Executive Officer will issue an Initial Notice, which alerts the owner or operator of a facility that the South Coast AQMD is conducting metal TAC monitoring in the area. After receiving the Initial Notice, an owner or operator of a facility may receive an Information Request from the Executive Officer, which may require the owner or operator to provide access to the Executive Officer to conduct emissions testing or Monitoring and Sampling of metal TACs within the facility or provide records in relation to the use or emissions of Metal TACs. The Executive Officer may then issue a Notice of Findings that will inform the facility that it may be designated a Metal TAC Monitoring Facility. The owner or operator of the facility can respond to and/or submit information to the Executive Officer for consideration. The Executive Officer will, using all information available, make a determination to either not designate a facility or designate a facility as a Metal TAC Monitoring Facility. An owner or operator of a facility may contact the Executive Officer at any time to request one or more meetings.

It is important to note that South Coast AQMD first starts monitoring for the Metal TAC in the vicinity of the facility and will continue Metal TAC monitoring and sampling as the designation process under PR 1480 proceeds. Even if the facility is not designated under PR 1480, South Coast AQMD will likely continue monitoring, as seen in the monitoring efforts in Paramount and Compton.

Figure 2-1 provides an overview of the process of designating a facility as a Metal TAC Monitoring Facility.

**Figure 2-1**  
**Overview of Designation of Metal TAC Monitoring Facility**



***Initial Notice (d)(1) and Information Request (d)(2)***

During the development of PR 1480, stakeholders requested advance notice of monitoring that may lead to a facility being designated as Metal TAC Monitoring Facility and a pathway for an owner or operator of a facility to identify and correct issues that were associated with Metal TAC emissions detected by ambient monitors. Staff added the Initial Notice in paragraph (d)(1) to provide an early notice to the facility that the South Coast AQMD is conducting Monitoring and Sampling. The Executive Officer may issue future Initial Notices to the same facilities that were previously not designated or are no longer designated as a Metal TAC Monitoring Facility. This could occur if new information is obtained or if there are changes at the facility. Additionally, the owner or operator would be informed that PR 1480 includes an exemption for facilities meeting the criteria in paragraph (k)(3) and information specified in subparagraphs (k)(3)(A) through (k)(3)(C) would need to be submitted within 60 days of the Initial Notice for the Executive Officer to verify the facility's eligibility.

In order to gather the additional information needed to determine if a facility should be designated a Metal TAC Monitoring Facility, the Executive Officer may issue one or more Information Requests pursuant to paragraph (d)(2) to an owner or operator of a facility. The Information Request would be issued following the Initial Notice if the Executive Officer needs additional information to determine if a facility meets the criteria specified in paragraph (d)(7) to designate a facility as a Metal TAC Monitoring Facility. Separate from the Information Request, the Executive Officer may request information outside of this process to implement and enforce other South Coast AQMD rules and for other projects and programs such as permitting, compliance plans, etc. Emission testing of sources verifies that Metal TAC emissions are being generated from an operation or activity at a facility. For example, a facility may process a Metal TAC, but there may not be a method for emissions to be generated. Sample analyses can determine the contents of an operation and/or if there is Metal TAC material being deposited. The Information Request may include requiring the owner or operator to conduct source tests and/or sample analyses. An owner

or operator of a facility has a choice to either conduct this testing or provide the Executive Officer access to the facility to conduct the testing. If the owner or operator chooses to conduct their own testing, the owner or operator will submit a test protocol to South Coast AQMD within the time specified in the written request by the Executive Officer, and the facility subsequently will conduct the test in accordance with the South Coast AQMD-approved protocol within the required timelines, and provide the complete report to the Executive Officer. While the Executive Officer may have initially placed Metal TAC monitors as part of a preliminary investigation, the Metal TAC monitors may not have been sited to quantify Metal TAC emissions from the facility and it may be necessary for Metal TAC monitors to be sited on the property, near the fenceline to more accurately measure emissions from the facility. The Information Request may require placement of the Metal TAC monitors near the fenceline within the facility, or at the fenceline of the facility.

### *Notice of Findings (d)(3)*

After evaluating the information collected regarding the facility, the Executive Officer may issue a Notice of Findings pursuant to paragraph (d)(3). A Notice of Findings is a formal notice from the Executive Officer that a facility may be designated a Metal TAC Monitoring Facility. As discussed in Chapter 1, the Executive Officer utilizes the Four-Step Process to determine if a facility is a source of emissions. The Notice of Findings would include the information that the facility has equipment or processes with Metal TAC emissions and those Metal TAC emissions are capable of being released into the ambient air. In addition, the Notice of Findings will include the highest health risk value at a Sensitive Receptor that exceeds the Significant Risk Level based on the Metal TAC emissions from the facility, location of the Sensitive Receptor with the highest health risk value, and the percent that each Metal TAC contributes to the highest health risk value, based on air dispersion modeling.

Information collected either prior to or following the Initial Notice would be used to determine that Metal TAC emissions are being emitted from processes or operations at the facility. The Executive Officer would use source or screening test results with an emission rate or other known emission factors to model the health risks to a Sensitive Receptor. This approach where only facility-specific information is used to estimate the health risk at the Sensitive Receptor ensures that only the emissions from the facility are used to designate a Metal TAC Monitoring Facility. Cancer Risk and Chronic Hazard Index would be estimated using air dispersion modeling with AERMOD, or the most recent U.S. EPA approved dispersion modeling software, and the Tier 4 detailed risk assessment procedures in Rule 1401<sup>5</sup>.

Stakeholders requested that the Notice of Findings include key deadlines of when the owner or operator of the facility would need to comply with specific PR 1480 requirements and the data collected by the South Coast AQMD. A Notice of Findings issued under PR 1480 would include the information and data that the South Coast AQMD is considering to use to designate the facility, the next steps in the process for the facility, along with the appropriate deadlines, and a link to the rule language.

If a Notice of Findings is not issued 180 days after an Initial Notice or 180 days after the due date in the most recent Information Request, the Executive Officer may issue a subsequent Initial Notice that could lead to a Notice of Findings.

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<sup>5</sup> The Risk Assessment Procedures referenced in Rule 1401 can be found here: <http://www.aqmd.gov/home/permits/risk-assessment>.

***Facility Response After Notice of Findings (d)(4), (d)(5), and (d)(6)***

Throughout the development of PR 1480, stakeholders requested that the facility have the opportunity to respond to the information included in the Notice of Findings and have the necessary time to respond. In paragraph (d)(4), owner or operators that need additional time, beyond 30 days, to prepare information must submit a written notice to the Executive Officer that additional information will be submitted no later than 90 days from the date of the Notice of Findings. Initial drafts of PR 1480 allowed 60 days from the Notice of Findings, which was later increased to 90 days from the Notice of Findings based on stakeholder input.

Paragraph (d)(5) clarifies the type of additional information that can be provided. An owner or operator of a facility may provide any additional data to substantiate that the equipment or processes are not contributing to some or all of the Metal TAC emissions, a list of Enforceable Measures (explained below), a list of future Enforceable Measures, Regulation XIV rules with future effective compliance dates, or information to substantiate that the Metal TAC emissions are not attributed to the facility. Examples of data that a facility may provide include source tests or screening tests, operating records, or information from data recorders.

Enforceable Measures for subparagraph (d)(5)(B) are those measures that reduce or eliminate Metal TAC emissions that are real, permanent, quantifiable, and enforceable by the Executive Officer, and must be implemented at the time of the submittal of the additional information. Examples of Enforceable Measures include installation of emissions control equipment, emissions or throughput limits in permit conditions, and permanent removal of equipment that were sources of Metals of Concern. This provision is intended for those facilities that have already gone through the permitting process and have installed pollution controls or new equipment to permanently reduce emissions or have removed equipment and inactivated their South Coast AQMD permit to operate or canceled their permit to construct.

In addition to Enforceable Measures that have been implemented, the owner or operator may provide information regarding Enforceable Measures that will be implemented within 90 days of a Notice of Findings under subparagraph (d)(5)(C). Pollution controls or equipment still undergoing permit evaluation would not be considered Enforceable Measures unless the Permit(s) to Construct have been issued, the equipment is installed within 60 days of the Notice of Findings, and in operation within 90 days of the Notice of Findings to reduce Metal TAC emissions.

Based on stakeholder comments, provisions were added to recognize implementation of adopted or amended rules that will reduce Metal TAC emissions. Subparagraph (d)(5)(D) allows an owner or operator to submit information regarding Regulation XIV rule with provisions with a final compliance date that would result in Metal TAC emission reductions. The owner or operator may provide a list of equipment or processes and specify the Regulation XIV rule(s) with the final compliance date(s), that will occur after the Notice of Findings is issued. The owner or operator must provide information that the owner or operator has met all interim compliance date(s) and all actions taken if the interim compliance date(s) will occur after the owner or operator is required to submit this information as specified in paragraph (d)(6). The reduction of Metal TAC emissions from equipment or sources meeting these criteria would be considered by the Executive Officer when determining whether or not to designate the facility a Metal TAC Monitoring Facility. If the equipment specified in subparagraph (d)(5)(C) is not in operation within 90 days of the Notice of Findings, it would not be a violation of this rule, but the Executive Officer would disregard the emission reductions from this equipment when considering designation of the facility. Future

Enforceable Measures were added based on stakeholder feedback to recognize efforts made by facilities to reduce Metal TACs. Examples of additional information an owner or operator would provide to demonstrate that the Metal TAC emissions are not attributed to the facility include identifying other sources of Metal TAC emissions in the immediate vicinity of the facility and information that elevated Monitoring and Sampling results were due to exceptional events such as fireworks on the Fourth of July or construction activities involving cement, or welding activities.

***Criteria to Designate a Metal TAC Monitoring Facility (d)(7)***

Paragraph (d)(7) includes the criteria to designate a facility as a Metal TAC Monitoring Facility. The criteria includes:

- The facility has equipment or processes with Metal TAC(s) emissions;
- The Metal TAC(s) emissions are capable of being released into the ambient air;
- The facility has been designated as a Potentially High Risk Level Facility under Rule 1402; and
- Based on the Metal TAC emissions from the facility, the Executive Officer finds that the Significant Risk Level has been exceeded for any Sensitive Receptor using air dispersion modeling and the Risk Assessment Procedures referenced in Rule 1401, taking into account the following to the extent available:
  - Results of Metal TAC emissions testing and sampling analyses;
  - Results of Monitoring and Sampling;
  - Records of Metal TAC material usages, manifests, and other records;
  - Information provided pursuant to paragraphs (d)(3), (d)(4), (d)(5), and (d)(6);
  - Verification of the reduction or elimination of Metal TACs associated with implementation of enforceable measures provided in subparagraph (d)(5)(B), enforceable measures that will be implemented within 90 days of the Notice of findings provided in subparagraph (d)(5)(C); and provisions in a Regulation XIV rule with a future effective final compliance date provided in subparagraph (d)(5)(D), provided all interim compliance dates have been met; and
  - Other information available to the Executive Officer.

The Executive Officer would consider the information and data collected by, and available to, the South Coast AQMD and the information and data provided by the owner or operator of the facility. For example, default emission factors or source tests from other equivalent sources may be used to estimate Metal TAC emissions from a facility. The Executive Officer would use the information collected to estimate the health risks at the Sensitive Receptors (the definition of Sensitive Receptor which is defined in paragraph (c)(13), includes schools which is defined in paragraph (c)(12)) by using air dispersion modeling such as AERMOD, or the most recent U.S. EPA approved dispersion modeling software, and the Tier 4 detailed risk assessment procedures in Rule 1401<sup>5</sup>. The health risk at a Sensitive Receptor is an estimation based on only the Metal TAC emissions from a facility and it is possible that the approved Rule 1402 health risk assessment may report health risks which are higher than those estimated during the designation process in PR 1480, since Rule 1402 considers all TACs and all sources of TACs. Furthermore, the Executive Officer does not need to have data on all the Metal TAC emissions from all sources to designate a Metal TAC Monitoring Facility. The Executive Officer only needs to demonstrate that Metal TAC emissions, which may be from some sources at the facility cause an exceedance of the Significant Risk Level at a Sensitive Receptor.

***Notification of Designation as a Metal TAC Monitoring Facility (d)(8)***

Paragraph (d)(8) specifies the information that the Executive Officer would provide if the facility was designated a Metal TAC Monitoring Facility. A facility designated as a Metal TAC Monitoring Facility would be provided:

- Information that demonstrates that the facility met the designation criteria;
- Location of Sensitive Receptors that exceed the Significant Risk Level and the estimated values;
- Metals of Concern, which are those Metal TACs that are contributing to the Significant Risk Level at a Sensitive Receptor; and
- Equipment and processes at the facility that are contributing to exceeding the Significant Risk Level at a Sensitive Receptor;
- Initial number, type, and approximate locations of Metal TAC monitors and wind monitors required to conduct Monitoring and Sampling; and
- The Benchmark Concentration(s) for each Metal of Concern and the identification of the corresponding monitor.

The Benchmark Concentration calculation is specific to each Metal TAC Monitoring Facility and would be used as criteria for approval of a Reduced Basic or Reduced Alternative Monitoring Sampling Plan, reverting from a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan to a Basic or Alternative Monitoring and Sampling Plan, and notifying the Executive Officer for high sampling data. Appendix 2 of PR 1480 provides the methodology on how the Benchmark Concentration is calculated. By providing the Benchmark Concentration(s) upfront during the designation process, the facilities will know the Metal TAC concentration(s) they need to stay under to qualify for a reduction in the Monitoring and Sampling frequency and/or the number of monitors. The Benchmark Concentration would be specified for each Metal of Concern at each monitor performing Monitoring and Sampling.

Based on stakeholder input, the Executive Officer may use an alternative methodology to calculate the Benchmark Concentration if there are multiple facilities within 1,000 feet of the facility of the owner or operator with the same Metal TACs. The purpose of this alternative methodology is to better isolate the Metals of Concern from those sources at the facility of the owner or operator. This provision is allowed when there are one or more facilities that have been issued an Initial Notice with the same Metals of Concern that are within 1,000 feet of each other, as measured from each facility's fence line. Staff felt that 1,000 feet was an appropriate distance for addressing other sources that are near the Metal TAC Monitoring Facility as this is the recommended distance for siting chrome plating and anodizing facilities near sensitive receptors in CARB's Air Quality and Land Use Handbook: A Community Health Perspective<sup>6</sup> and is the approximate distance where the health risk is reduced by 90 percent.

***Requirements for a Metal TAC Monitoring Facility (d)(9)***

After a facility is designated as a Metal TAC Monitoring Facility, the owner or operator would be required to submit a draft Basic Monitoring and Sampling Plan pursuant to subdivision (e) for review and approval by the Executive Officer. The approval letter for a Monitoring and Sampling

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<sup>6</sup> California Air Resource Board. April 2005. Retrieved October 29, 2019, from <https://ww3.arb.ca.gov/ch/handbook.pdf>.

Plan will specify when ambient air monitoring is to begin to comply with the Monitoring and Sampling requirements pursuant to subdivision (f). If the approval letter does not specify a date, then ambient air monitoring must begin within 30 days of the date of the approval letter. Should the Metal TAC Monitoring Facility elect to have the Executive Officer conduct the Monitoring and Sampling, the owner or operator may submit an Alternative Monitoring and Sampling Plan pursuant to subdivision (g) and would be responsible for the Monitoring and Sampling fees. The information required to be submitted in a Basic or Reduced Basic or Reduced Alternative Monitoring and Sampling Plan is specified in paragraph (e)(1) and the information required to be submitted in an Alternative Monitoring and Sampling Plan is specified in paragraph (e)(2).

### **Monitoring and Sampling Plan – Subdivision (e)**

The Monitoring and Sampling Plan establishes procedures that the owner or operator of a Metal TAC Monitoring Facility must follow when conducting Monitoring and Sampling. The Executive Officer would need to approve the Monitoring and Sampling Plan prior to the start of monitoring and sampling. Paragraph (e)(1) specifies the information that must be included in a Monitoring and Sampling Plan, such as information about the potential sources of Metals of Concern within the facility, a detailed map of the facility, and the Monitoring and Sampling equipment and procedures to be used. Please refer to the Rule 1480 Monitoring and Sampling Plan Guidance for details on what to include in a Monitoring and Sampling Plan.

In order to reduce costs associated with PR 1480, staff has modified provisions for wind speed and direction data collection. In the event that there is an existing wind monitor location representative of the conditions at the facility, taking into account site topography, and the location records wind speed and direction continuously, that wind monitor could be used to satisfy the wind monitoring requirement in paragraph (f)(8). It should be noted, however, the benefit of having a wind monitor is that in the event of an exceedance of four times the Benchmark Concentration, the wind monitor could provide information and evidence that the exceedance is not attributed to the facility. Additionally, an owner or operator of a Metal TAC Monitoring Facility with only one monitor could elect not to collect wind speed and direction data if the owner or operator does not intend to use the wind monitoring data as evidence that exceedances at the one downwind monitor are not attributed to the facility. Wind monitoring data is not necessarily needed to identify other activities that contributed to elevated levels. Records regarding certain activities outside the facility that occurred can be used to substantiate that an exceedance is not attributed to the facility such as road work, construction activities, or welding activities. An owner or operator electing to use the South Coast AQMD to conduct Monitoring and Sampling pursuant to subdivision (g) could also elect to use another third party contractor to conduct wind monitoring which is expected to be less costly option.

Clause (e)(1)(H)(v) allows the use of a surrogate of a Metal of Concern for Monitoring and Sampling instead of the Metal of Concern itself. The use of a surrogate will be evaluated on a case by case basis during evaluation of the Monitoring and Sampling Plan. Although South Coast AQMD staff is not currently aware of any appropriate use of surrogates for Metal TACs, it is possible that as future technologies emerge, this could be a less expensive option for Monitoring and Sampling. An owner or operator wanting to use a surrogate for Monitoring and Sampling must provide this information in the draft Monitoring and Sampling Plan and can use this approach if it is included in an approved Monitoring and Sampling Plan.

### ***Overview of the Monitoring and Sampling Plans***

Once designated as a Metal TAC Monitoring Facility, the owner or operator must submit either a Basic Monitoring and Sampling Plan or an Alternative Monitoring and Sampling Plan for review and approval.

- *Basic Monitoring and Sampling Plan* – a facility that submits a Basic Monitoring and Sampling Plan is required to conduct Monitoring and Sampling, or have a contractor conduct Monitoring and Sampling
- *Alternative Monitoring and Sampling Plan* – a facility that elects to have the Executive Officer conduct Monitoring and Sampling for the owner and operator must submit an Alternative Monitoring and Sampling Plan
- *Reduced Basic or Reduced Alternative Monitoring and Sampling Plans* – facilities that have approved Basic or Alternative Monitoring and Sampling Plans may reduce their Monitoring and Sampling frequency and/or reduce the number of required ambient monitors, if they meet certain criteria, as listed in subparagraphs (e)(5)(A) through (e)(5)(C) (discussed further below)

Subdivision (e) specifies requirements for the Basic Monitoring and Sampling Plan, Alternative Monitoring and Sampling Plan, and Reduced Monitoring and Sampling Plan. A general description of each of these Monitoring and Sampling Plans and the information required is described in Table 2-1.



**Table 2-1  
Comparison of Monitoring and Sampling Plans**

	<b>Basic Monitoring and Sampling Plan</b>	<b>Alternative Monitoring and Sampling Plan</b>	<b>Reduced Monitoring and Sampling Plan</b>
<b>Purpose</b>	For facilities that will have a contractor conduct Monitoring and Sampling for the owner or operator	The Executive officer or its contractor conducts Monitoring and Sampling for the owner or operator	Facility operating under a Basic or Alternative Monitoring and Sampling Plan that meets criteria in subparagraphs (e)(5)(A) through (e)(5)(C) may elect to reduce Monitoring and Sampling frequency and/or number of monitors
<b>Information Required Pursuant to Paragraph (e)(1)</b>	All information in paragraph (e)(1)	Information in subparagraphs (e)(1)(A) through (e)(1)(E), but not in clause (e)(1)(E)(i) if electing to have South Coast AQMD conduct wind monitoring	All information in paragraph (e)(1)
<b>Sampling Frequency</b>	1 in 3 days	1 in 3 days	1 in 6 days
<b>Denial of Revised Draft Monitoring and Sampling Plan</b>	Revised Draft Basic Monitoring and Sampling Plan will be modified and approved as an Alternative Monitoring and Sampling Plan, unless the facility ceases operation of equipment responsible for metal TAC emissions	Revised Draft Alternative Monitoring and Sampling Plan will be modified and approved as an Alternative Monitoring and Sampling Plan	No reduction in the Monitoring and Sampling frequency and/or number of monitors and existing approved Basic or Alternative Monitoring and Sampling Plan is still in effect

***Basic Monitoring and Sampling Plan***

Once a facility is designated as a Metal TAC Monitoring Facility, it must submit either a Basic or Alternative Monitoring and Sampling Plan. An owner or operator of a Metal TAC Monitoring Facility electing to conduct Monitoring and Sampling or hire a contractor to conduct Monitoring and Sampling is required to submit a Basic Monitoring and Sampling Plan.

For a Basic Monitoring and Sampling Plan all of the information specified in paragraph (e)(1) is required, which includes the facility details, such as a map of the facility, the equipment and processes that are sources of Metal TACs, the operating conditions of the equipment, and any source tests or emission tests. A Basic Monitoring and Sampling Plan would also include information regarding how the Monitoring and Sampling will be conducted to meet the requirements in subdivision (f), such as the monitoring equipment and methodology used to obtain ambient air samples (i.e., sample collection), the procedures that samples are removed from the monitors and brought back for analysis (i.e. sample retrieval), sample analysis, quality assurance and quality control procedures; the proposed locations of the monitors; and the information for each company that will conduct monitoring and sampling, including the name of the laboratory that will be used. If wind monitoring is not being proposed, the Basic Monitoring and Sampling Plan should provide the reasons why wind data need not be collected.

#### ***Alternative Monitoring and Sampling Plan***

An Alternative Monitoring and Sampling Plan is required if the owner or operator of a Metal TAC Monitoring Facility, rather than hiring a contractor to conduct Monitoring and Sampling, elects to have the South Coast AQMD conduct Monitoring and Sampling pursuant to subdivision (g). In an Alternative Monitoring and Sampling Plan, the owner or operator would provide the relevant facility details required under subparagraphs (e)(1)(A) through (e)(1)(E). If wind monitoring is not being proposed, the Alternative Monitoring and Sampling Plan should provide the reasons why wind data need not be collected. However, information pertaining to the Monitoring and Sampling specified in subparagraphs (e)(1)(F) through (e)(1)(I) is not required because South Coast AQMD staff will prepare the Monitoring and Sampling information and include the specifics of how Monitoring and Sampling will be conducted. The South Coast AQMD may hire a third-party contractor to conduct the Monitoring and Sampling.

#### ***Reduced Basic or Reduced Alternative Monitoring and Sampling Plan***

An owner or operator of a Metal TAC Monitoring Facility that elects to reduce the sampling frequency from 1 in 3 days to 1 in 6 days and/or to reduce the number of monitors (if the facility's approved Monitoring and Sampling Plan required more than one monitor), is required to submit a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan pursuant to subdivision (h). In addition to the criteria for approval for the Basic or Alternative Monitoring Plan, a draft Reduced Monitoring and Sampling Plan must meet additional criteria in subparagraphs (e)(5)(A) through (e)(5)(D):

- If only one Metal of Concern is specified in the notification that the facility has been designated as a Metal TAC Monitoring Facility, the owner or operator of a Metal TAC Monitoring Facility shall demonstrate that the average concentration of the Metal of Concern did not exceed the Benchmark Concentration for the 30 consecutive calendar days preceding the submittal of the Reduced Basic or Reduced Alternative Monitoring and Sampling Plan;
- If more than one Metal of Concern is specified in the notification that the facility has been designated as a Metal TAC Monitoring Facility, the owner or operator of a Metal TAC Monitoring Facility shall demonstrate that either:
  - The average concentration of each Metal of Concern did not exceed its respective Benchmark Concentration for the 30 consecutive calendar days preceding the

- submittal of the Reduced Basic or Reduced Alternative Monitoring and Sampling Plan; or
- The estimated health risk associated with all Metals of Concern from the facility are below the Reduced Risk Level for any Sensitive Receptor using air dispersion modeling and Risk Assessment Procedures referenced in Rule 1401 or an alternative approach approved by the Executive Officer.
- The approved Early Action Reduction Plan risk reduction measures required under Rule 1402 have been implemented; and
- The facility did not previously have more than one approved Reduced Monitoring and Sampling Plan.

Earlier versions of PR 1480 did not allow a facility that was on a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan that was required to revert back to a Basic or Alternative Monitoring and Sampling Plan to go back to a Reduced Basic or Reduces Alternative Monitoring and Sampling Plan. The current version of PR 1480 allows facilities one opportunity to go back to a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan if they meet the above criteria.

The Benchmark Concentration(s) are provided with the designation letter along with the other information pursuant to (d)(8). These concentration(s) represent the Reduced Risk Level for the Sensitive Receptor with the highest health risk value for the corresponding Metal of Concern. The average of Monitoring and Sampling data for the 30 consecutive calendar days preceding the submittal of the Reduced Basic or Reduced Alternative Monitoring and Sampling Plan would need to be below the Benchmark Concentration(s) for all Metals of Concern in order to be eligible. In cases where there is more than one Metal of Concern and not all Metals of Concern are below the corresponding Benchmark Concentrations, the owner or operator of a Metal TAC Monitoring Facility may demonstrate that the estimated health risks associated with all Metals of Concern are below the Reduced Risk Level using air dispersion modeling and Risk Assessment Procedures referenced in Rule 1401 or using another approach that is approved by the Executive Officer.

An owner or operator that submits a draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan can base that plan on their approved corresponding Basic or Alternative Monitoring and Sampling Plan with revisions to the monitoring frequency and/or remove a monitor.

#### ***Approval of Basic and Alternative Monitoring and Sampling Plans***

Paragraphs (e)(3), (e)(4), and (e)(6) establish the process for approving or not approving the draft Basic and Alternative Monitoring and Sampling Plans. A draft Basic or Alternative Monitoring and Sampling Plan will be approved if it contains the information required in paragraph (e)(1) or (e)(2). Upon approval of a Basic Monitoring and Sampling Plan, the owner or operator would be required to begin Monitoring and Sampling by the date listed in the approval letter. Upon approval of an Alternative Monitoring and Sampling Plan, the owner or operator would be required meet the requirements of paragraph (g)(1) which includes providing access for the South Coast AQMD or its third-party contractor to conduct monitoring and sampling and paying the specified fees. If the approval letter does not specify a date, then ambient air monitoring must begin within 30 days of the date of the approval letter.

### ***Approval of Reduced Basic and Reduced Alternative Monitoring and Sampling Plans***

A facility that has an approved Basic or Alternative Monitoring and Sampling Plan may elect to submit a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan to reduce the monitoring and sampling frequency and/or the number of monitors. The Executive Officer may approve the Reduced Basic or Reduced Alternative Monitoring and Sampling Plan if the facility meets the requirements of (e)(5)(A), (e)(5)(B), and (e)(5)(C). Additional information on Reduced Basic or Reduced Alternative Monitoring and Sampling Plans is included in the discussion of subdivision (h) below.

### ***Basic, Alternative, and Reduced Monitoring and Sampling Plans that are Not Approved***

Under paragraphs (e)(4) and (e)(6), if the Executive Officer determines that a draft Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan does not meet the approval criteria, the Executive Officer will notify the owner or operator that the draft Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan was not approved and provide the specific deficiencies. The owner or operator must submit a revised draft Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan within 30 days that addresses the deficiencies identified in the letter.

If a revised draft Basic Monitoring and Sampling Plan does not address the deficiencies, the Executive Officer will issue a denial letter. Within 7 days of the date of the denial letter, the owner or operator must either cease operations that contribute emissions of the Metals of Concern (as specified in subparagraph (d)(8)(D)) or notify the Executive Officer that the owner or operator elects to have the Executive Officer conduct Monitoring and Sampling pursuant to subdivision (g) and the revised draft Basic Monitoring and Sampling Plan will be modified by the Executive Officer and approved as an Alternative Sampling and Monitoring Plan.

A revised draft Alternative Sampling and Monitoring Plan that fails to meet the necessary requirements will be modified by the Executive Officer and approved. If a revised draft Reduced Basic Sampling and Monitoring Plan is not approved, the owner or operator must continue to implement the most recently approved Basic Sampling and Monitoring Plan. If a revised draft Reduced Alternative Monitoring and Sampling Plan is not approved, the South Coast AQMD will continue conducting monitoring and sampling based on the most recently approved Alternative Monitoring and Sampling Plan, without a reduction in the Monitoring and Sampling frequency and/or number of monitors. The owner or operator shall continue paying fees for Monitoring and Sampling based on the most recently approved Alternative Monitoring and Sampling Plan.

An owner or operator of a Metal TAC Monitoring Facility may appeal the Executive Officer's denial of a Monitoring and Sampling Plan by appealing to the Hearing Board pursuant to Rule 216 – Appeals.

### ***Modifications to an Approved Monitoring and Sampling Plan (e)(7) and (e)(8)***

Before an owner or operator makes any changes at the facility that would result in changes to an approved Monitoring and Sampling Plan, the owner or operator would need to submit a draft Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan. Some examples of changes which would necessitate a modification to an approved Monitoring and Sampling Plan include, but are not limited to, if the owner or operator changes equipment or processes at the facility which would cause a change to the location of the maximum predicted ground level concentration, if the owner or operator wanted to change third party contractors, or if

an update to a specific method was required. The modified Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan would follow the same process to approve or not approve the Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan. However, if the revised draft Reduced Basic or Reduced Alternative Monitoring and Sampling Plan is not approved, the revised draft will be modified by the Executive Officer to correct the identified deficiencies and approved as a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan.

Should an owner or operator be notified by the Executive Office that the Metal TAC Monitoring Facility's approved Monitoring and Sampling Plan is required to be modified, the Executive Officer will provide the reason(s) why the modification is required and what the deficiency(ies) are in the current approved Monitoring and Sampling Plan in order to meet the requirements of subdivision (f). The Executive Officer will identify the reasons and deficiencies in a letter provided to the owner or operator of a Metal TAC Monitoring Facility. Examples of why the Executive Officer may require a modification to an approved Monitoring and Sampling Plan include changes at the facility which would result in changes to the maximum expected ground level concentration and changes to approved Monitoring and Sampling methods.

#### ***Monitoring and Sampling Plan Fees (e)(9) and (e)(10)***

Evaluation of a Monitoring and Sampling Plan shall be subject to Rule 306 - Plan Fees. If Rule ~~301-306~~ ~~Permitting and Associated Fees~~, does not list the fee, the fees for the preparation of an Alternative Monitoring and Sampling Plan are listed in Appendix 1.

Further discussion of fees associated with subdivision (e) is in the Rule 1480 Fees section of this report.

#### **Monitoring and Sampling Requirements – Subdivision (f)**

In order for a Monitoring and Sampling Plan to be approved by the Executive Officer, it must meet the requirements in subdivision (f). The subdivision states that the owner or operator of a Metal TAC Monitoring Facility with an approved Monitoring and Sampling Plan is required to:

- Maintain the most recently approved Monitoring and Sampling Plan to include all processes and equipment that emit Metals of Concern and represents current processes and operating conditions;
- Install Metal TAC Monitor(s) and conduct Monitoring and Sampling at a minimum of one site, based on the location of the Maximum Expected Ground Level Concentration of the Metals of Concern, while taking into consideration logistical constraints
- Collect one sample, with a continuous sampling time of at least 23 hours to no more than 25 hours from midnight to midnight, unless a different collection schedule (e.g. 8:00 am to 8:00 am) is specified in an approved Monitoring and Sampling Plan.
- For hexavalent chromium monitoring: if the owner or operator requires an alternate collection schedule for the 24-hour sample collection (e.g. 8:00 am to 8:00 am), to accommodate timely submission of hexavalent chromium samples for analysis, the owner or operator would need to specify the alternate schedule in the draft Monitoring and Sampling Plan for approval by the Executive Officer;
- Monitor and sample on a schedule that will either be one in three days or one in six days, when on a reduced sampling schedule pursuant to subdivision (h), unless receiving written

- notification from the Executive Officer to sample on another date in lieu of an atypical sampling day such as the Fourth of July or New Year's Eve;
- Operate and maintain all Monitoring and Sampling equipment in accordance with U.S. EPA approved methods or other methods approved by the Executive Officer in the approved Monitoring and Sampling Plan;
  - Collect and analyze each sample in accordance with U.S. EPA approved methods or other methods in the approved Monitoring and Sampling Plan.
    - A chain of custody record must be maintained for discrete samples, those samples that are retrieved and brought to a laboratory for analysis.
    - The laboratory used to analyze the samples must be able to analyze low ambient levels of metal TACs, have previous experience in analyzing for hexavalent chromium and/or metals in the nanograms per cubic meter range, and follow a QA/QC program;
  - Retain sample media or sample extracts for six months, or other period in an approved Monitoring and Sampling Plan, unless the entire sample media is consumed, in which case, there is no sample media left to retain. The solution rendered from the acid extraction and digestion of a filter must also be retained and properly stored for six months, unless the entire sample extract is consumed for analysis. The sample media or sample extract should be made available to the Executive Officer, upon request;
  - Record wind speed and direction continuously if required in an approved Monitoring and Sampling Plan; and
  - Do not miss more than one sample within a 30 consecutive calendar day period, unless the sample was missed due to mechanical failure (including loss of electricity due to local power failures) of the Monitoring and Sampling equipment. A notification and written report to the Executive Officer are still required pursuant to (i)(4) and (i)(5)

Additionally, the owner or operator of a Metal TAC Monitoring Facility must not conduct activities that may damage or bias the samples, including but not limited to tampering with or obstructing the Monitoring and Sampling equipment.

Please refer to PR 1480 for the specific monitoring and sampling requirements.

Although the minimum number of ambient air monitors is one, the Executive Officer may require more than one monitor if the Metal TAC Monitoring Facility is large and there are many sources of Metal TAC emissions. A Metal TAC Monitoring Facility with only one ambient monitor may have difficulty demonstrating that the Monitoring and Sampling results at the single downwind monitor are not attributed to the facility. For Metal TAC Monitoring Facilities with an additional monitor location which represents upwind conditions, the data from the upwind monitor may be submitted along with wind monitoring data in the follow up reports pursuant to paragraphs (h)(2), (h)(5), and (i)(3) to demonstrate why the elevated monitor concentrations are not attributed to the Metal TAC Monitoring Facility. Similarly, an owner or operator electing not to conduct wind monitoring would not have the wind speed and direction data available to demonstrate that an exceedance of four times the Benchmark Concentration is not attributed to the facility. This does not preclude the facility, however, to provide information regarding activities outside of the facility that may have contributed to elevated levels of Metal TACs such as construction activities.

### **Alternative Monitoring and Sampling – Subdivision (g)**

Paragraph (g)(1) allows the owner or operator of a Metal TAC Monitoring Facility to elect to have the Executive Officer conduct ~~Metal TAC Monitoring and Sampling~~ in lieu of meeting the requirements of subparagraph (d)(9)(B) or pursuant to clause (e)(4)(B)(ii). The owner or operator of a Metal TAC Monitoring Facility shall provide access for the South Coast AQMD or its third-party contractor to conduct ~~Metal TAC Monitoring and Sampling~~. This can include, but is not limited to, providing electricity to power equipment, space for Monitoring and Sampling equipment near the fenceline or at the fenceline within the facility, a suitable location for deployment of a wind monitor, and access to Monitoring and Sampling equipment.

The owner or operator of a Metal TAC Monitoring Facility is required to be pay fees for the Monitoring and Sampling services on a monthly basis. The fee structure would initially be established in Appendix 1 of PR 1480, however, the fees for ~~Metal TAC Monitoring and Sampling~~ would eventually be incorporated into ~~Rule 301~~Regulation III – Fees and periodically updated to reflect changes to the consumer price index or other situations. Appendix 1 of this rule would only be used for the Monitoring and Sampling fees until the fees are incorporated into ~~Rule 301~~Regulation III.

If the owner or operator elects to no longer have the Executive Officer conduct Monitoring and Sampling, the owner or operator must notify the Executive Officer and submit a draft Basic Monitoring and Sampling Plan. The owner or operator would be able to use the approved Alternative Monitoring and Sampling Plan and update the contractor information and resubmit that as a draft Basic Monitoring and Sampling Plan and follow the approval process in subdivision (e). The Executive Officer would continue Monitoring and Sampling under the Alternative Monitoring and Sampling Plan until the Basic Monitoring and Sampling Plan is approved.

Further discussion of fees associated with subdivision (e) is in the Rule 1480 Fees section of this report.

### **Proposed Rule 1480 Fees**

PR 1480 provides for payment of various fees for an owner or operator that includes:

- Evaluation of a Monitoring and Sampling Plan
- Electing to have the Executive Officer conduct Monitoring and Sampling pursuant to subdivision (g) that includes;
  - Preparation of an Alternative Monitoring and Sampling Plan
  - Work to conduct Monitoring and Sampling.

#### ***Evaluation of a Monitoring and Sampling Plan***

Pursuant to paragraph (e)(9), an owner or operator would pay a fee for the evaluation of a Basic, Alternative, Reduced Basic, or Reduced Alternative Monitoring and Sampling Plan. When required, these plans are prepared by a facility and must be approved by the Executive Officer.

The evaluation fee, which is set forth in Rule 306(d), is the current hourly fee of \$161.17 for non-Title V facilities and \$202.06 for Title V facilities. South Coast AQMD staff estimates that the evaluation of a Basic Monitoring and Sampling Plan would require between 20 to 50 hours of South Coast AQMD staff review time, based on staff's previous experience of reviewing similar monitoring plans for Rule 1420.2. One hour of filing a Monitoring and Sampling Plan, that is

processing and entering the Monitoring and Sampling Plan into the review system is included in the 20-50 hours. Review of a Basic Monitoring and Sampling Plan involves verifying the facility information and monitoring information provided in the plan. Staff would need to verify the facility information, review the air dispersion modeling output to confirm the predicted maximum ground level concentration, evaluate the siting of the monitor, conduct a site visit to ensure the proper placement of the monitor, and review the proposed methodology for Monitoring and Sampling. Review of an Alternative Monitoring and Sampling Plan involves verifying the facility information provided in the plan. South Coast AQMD staff's completion of the monitoring information is included in the Alternative Monitoring and Sampling Plan preparation fee. Review of a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan or modifications to an approved Monitoring and Sampling Plan is anticipated to involve fewer hours than that of the Basic or Alternative Monitoring and Sampling Plan it is based on.

Currently, Rule 306 lists the fees which would apply to the Monitoring and Sampling Plan. The Plan evaluation fee would be appropriate for South Coast AQMD to recover the reasonable costs associated with review of the Monitoring and Sampling Plans, as described previously. The average amount of time spent reviewing the Monitoring and Sampling Plans would vary based on the complexity of the facility and the corresponding emission sources, as well as the completeness of information submitted. The Monitoring and Sampling Plan would be reviewed by a Meteorological Technician, Principal AQ Chemist, Air Quality Engineer II/Air Quality Specialist, Program Supervisor, Supervising Engineer, Monitoring Operations Manager, and Planning and Rules Manager/Senior Engineering Manager. A senior member of the Special Monitoring group would verify the location of monitoring equipment and the type of equipment to be used. A Principal AQ Chemist would determine the appropriate methods for analysis, an Air Quality Engineer II/Air Quality Specialist would evaluate data collected by the South Coast AQMD and provided by the Metal TAC Monitoring Facility, such as source tests or other emission tests, to determine the location of the monitors by using air dispersion modeling. Additional review would be performed by the Advanced Monitoring Technologies Manager, Senior Engineer, Program Supervisor/Supervising Engineer, and Planning and Rules Manager/Senior Engineering Manager. There are multiple departments involved in the review and approval of a Monitoring and Sampling Plan. Prior to the approval each department must have a first level supervisor review followed by a managerial review prior to the issuance of the Alternative Monitoring and Sampling Plan. There is also time allocated for a senior office assistant to perform administrative support to the evaluation staff. Note that the billing will be based solely on the evaluation hours spent by the evaluating engineer or air quality specialist. To take into account the unbilled hours for review by the supervisor and managers of the various departments, Table 2-2 shows how the hourly staff cost is derived per hour of evaluation at the Air Quality Specialist/Air Quality Engineer II level. This cost is consistent with the current hourly fee of \$161.17 for non-Title V facilities and \$202.06 for Title V facilities.



**Table 2-2  
Hourly Staff Cost for Monitoring and Sampling Plan Evaluation**

	<b>FY 2018-2019 Burdened Rate</b>	<b>Staff Time per Hour of Evaluation</b>	<b>Staff Cost</b>
<b>Air Quality Specialist/Air Quality Engineer II</b>	\$107.20	100%	\$107.20
<b>Monitoring Operations Manager</b>	\$110.90	20%	\$22.18
<b>Advanced Monitoring Operations Manager</b>	\$137.45	5%	\$6.87
<b>Senior Engineer</b>	\$114.64	20%	\$22.93
<b>Supervising Engineer/Program Supervisor</b>	\$123.01	10%	\$12.30
<b>Senior Engineering Manager/Planning and Rules Manager</b>	\$137.45	5%	\$6.87
<b>Senior Office Assistant</b>	68.95	10%	\$6.90
			<b>\$185.25</b>

***Electing to have the Executive Officer conduct Monitoring and Sampling***

Pursuant to subdivision (g), an owner or operator may elect to have Executive Officer conduct Monitoring and Sampling by paying fees. These fees are separate from the toxic emission fees included in the amendment to Rule 301 (2019) for monitoring, inspecting, and auditing a facilities' TAC emissions inventories. The monitoring, inspecting, and auditing of a facility would be the work South Coast AQMD conducts prior to designating a facility a Metal TAC Monitoring Facility. The fees for preparation of an Alternative Monitoring and Sampling Plan and to conduct Monitoring and Sampling is for new work that South Coast AQMD would be conducting on behalf of a Metal TAC Monitoring Facility to satisfy the requirements of PR 1480.

***Preparation of an Alternative Monitoring and Sampling Plan***

Pursuant to paragraph (e)(10), an owner or operator would be required to pay fees for the preparation of Alternative Monitoring and Sampling Plan to meet the requirements of clause (e)(1)(E)(i) and subparagraphs (e)(1)(F) through (e)(1)(I). An owner or operator that elects to have the Executive Officer conduct Monitor and Sampling would submit the information specified in paragraph (e)(2). The Executive Officer would use the information provided by the owner or operator to prepare an Alternative Monitoring and Sampling Plan that would be followed by the Executive Officer when conducting Monitoring and Sampling at the Metal TAC Monitoring Facility.

The fee is \$6,000 as specified in Appendix 1, but may be modified due to changes in the consumer price index, evaluation approach, or other events that may modify the fee. The change in fee would be reflected in a future amendment to Rule 306 – Plan Fees.

The proposed fees have been estimated based on South Coast AQMD staff's experience preparing similar plans in other contexts, including monitoring plans required for other rules or for enforcement investigations. While the preparation of a Monitoring and Sampling Plan can vary depending on its complexity, staff will be following a pre-populated template and adding information identifying the approximate location where Metal TAC monitors and wind monitors would be best sited. The Alternative Monitoring and Sampling Plan would be prepared by a Monitoring Operations Manager. Input would be provided from a Meteorological Technician,

Principal AQ Chemist, and an Air Quality Engineer II/Air Quality Specialist. A Meteorological Technician would verify the location of monitoring equipment and the type of equipment to be used. A Principal AQ Chemist would determine the appropriate methods for analysis, an Air Quality Engineer II/Air Quality Specialist would evaluate data collected by the South Coast AQMD and provided by the Metal TAC Monitoring Facility to determine the location of the monitors by using air dispersion modeling. Additional review would be performed by the Advanced Monitoring Operations Manager, Senior Engineer, Program Supervisor, and a Planning and Rules Manager. There are multiple departments involved in the preparation of an Alternative Monitoring and Sampling Plan. Prior to approval, each department must have a first level supervisor review followed by a managerial review prior to the issuance of the Alternative Monitoring and Sampling Plan. There is also time spent by a senior office assistant to create facility folders, scan reports, and provide administrative support to the evaluation staff. Table 2-3 Alternative Monitoring and Sampling Plan Preparation Cost itemized the hours and the corresponding South Coast AQMD staff needed to prepare an Alternative Monitoring and Sampling Plan.

**Table 2-3  
Monitoring and Sampling Plan Preparation Cost**

	<b>FY 2018-2019 Burdened Rate</b>	<b>Number of hours</b>	<b>Cost</b>
<b>Monitoring Operations Manager</b>	\$110.90	20	\$2,218.00
<b>Meteorology Technician</b>	\$96.41	10	\$964.10
<b>Advanced Monitoring Operations Manager</b>	\$137.45	2	\$274.90
<b>Senior Office Assistant</b>	\$68.95	5	\$344.75
<b>Air Quality Specialist/Air Quality Engineer II</b>	\$107.20	15	\$1,608.00
<b>Senior Engineer</b>	\$114.64	3	\$343.92
<b>Program Supervisor</b>	\$123.01	1.5	\$184.52
<b>Planning and Rules Manager</b>	\$137.45	0.5	\$68.73
			<b>\$6,006.91</b>

### ***Reduced Monitoring and Sampling***

Subparagraph (g)(1)(C) requires the owner or operator that has a current Reduced Alternative or Alternative Monitoring and Sampling Plan to pay the fees for the number of monitors and frequency specified in the most recent plan.

Subparagraph (h)(4)(B) requires the owner or operator to pay fees for the reduced sampling frequency and/or reduced number of monitors as specified in the most recent Reduced Alternative Monitoring and Sampling Plan.

Subparagraph (h)(6)(A) requires the owner or operator to pay fees for a sampling frequency of at least once every three days after certain exceedances of the Benchmark Concentration.

### ***Monitoring and Sampling***

A monthly fee is billed to the owner or operator based on the number of monitors required and the monitoring and sampling frequency as specified in the most recently approved Reduced Alternative or Alternative Monitoring and Sampling Plan. The fee structure would initially be established in Appendix 1 of PR 1480, however, the fees for Metal TAC Monitoring and Sampling

would eventually be incorporated into ~~Rule 301~~ Regulation III and periodically updated to reflect changes to the consumer price index or other situations. Appendix 1 of this rule would only be used for Monitoring and Sampling fees until the fees are incorporated into ~~Rule 301~~ Regulation III. The fees in PR 1480 Table 1 are broken down by the base monitor and additional monitors. The base monitor refers to the minimum of one monitor required by PR 1480. There are two types of monitors – hexavalent chromium or non-hexavalent chromium multi-metal. For Metal TAC Monitoring Facilities requiring only one monitor, the base fee would be the only charge. The fee for the additional monitor would only apply if the Metal TAC Facility was required to have more than one of the same type of monitor. To calculate the fees, the base fee would apply first, then the additional monitor fees would apply to additional monitors of the same type. This is because for hexavalent chromium monitors, staff would need to retrieve the sample within 24 hours of the completion of the sampling period while there is no need to do the same for the multi-metal monitors. If a Metal TAC Monitoring Facility was required to have two monitors – one hexavalent chromium and one non-hexavalent chromium, the base fee that represents this scenario would be used. Table 2-4 shows the PR 1480 Appendix 1, Table 1 – Alternative or Reduced Alternative Monitoring and Sampling Plan Monthly Monitoring Fees that lists the fees that will be assessed to the owner or operator of a Metal TAC Monitoring Facility electing to have the South Coast AQMD conduct Monitoring and Sampling.

**Table 2-4**  
**PR 1480 Table 1 – Alternative or Reduced Alternative Monitoring and Sampling Plan**  
**Monthly Monitoring Fees**

	Number and Type of Monitor	Sampling Frequency			
		1 in 3 Days		1 in 6 Days	
		2 Staff	1 Staff	2 Staff	1 Staff
Base	-1 - Metal TAC Monitor - Hexavalent Chromium	\$10,000	\$6,500	\$5,000	\$3,500
	-1 - Metal TAC Monitor – Non-Hexavalent Chromium	\$5,500	\$3,500	\$3,000	\$2,000
	-1 - Metal TAC Monitor – Hexavalent Chromium & -1 - Metal TAC Monitor – Non-Hexavalent Chromium	\$13,000	\$8,500	\$6,500	\$4,500
Additional	1- Metal TAC Monitor - Hexavalent Chromium	\$4,000	\$3,500	\$2,500	\$2,000
	1- Metal TAC Monitor – Non-Hexavalent Chromium	\$2,500	\$2,000	\$1,500	\$1,000

Monthly billing was chosen over quarterly billing in large part due to stakeholder concerns that smaller facilities would not be able to pay the larger upfront fees associated with quarterly billing. South Coast AQMD would send the owner or operator of a Metal TAC Facility a bill at the beginning of the month with payment due at the end of the month, after the Monitoring and Sampling services have been rendered. A monthly billing frequency was selected as facilities would be able to elect to have the South Coast AQMD conduct Monitoring and Sampling at any time after being designated a Metal TAC Monitoring Facility and there is no requirement for the facility to continue to have the South Coast AQMD conduct Monitoring and Sampling for a specified duration. Furthermore, when certain criteria are met, the Metal TAC Monitoring Facility

would be able to reduce the monitoring frequency and/or the number of monitors or discontinue Metal TAC Monitoring and Sampling. Since the Metal TAC Monitoring Facility would be charged on a pro-rated basis for the services rendered, a monthly billing schedule would make for easier administration.

During the development of PR 1480, rule staff consulted with both laboratory staff and special monitoring/operations to determine the reasonable costs incurred by the South Coast AQMD when conducting monitoring, sampling, and analysis and the necessary cost recovery when a Metal TAC Monitoring Facility chooses the South Coast AQMD to perform such activities. The fees were calculated on an annual basis and then divided up into months to match the proposed monthly collection of fees. The monthly fees were rounded up to the nearest five hundred to account for incidentals which were not adequately captured such as additional mileage charges beyond the estimated distance between Paramount and Diamond Bar, specialized parts needed to install monitoring equipment, copying of data reports, retention of data reports, storage of samples and solutions required in PR 1480, and auditing of samples collected.

In order to determine the appropriate fee, staff itemized the non-labor and labor costs required to conduct monitoring and sampling, which is separate from sample analysis. Non-labor costs for monitoring and sampling included monitors based on the anticipated useful life of the monitor, annual maintenance and battery of the monitor, and vehicle mileage based on a round trip to Paramount from Diamond Bar. There were two different types of Metal TAC monitors that were considered in the preparation of fees, Omni sampler for sampling of hexavalent chromium and a PQ100 sampler for non-hexavalent chromium Metal TACs. The lifetime of the sampler was doubled for a sampling frequency of 1 in 6 days due to the usage being half of a sampling frequency of 1 in 3 days. Special monitoring staff determined the rental estimates for hexavalent chromium monitors, non-hexavalent chromium monitors, and wind monitors by dividing the purchase cost by the anticipated working life time of the equipment based on experience using the equipment. This is a reasonable method to assign costs to facilities because it averages out the initial purchase cost of the monitor by the number of samples and the fees assessed to an owner or operator is based on the number of samples being collected. An additional monitor would be cheaper than the base monitor fee as it would not be necessary to incur an additional trip as the work associated the additional monitor with that trip would be assessed to the base costs.

Labor costs were estimated using the fully burdened staff rates. The fully burdened rate takes into account the staff's hourly salary rate and additional costs such as taxes and benefits. Staff hours were determined based on the necessary tasks to conduct monitoring and maintain the associated equipment. Labor for monitoring and sampling included sample set-up and collection, preventative maintenance, cleaning, flow checks, chain of custody documentation, drive time, semiannual calibration, and annual audit. Additional labor was added for hexavalent chromium monitors as staff would need to retrieve the sample within 24 hours of the completion of the sampling period, hence creating the need for an extra trip to the facility, while there is no need to do the same for the multi-metal monitors where the sample could be retrieved on the next sample day.

South Coast AQMD typically deploys two field staff to perform field work due to potential hazards encountered in the field. During the review of an Alternative Monitoring and Sampling or Reduced Alternative Monitoring and Sampling Plan, the Executive Officer will evaluate and determine if it is appropriate to have only one field staff to conduct Monitoring and Sampling at the Metal TAC Monitoring Facility. A Metal TAC Monitoring Facility would be notified of the Executive

Officer's decision at the time of approval of the Alternative or Reduced Alternative Monitoring and Sampling Plan. The Executive Officer's decision will be based on the following factors:

1. Height of the monitor
2. Use of a ladder
3. Sampling schedule
4. Access to the facility
5. Safety concerns

### ***Sample Analysis***

Laboratory staff determined the cost to prepare filters and analyze the Metal TAC by itemizing both labor and non-labor components. Non-labor costs for the analysis of hexavalent chromium include filter, petri dish, consumable reagents, instruments, and an instrument service plan. Labor for the analysis of hexavalent chromium includes prep-light inspection, filter impregnation, sample extraction, sample analysis, and multiple levels of quality assurance and quality check. Non-labor for the analysis of a multi-metal samples includes inductively coupled plasma mass spectrometry supplies, reagents, annual preventative maintenance contracts for analysis equipment, and instruments. Laboratory staff determined the fees associated with the instruments by dividing the total cost of the instruments by the number of samples that would be performed during the anticipated lifetime of the instrument. This is a reasonable method to assign costs to facilities because it averages out the initial purchase cost of the instruments by the number of samples and the fees assessed to an owner or operator is based on the number of samples being analyzed. Labor for the analysis of a multi-metal sample includes extraction preparation, instrument, analysis, and multiple levels of quality assurance and quality control. The analysis and preparation of filters for a hexavalent chromium sample is more expensive due to the increase in time needed to prepare and analyze per sample compared to those for a non-hexavalent chromium Metal TAC.

If the Alternative or Reduced Alternative Monitoring and Sampling Plan requires collection of wind speed and direction, an additional charge of \$500 per month would be added. The fee is based on annual work including wind system acquisition, installation cost, wind system calibration, mileage, data review, and an annual independent audit of wind system. An itemization of the non-labor costs and labor costs are shown in Table 2-5 Breakdown of Wind Monitor Costs.

**Table 2-5  
Breakdown of Wind Monitor Costs**

Wind Monitor and Non Labor Costs	Cost	Anticipated Lifetime			Non-Labor Annual Fee
Wind System Acquisition	\$6,000	6 years			\$ 1,000.00
Vehicle Usage	Miles	Mileage Rate	Number of Occurrences		
Standard Mileage-Install	60	0.58	Once Every 6 Years		\$ 5.80
Standard Mileage-Calibration	60	0.58	Twice a Year		\$ 69.60
Equipment		Occurrence			
Annual modem subscription	\$252.00	Once a Year			\$ 252.00
Annual flange bearings and battery replacement	\$ 40.00	Once a Year			\$ 40.00
Vertical bearings replaced every 3	\$170.10	Every 3 Years			\$ 56.70
				<i>Non-Labor Subtotal</i>	<i>\$ 1,424.10</i>
Labor	Hours	Rate	Position	Number of Occurrences	Labor Annual Fee
Wind System Installation	4	96.41	Met Tech	Once Every 6 Years	\$ 64.27
Wind System Installation	4	91.81	AQIS II	Once Every 6 Years	\$ 61.21
Wind System Calibration	4	96.41	Met Tech	Twice a Year	\$ 771.28
Wind System Calibration	4	91.81	AQIS II	Twice a Year	\$ 734.48
Annual Data Review	20	96.41	Met Tech	Once a Year	\$ 1,928.20
Annual independent audit of wind system by third party					\$ 1,000.00
				<i>Labor Subtotal</i>	<i>\$ 4,559.44</i>
				Annual Total	\$ 5,983.54
				Monthly Total	\$ 498.63
				<b>Appendix I Fee</b>	<b>\$ 500.00</b>

Table 2-6 Breakdown of Monitoring and Sampling Fees provides a breakdown of the fees for Monitoring and Sampling by the non-labor costs and labor costs needed to conduct sampling/monitoring and the non-labor costs and labor costs needed to perform sample analysis. The items that went into both the non-labor costs and labor costs are described earlier. An itemized table of how each PR 1480 Appendix 1 fee was estimated can be found in Appendix B to this Staff Report. The tables vary based on whether it is a base or additional monitor, the type of monitor, frequency, and number of staff needed.

**Table 2-6  
Breakdown of Monitoring and Sampling Fees**

Base/ Additional	No. and Type of Monitor	Frequency	No. of Staff	Monitoring and Sampling		Sample Analysis		Annual Total	Monthly Total	Appendix 1 Fee	Appendix B Reference <sup>1</sup>
				Non- Labor	Labor	Non- Labor	Labor				
Base	1 Hex chrome	1 in 3 days	2	\$10,306.40	\$83,938.30	\$3,645.60	\$20,412.00	\$118,302.30	\$9,858.53	\$10,000.00	Table B-1
Base	1 Hex chrome	1 in 3 days	1	\$10,306.40	\$42,250.30	\$3,645.60	\$20,412.00	\$76,614.30	\$6,384.53	\$6,500.00	Table B-2
Additional	1 Hex chrome	1 in 3 days	2	\$1,850.00	\$21,406.30	\$3,645.60	\$20,412.00	\$47,313.90	\$3,942.83	\$4,000.00	Table B-3
Additional	1 Hex chrome	1 in 3 days	1	\$1,954.40	\$10,984.30	\$3,645.60	\$20,412.00	\$36,996.30	\$3,083.03	\$3,500.00	Table B-4
Base	1 Hex chrome	1 in 6 days	2	\$5,415.40	\$42,250.30	\$1,822.80	\$10,206.00	\$59,694.50	\$4,974.54	\$5,000.00	Table B-5
Base	1 Hex chrome	1 in 6 days	1	\$5,415.40	\$21,406.30	\$1,822.80	\$10,206.00	\$38,850.50	\$3,237.54	\$3,500.00	Table B-6
Additional	1 Hex chrome	1 in 6 days	2	\$1,135.00	\$10,984.30	\$1,822.80	\$10,206.00	\$24,148.10	\$2,012.34	\$2,500.00	Table B-7
Additional	1 Hex chrome	1 in 6 days	1	\$1,135.00	\$5,773.30	\$1,822.80	\$10,206.00	\$18,937.10	\$1,578.09	\$2,000.00	Table B-8
Base	1 Metal	1 in 3 days	2	\$6,604.90	\$42,250.30	\$3,369.24	\$8,711.81	\$60,936.25	\$5,078.02	\$5,500.00	Table B-9
Base	1 Metal	1 in 3 days	1	\$6,604.90	\$21,406.30	\$3,369.24	\$8,711.81	\$40,092.25	\$3,341.02	\$3,500.00	Table B-10
Additional	1 Metal	1 in 3 days	2	\$2,324.50	\$10,984.30	\$3,369.24	\$8,711.81	\$25,389.85	\$2,115.82	\$2,500.00	Table B-11
Additional	1 Metal	1 in 3 days	1	\$2,324.50	\$5,773.30	\$3,369.24	\$8,711.81	\$20,178.85	\$1,681.57	\$2,000.00	Table B-12
Base	1 Metal	1 in 6 days	2	\$3,480.65	\$21,406.30	\$1,684.62	\$4,355.90	\$30,927.47	\$2,577.29	\$3,000.00	Table B-13
Base	1 Metal	1 in 6 days	1	\$3,480.65	\$10,984.30	\$1,684.62	\$4,355.90	\$20,505.47	\$1,708.79	\$2,000.00	Table B-14
Additional	1 Metal	1 in 6 days	2	\$1,288.25	\$5,773.30	\$1,684.62	\$4,355.90	\$13,102.07	\$1,091.84	\$1,500.00	Table B-15
Additional	1 Metal	1 in 6 days	1	\$1,288.25	\$3,167.80	\$1,684.62	\$4,355.90	\$10,496.57	\$874.71	\$1,000.00	Table B-16
Base	Combination	1 in 3 days	2	\$12,630.90	\$105,344.60	\$7,014.84	\$29,123.81	\$154,114.15	\$12,842.85	\$13,000.00	Table B-17
Base	Combination	1 in 3 days	1	\$12,630.90	\$53,234.60	\$7,014.84	\$29,123.81	\$102,004.15	\$8,500.35	\$8,500.00	Table B-18
Base	Combination	1 in 6 days	2	\$6,703.65	\$53,234.60	\$3,507.42	\$14,561.90	\$78,007.57	\$6,500.63	\$6,500.00	Table B-19
Base	Combination	1 in 6 days	1	\$6,703.65	\$27,179.60	\$3,507.42	\$14,561.90	\$51,952.57	\$4,329.38	\$4,500.00	Table B-20

<sup>1</sup>An itemized table of how each Appendix 1 Fee was developed is located in Appendix B for the listed table in the column.

For example, a facility that elects to have the South Coast AQMD conduct Monitoring and Sampling and is required to have one hexavalent chromium monitor with two staff members at a sampling frequency of once every three days would be assessed the following fees:

- \$6,000 – Alternative Monitoring and Sampling Plan Preparation Fee (described above)
- \$10,000 – Monthly Monitoring and Sampling Fee (shown in Table 2-4)

### **Reduced Monitoring and Sampling Frequency and/or Monitors – Subdivision (h)**

#### ***Reduced Basic or Reduced Alternative Monitoring and Sampling Plan (h)(1) and (h)(4)***

An owner or operator with an approved Basic or Alternative Monitoring and Sampling Plan is eligible to request a reduction in the Monitoring and Sampling frequency, from the initial, at least once every three days, to a reduced, at least once every six days, schedule and/or a reduction in the number of monitors, if the criteria in subparagraphs (e)(5)(A) through (e)(5)(D) are met. The owner or operator would submit a draft Reduced Monitoring and Sampling Plan and implement the Reduced Monitoring and Sampling Plan after the owner or operator gets approval from the Executive Officer. In response to stakeholder concerns, a Metal TAC Monitoring Facility that was required to revert back to a once every three day sampling frequency would be eligible to reduce the monitoring frequency one more time. However, if the Metal TAC Monitoring Facility was required to revert back to a once every three day sampling schedule, it would no longer be eligible to reduce the monitoring frequency.

#### ***Exceedance of Benchmark Concentration (h)(2), (h)(3), (h)(5), and (h)(6)***

A Benchmark Concentration is the Metal TAC concentration at a Metal TAC Monitor that would represent a Reduced Risk Level at a Sensitive Receptor calculated using the methodology in Appendix 2 in the rule and is provided to the facility during designation as a Metal TAC Monitoring Facility. For facilities conducting their own monitoring and sampling, if the concentration of three consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern, the owner or operator must provide notice to the Executive Officer with the date of the exceedances, the monitor, the concentration level of the Metal TAC, and an explanation, if any for the exceedance. For example, if a Metal TAC Monitoring Facility has two Metals of Concern (e.g. Metal TAC 1 and Metal TAC 2) identified by the Executive Officer in subparagraph (d)(8)(C), and there are three consecutive results greater than four times the Benchmark Concentration specified in subparagraph (d)(8)(F) for either Metal TAC 1 or Metal TAC 2, the owner or operator must notify the Executive Officer. However, if the three consecutive exceedances of four times the Benchmark Concentration are for Metal TAC 1, Metal TAC 2, and Metal TAC 1, then the owner or operator does not need to notify the Executive Officer. This is because the three consecutive exceedances of four times the Benchmark Concentration are not all for the same Metal TAC. The explanation can include any information to substantiate that the exceedances were not attributed to the facility. For facilities electing to have the South Coast AQMD conduct monitoring and sampling, the Executive Officer would notify the owner or operator of the exceedances and the owner or operator can provide information to the Executive Officer with any information to substantiate that the exceedances were not attributed to the facility.

If the Executive Officer finds that the emissions are attributed to the facility, the facility must immediately return to an increased Monitoring and Sampling frequency of once every three days



and/or increase the number of monitors to what was previously approved. The Executive Officer will notify the facility in writing and will take the facility's Reduced Monitoring and Sampling Plan, change the frequency and the number of monitors to revert back to what was in the previously approved Basic or Alternative Monitoring and Sampling Plan and provide the owner or operator with an approved Basic or Alternative Monitoring and Sampling Plan. The owner or operator would not be allowed to request a reduced monitoring and sampling frequency and/or monitors again. Although a facility may have reduced the number monitors when moving from a Basic or Alternative Monitoring and Sampling Plan to a Reduced Monitoring and Sampling Plan, all monitors should remain onsite or be available to be installed immediately, in the event that a facility is required to add monitors when reverting to a Basic or Alternative Monitoring and Sampling Plan.

### **Monitoring, Recordkeeping, and Reporting Requirements – Subdivision (i)**

Upon starting Monitoring and Sampling, a facility must electronically submit a report to the Executive Officer by the 21st of each month. Paragraph (i)(1) specifies the information that must be reported. Records specified in paragraph (i)(2) must be maintained for a minimum of three years by the owner or operator of a facility and will be made available to the Executive Officer upon request. Additionally, if the concentration of three consecutive Valid Samples each exceeded the Benchmark Concentration by four times, for any individual Metal of Concern, the owner or operator of a Metal TAC Monitoring Facility shall notify the Executive Officer by calling 1-800-CUT-SMOG within 24 hours of receiving the third Valid Sample result and provide the information specified in paragraphs (h)(2)(A) and (h)(2)(B). An owner or operator of a Metal TAC Monitoring Facility can provide information such as why the exceedance is not attributed to the facility or if there were certain activities occurring at the facility in the follow up report within three calendar days of the initial notification to the Executive Officer.

The owner or operator of a Metal TAC Monitoring Facility shall notify the Executive Officer by calling 1-800-CUT-SMOG and providing the information specified in (i)(4) within two hours of knowing that a Valid Sample was not or will not be collected from any approved monitor. Within seven calendar days of the call to the Executive Officer, the owner or operator must provide written documentation of the repair or replacement of the monitor that demonstrates that the incident was beyond the control of the facility and was not due to neglect or operator error. The Executive Officer will determine whether or not the incident would count as missed Valid Sample(s). Scheduled events, such as announced power outages, that would affect the ability of the owner or operator, or its third party contractor, to collect a Valid Sample are not considered beyond the control of the owner or operator. In the event the Executive Officer is conducting the Monitoring and Sampling for the Metal TAC Monitoring Facility under an Alternative or Reduced Alternative Monitoring and Sampling Plan, the owner or operator is required to notify the Executive Officer of such scheduled events.

### **Discontinuation of Monitoring and Sampling – Subdivision (j)**

Once the owner or operator of a Metal TAC Monitoring Facility receives a written notification from the Executive Officer that the approved Risk Reduction Plan has been fully implemented or if the approved Health Risk Assessment indicates that a Risk Reduction Plan is not required, the facility shall no longer be designated a Metal TAC Monitoring Facility. The owner or operator of

the facility would no longer be subject to paragraph (d)(9) and may discontinue Monitoring and Sampling.

It is possible that a facility that is designated under Rule 1402 as Potentially High Risk Level Facility may not be required to prepare and implement a Risk Reduction Plan if the approved Health Risk Assessment has a cancer risk of less than 25 in one million and a non-cancer chronic hazard index of less than 3.0.

Housekeeping provisions which are needed to minimize fugitive emissions should be incorporated into any required Risk Reduction Plan to ensure that these emission reduction measures are permanent and enforceable. Full implementation of the Risk Reduction Plan represents completion of permanent pollution controls and measures to ensure the facility will maintain health risk levels below the Rule 1402 Action Risk Level.

### **Exemptions – Subdivision (k)**

PR 1480 includes two exemptions to account for those sources that are already regulated under rules that have ambient air monitoring requirements for lead or hexavalent chromium. While lead emissions addressed by Rule 1420 – Emissions Standard for Lead, Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities, or Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities are exempt, these facilities would still be subject to PR 1480 for Metal TAC(s) other than lead. Additionally, hexavalent chromium emissions monitored as required by Rule 1156 are exempt, however these facilities would still be subject to PR 1480 for other Metal TAC(s).

PR 1480 includes an exemption for facilities that have annual gross receipts of three million dollars (\$3,000,000) or less, averaged over the previous three years, and 25 or fewer employees. During the development of PR 1480, stakeholders were concerned that the costs of Monitoring and Sampling would place a financial burden on smaller facilities that would not have the ability to absorb those costs. The criteria was based in stakeholder input on the number of employees and gross receipts which would make the requirements of PR 1480 too burdensome. Facilities meeting the criteria would be exempt from PR 1480 except for paragraphs (d)(1) and (d)(2). The Executive Officer may issue an Initial Notice and Information Requests, but the owner or operator would not receive a Notice of Findings and the facility would not be designated as Metal TAC Monitoring Facility under PR 1480. No later than 60 days after receiving the Initial Notice, the owner or operator would be required to submit documentation to show that the facility meets both the criteria. For gross receipts, the owner or operator would need to provide tax returns for the previous three years or other documentation that the Executive Officer can use to verify the annual gross receipts. For the number of employees, the owner or operator would need to provide the Internal Revenue Service's Form 941, which lists the number of employees or any other documentation that the Executive Officer can use to verify the number of employees. For purposes of PR 1480, employees includes but is not limited to full-time, part-time, temporary, seasonal, etc. In addition to the information provided, the Executive Officer may also rely on South Coast AQMD inspector reports to verify the number of employees.

### **South Coast AQMD Monitoring and Sampling Fees – Appendix 1**

Appendix 1 lists the fees for the Executive Officer to prepare the Alternative Monitoring and Sampling Plan and conduct Monitoring and Sampling under an Alternative Monitoring and

Sampling Plan. The fee for the preparation of the Alternative Monitoring and Sampling Plan in Appendix 1 will be superseded by Rule 306 – Plan Fees and the fee for conducting Monitoring and Sampling will be superseded by ~~Rule 304~~Regulation III – Permitting and Associated Fees when the rules are amended to include these relevant fees.

### ***Principle***

This paragraph outlines that the owner or operator of a Metal TAC Monitoring Facility would pay the Executive Officer on a monthly basis to conduct Monitoring and Sampling.

### ***Preparation of a Monitoring and Sampling Plan***

Under PR 1480, facilities can submit a Basic Monitoring and Sampling Plan and use third party contractors to conduct the ambient air monitoring and sampling, or they can elect to have the Executive Officer prepare an Alternative Monitoring and Sampling Plan and conduct the ambient air monitoring and sampling. The owner or operator who elects to have the Executive Officer conduct the Monitoring and Sampling would be responsible for the fees associated with the plan preparation of subparagraphs (e)(1)(E) through (e)(1)(I) of an Alternative Monitoring and Sampling Plan. If a facility prepares a Basic Monitoring and Sampling Plan, it must be submitted to the Executive Officer for evaluation and be subjected to a plan review fee per Rule 306.

### ***Metal TAC Monitoring and Sampling Fee***

PR 1480 Table 1 – Alternative or Reduced Alternative Monitoring and Sampling Plan Monthly Monitoring Fees lists the fees that will be assessed to the facility.

If the Executive Officer contracts with a third-party contractor to conduct Monitoring and Sampling, the fees would be specified by the third-party contractor. The fees charged by the Executive Officer would not exceed the fees specified in ~~Rule 306, Rule 304~~Regulation III, or Appendix 1, if applicable.

The number, type, and location of the monitors is initially specified in the designation notice and maintained in the most recent Alternative Monitoring and Sampling Plan. The number of monitors would impact the monthly fees. The base number of monitors depends on the Metals of Concern identified in the designation notice. Additional monitors may be needed to measure Metal TAC emissions coming from sources throughout the facility. The cost for each additional monitor beyond the base is specified in Table 1. Additional monitors would increase the workload at the facility resulting in increased fees. The Executive Officer may require modification to the number, type, and location of the monitors needed to conduct Monitoring and Sampling based on new information from the date the facility was designated a Metal TAC Monitoring Facility. The Executive Officer may require the owner or operator of a Metal TAC Monitoring Facility to submit a draft Alternative Monitoring and Sampling Plan with the necessary modifications. The need for the modification would be explained in the notice from the Executive Officer.

### ***Payment Deadline***

The fees for Monitoring and Sampling shall be billed on a monthly basis with payments being due on or before the end of the month for which Monitoring and Sampling is required. This bill would include any other unpaid operating and maintenance fees. If the operating and maintenance fee is not paid in full within 60 calendar days of its due date, a 10 percent surcharge shall be imposed. This surcharge is needed to recover the additional staff costs needed to collect on the outstanding

amounts owed by owner or operators of facilities. In addition, non-payment of invoices would be a violation of this rule or ~~Rule 301~~Regulation III, once the fees are included.

### ***Pro-Rated Payments***

If Monitoring and Sampling will no longer be required to be conducted by the Executive Officer or if the sampling frequency is modified in the middle of a month, an owner or operator shall pay fees at a prorated amount.

If the number and/or type of monitors is modified in the middle of a month, an owner or operator shall pay fees at a prorated amount.

### **Methodology for Calculating Benchmark Concentration – Appendix 2**

The Benchmark Concentration is provided at the time a facility is designated a Metal TAC Monitoring Facility and is used as criteria for approval of a Reduced Basic or Reduced Alternative Monitoring Sampling Plan pursuant to subparagraph (e)(5)(A), basis for a Metal TAC Monitoring Facility on a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan to revert back to a Basic or Alternative Monitoring and Sampling Plan pursuant to paragraphs (h)(3) and (h)(6), and as a notification level pursuant to paragraphs (h)(2), (h)(5), and (i)(3). The Benchmark Concentration is specific for each facility and each Metal of Concern and would be specified in the designation letter pursuant to subparagraph (d)(8)(F).

In order to designate a Metal TAC Monitoring Facility, the South Coast AQMD staff would have to use air dispersion modeling to demonstrate that the facility's Metal TAC emissions are causing the Significant Risk Level to be exceeded at a Sensitive Receptor. The results from monitoring and sampling would be used to compare to the air dispersion model predicted concentrations. If the model predicted concentrations are higher than the monitoring and sampling results, then there is confidence that no additional sources of Metal TAC emissions at the facility have been overlooked.

The Benchmark Concentration is the higher of the Ratio Concentration and the Estimated Risk Concentration. The Ratio Concentration is based on calculating the reductions needed at the Sensitive Receptor to get below the Reduced Risk Level and applying that ratio to the highest 30 consecutive calendar day average concentration at the monitor.

For example, a facility's Metal TAC emissions were modeled and found to cause a cancer risk of 700 in one million at a Sensitive Receptor and the model predicted concentration at the monitor was 4.27 ng/m<sup>3</sup>. The facility's Ratio is the maximum cancer risk divided by the Reduced Risk Level or 450 per million / 25 per million = 18.

Table 2-7 shows the ambient monitoring data from the monitor at the facility's fenceline.

Based on Table 2-7, the highest 30 consecutive calendar day average concentration is 3.93 ng/m<sup>3</sup> (bold numbers). Therefore the facility's Ratio Concentration is calculated as the highest 30 consecutive calendar day average concentration divided by the Ratio or 3.93 ng/m<sup>3</sup> / 18 = 0.22 ng/m<sup>3</sup>.

**Table 2-7**  
**Example Ambient Monitoring Data**

Date	Concentration	Date	Concentration	Date	Concentration	Date	Concentration
5/1/19	2.0 ng/m <sup>3</sup>	<b>5/22/19</b>	<b>5.0 ng/m<sup>3</sup></b>	<b>6/12/19</b>	<b>6.2 ng/m<sup>3</sup></b>	7/3/19	1.5 ng/m <sup>3</sup>
5/4/19	1.3 ng/m <sup>3</sup>	<b>5/25/19</b>	<b>3.5 ng/m<sup>3</sup></b>	<b>6/15/19</b>	<b>3.0 ng/m<sup>3</sup></b>	7/6/19	1.0 ng/m <sup>3</sup>
5/7/19	1.7 ng/m <sup>3</sup>	<b>5/28/19</b>	<b>6.0 ng/m<sup>3</sup></b>	<b>6/18/19</b>	<b>3.5 ng/m<sup>3</sup></b>	7/9/19	2.0 ng/m <sup>3</sup>
5/10/19	1.2 ng/m <sup>3</sup>	<b>5/31/19</b>	<b>3.0 ng/m<sup>3</sup></b>	<b>6/21/19</b>	<b>3.0 ng/m<sup>3</sup></b>	7/12/19	0.1 ng/m <sup>3</sup>
5/13/19	1.5 ng/m <sup>3</sup>	<b>6/3/19</b>	<b>2.0 ng/m<sup>3</sup></b>	6/24/19	2.0 ng/m <sup>3</sup>	7/15/19	4.0 ng/m <sup>3</sup>
5/16/19	1.3 ng/m <sup>3</sup>	<b>6/6/19</b>	<b>3.0 ng/m<sup>3</sup></b>	6/27/19	2.1 ng/m <sup>3</sup>	7/18/19	7.0 ng/m <sup>3</sup>
5/19/19	1.6 ng/m <sup>3</sup>	<b>6/9/19</b>	<b>5.0 ng/m<sup>3</sup></b>	6/30/19	0.9 ng/m <sup>3</sup>	7/21/19	0.7 ng/m <sup>3</sup>

The Estimated Risk Concentration is the concentration which represents the Reduced Risk Level plus the Basin-wide background concentration from the most recent Multiple Air Toxics Study (MATES)<sup>1</sup>.

In this example, if the Metal TAC was hexavalent chromium, which has a concentration of 0.045 ng/m<sup>3</sup> for the Reduced Risk Level and a Basin-wide background concentration of 0.06 ng/m<sup>3</sup>, then the Estimated Risk Concentration would be 0.105 ng/m<sup>3</sup>. Since the Ratio Concentration of 0.22 ng/m<sup>3</sup> is higher than the Estimated Risk Concentration, the Benchmark Concentration would be 0.22 ng/m<sup>3</sup>.

However, if the Metal TAC was arsenic, which has a concentration of 0.32 ng/m<sup>3</sup> for the Reduced Risk Level and the MATES Basin-wide average concentration is 0.55 ng/m<sup>3</sup>, then the Estimated Ratio Concentration would be 0.87 ng/m<sup>3</sup>. In this case, the Benchmark Concentration would be 0.87 ng/m<sup>3</sup>.

In instances where there are multiple facilities that have the same emissions of Metals of Concern in proximity to the Metal TAC Monitoring Facility and those emissions might be captured by the downwind monitor, the Executive Officer might use or approve the use of an alternative methodology to calculate the Benchmark Concentration. This alternative methodology would be used in situations where:

- A. There is one or more facilities that are within 1,000 feet of the owner or operator's Metal TAC Monitoring Facility. The distance is measured from the fenceline of the Metal TAC Monitoring Facility to the fenceline of the other facility;
- B. Each facility referenced in A, above, has been issued an Initial Notice pursuant to paragraph (d)(1); and
- C. The Executive Officer has emissions data that the facility or facilities referenced in A, above, has equipment or sources within the facility with the same Metals of Concern as those emitted by the Metal TAC Monitoring Facility.

The alternative methodology would establish a Benchmark Concentration that is representative of the Reduced Risk Level at a sensitive receptor for each Metal of Concern, taking into account the emissions from other facilities which are in close proximity. The use of the alternative methodology would be based on the unique characteristics and parameters for each Metal TAC Monitoring Facility and developed on a case by case basis.

## **CHAPTER 3: IMPACT ASSESSMENT**

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AFFECTED SOURCES

EMISSIONS IMPACT

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SOCIOECONOMIC IMPACT ASSESSMENT

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION  
40727

Requirements to Make Findings

Necessity

Authority

Clarity

Consistency

Non-Duplication

Reference

COMPARATIVE ANALYSIS

## AFFECTED SOURCES

PR 1480 applies to facilities that are sources of Metal TAC(s) after being notified by the Executive Officer through an Initial Notice. This includes facilities that conduct practices such as metal working including but not limited to metal heat treating, forging, melting, cutting, welding, grinding, polishing, and finishing. These facilities can potentially include cement operations and other operations that use metals in the process. Facilities that may have been previously exempt from permitting under Rule 219 – Equipment Not Requiring a Written Permit Pursuant to Regulation II are potentially subject to the requirements of PR 1480 if it is designated a Metal TAC Monitoring Facility.

## EMISSIONS IMPACT

PR 1480 does not directly reduce emissions. A facility designated under PR 1480 will be designated as a Potentially High Risk Level Facility under Rule 1402 which will require implementation of an Early Action Risk Reduction Plan and a Risk Reduction Plan. If Metal TAC emissions are being released prior to implementing a Risk Reduction Plan, the South Coast AQMD can seek an order for abatement from the Hearing Board or use other legal tools to address elevated Metal TAC emissions.

## CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the California Environmental Quality Act (CEQA) and South Coast AQMD Rule 110, the South Coast AQMD, as lead agency for the proposed project, has reviewed PR 1480 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. South Coast AQMD staff has determined that because PR 1480 does not contain any project elements requiring physical modifications that would cause an adverse effect on the environment, it can be seen with certainty that there is no possibility that the proposed project 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) – Common Sense Exemption. PR 1480 is crafted to require facilities designated as Potentially Significant Facilities to conduct metal toxic air contaminant monitoring. Therefore, the proposed project is considered to be categorically exempt because it is designed to protect or enhance the environment pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. Additionally, as provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is exempt because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. CEQA Guidelines Section 15306 exempts such a project for information-gathering purposes, or as part of a study leading to future action which the agency has not yet taken. Further, South Coast AQMD staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. A Notice of Exemption ~~will be~~ has been prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption and is included as Attachment H to the Board Letter. 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**

### **Affected Facilities and Industries**

PR 1480 is a monitoring and sampling rule for facilities with Metal Toxic Air Contaminant (TAC) emissions that meet specific criteria. PR 1480 establishes the process to designate facilities with Metal TAC emissions. If a facility meets the specified criteria in PR 1480, the facility will be designated as a Metal TAC Monitoring Facility and will be required to conduct ambient monitoring and sampling. The designation process includes an Initial Notice to the facility that the South Coast AQMD is conducting ambient monitoring and sampling. The Executive Officer may then issue a request for information, if additional information is needed to determine if the facility meets the criteria for designation as a Metal TAC Monitoring Facility. Through the designation process, the owner or operator has the opportunity to provide additional information to the Executive Officer. The Executive Officer will consider the information provided by the owner or operator, in addition to information collected through South Coast AQMD's own investigation and will evaluate if the criteria specified in paragraph (d)(7) to designate the facility as a Metal TAC Monitoring Facility is met. If the facility meets the designation criteria, which includes that the facility has been designated as a Potentially High Risk Level Facility under Rule 1402 and the Metal TAC emissions from the facility are causing a health risk to a sensitive receptor that is above the Significant Risk Level, the facility would be designated as a Metal TAC Monitoring Facility and will be required to submit a Monitoring and Sampling Plan and conduct Monitoring and Sampling.

PR 1480 only applies to facilities that are emitting Metal TACs. There are a wide range of industries that use Metal TACs such as cadmium, nickel, arsenic, and hexavalent chromium. Table 3-1 presents the facilities and industries in the four-county region with various types of metal operations. According to Emsi (Economic Modeling International), nearly 1,350 facilities operate in industry categories that conduct activities with various Metal TACs. Only those facilities that meet the designation criteria specified in PR 1480 would be subject to ambient monitoring and sampling. Based on monitoring and sampling efforts that the South Coast AQMD has conducted since the end of 2016, there are only three facilities that have been designated as a Potentially Significant Level Facility under Rule 1402, which is one of the criteria to designate a facility as a Metal TAC Monitoring Facility under PR 1480.



**Table 3-1  
Industry Categories Potentially Subject to PR 1480, by County**

<b>NAICS</b>	<b>Los Angeles</b>	<b>Orange</b>	<b>Riverside</b>	<b>San Bernardino</b>	<b>Total</b>
332813 (Electroplating, Plating, Polishing, Anodizing, and Coloring)	258	75	12	10	<b>355</b>
327910 (Abrasive Products Manufacturing)	18	6	1	4	<b>29</b>
3315 (Foundries)	86	16	7	18	<b>127</b>
332111 (Iron and Steel Forging)	19	2	2	3	<b>26</b>
332313 (Plate Work Manufacturing)	42	13	11	12	<b>78</b>
332811 (Metal Heat Treating)	39	9	1	3	<b>52</b>
327310 (Cement and Concrete Product Manufacturing)	6	2	1	4	<b>13</b>
327320 (Ready-Mix Concrete Manufacturing)	86	21	27	37	<b>171</b>
423930 (Recyclable Material Merchant Wholesalers)	315	69	32	58	<b>474</b>
316110 (Leather and Hide Tanning and Finishing)	12	1	1	3	<b>17</b>
<b>Grand Total</b>					<b>1,342</b>

During the designation process the Executive Officer may need additional emissions data such as source tests, screening tests, or sample analyses. PR 1480 allows the owner or operator to either conduct the emissions testing and/or sample analyses, or provide the Executive Officer access to the facility to conduct such activities. Since it is optional for the operator to conduct emissions testing and sample analyses during the investigative portion of the designation process, it is assumed that the operator will rely on the South Coast AQMD to conduct these tests and analyses. In addition to collecting emissions data, under paragraph (d)(5), PR 1480 requires the owner or operator to provide process information and other information such as alloys used and operational data.

The designation process is based on modeled health risks to the nearest sensitive receptor that exceeds the Significant Risk Level which is a cancer risk of 100 in one million, or a total Individual Substance ~~Chronic~~-Chronic Hazard Index of 5.0. If a facility is designated as a Metal TAC Monitoring Facility, the owner or operator is required to submit a monitoring and sampling plan, and conduct Monitoring and Sampling. ~~Metal TAC~~ Monitoring and Sampling would be required until a Rule 1402 Risk Reduction Plan is implemented, or if a Risk Reduction Plan is not required, until the Health Risk Assessment is approved. The timeframe between the designation of a facility as a Metal TAC Monitoring Facility to when a 1402 Risk Reduction Plan is implemented (or a Health Risk Assessment is approved, if a Risk Reduction Plan was not required) is the period that

the majority of costs impacts will occur for the facility, and is the primary focus of the implementation cost associated with PR 1480.

### Compliance Cost Assumptions

To estimate the number of facilities that could potentially receive a PR 1480 Initial Notice, staff used historical data where the South Coast AQMD has identified an issue concerning Metal TAC emissions and the facility had been designated as a Potentially Significant Risk Level Facility under Rule 1402, which is one of the criteria to designate a Metal TAC Monitoring Facility. Since 2016, there have been three facilities that were designated as Potentially High Risk Level Facilities under Rule 1402 and each of these facilities were designated based on their Metal TAC emissions, and based on a residential sensitive receptor had an estimated health risk greater than 100 in one million. For the purpose of cost impact analysis, a simulation of costs for these three facilities is used. Since these three facilities were designated as Potentially High Risk Level facilities over a nine month time period (December 2016 to September 2017), it can be assumed that three facilities per year could be designated under PR 1480. This is a conservative assumption, since there have not been any facilities designated as Potentially High Risk Level Facilities since 2017, despite the community monitoring efforts in Compton and Rancho Dominguez.

The analysis is based on South Coast AQMD's ambient air monitoring data collected near these facilities to create realistic scenarios when each facility would have been designated and the required monitoring frequencies to determine costs for the period of the simulation.<sup>7</sup>

The costs include the development of an approved monitoring and sampling plan (one-time cost), and the ongoing collection of metal TAC samples on the required schedule prescribed in the approved Monitoring and Sampling Plan (PR 1480 subdivision (e)). Under PR 1480, an owner or operator of a Metal TAC Monitoring Facility is required to either conduct ambient monitoring and sampling using a contractor of the owner or operator's choice (Basic Monitoring and Sampling Plan) *or* by paying a fee for the South Coast AQMD to conduct Monitoring and Sampling (Alternative Monitoring and Sampling Plan). The fees under PR 1480 includes the cost of installing, operating, and maintaining air monitoring instrumentation (including consumables like filter media, paperwork, and sample handling/transport materials), staffing and training, as well as ongoing laboratory analysis, data quality control and reporting pursuant to PR 1480 requirements in subdivision (i).

Staff contacted environmental consulting companies and private laboratories to try to perform a comparison of the cost of services when using South Coast AQMD resources, however, most companies were reluctant to provide cost data. While some of the contractors contacted conduct source-specific sampling using the same methodologies as the South Coast AQMD, none of the companies contacted by staff had comparable pricing for a monitoring regime of the scale and duration that would be required by PR 1480. It is expected that many companies would extend their services to a competitive service comparable or even lower than that estimated by the South Coast AQMD's monitoring and analysis services available to PR 1480 designated facilities. For the purposes of this cost estimate, the costs provided are specific to South Coast AQMD fees for

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<sup>7</sup> PR 1480 Monitoring requirements specify a 1 in 3 day sample frequency, unless the facility is eligible for the reduced monitoring and sampling frequency (subdivision (h)) of 1 in 6 days. This analysis accounted for the changes in sampling frequency based on eligible reduced frequency or reverting to 1 in 3 because three consecutive samples exceeded four times the benchmark concentration.

conducting monitoring and sampling if a facility is designated as a Metal TAC Monitoring Facility. Table 3-2 shows the PR 1480 Table 1 fees for an Alternative and Reduced Alternative Monitoring and Sampling Plans.

**Table 3-2**  
**PR 1480 Table 1 – Alternative or Reduced Alternative Monitoring and Sampling Plan**  
**Monthly Monitoring Fees**

	Number and Type of Monitor	Sampling Frequency			
		1 in 3 Days		1 in 6 Days	
		2 Staff	1 Staff	2 Staff	1 Staff
Base	1 - Metal TAC Monitor – Hexavalent Chromium	\$10,000	\$6,500	\$5,000	\$3,500
	1 - Metal TAC Monitor – Non-Hexavalent Chromium	\$5,500	\$3,500	\$3,000	\$2,000
	1 - Metal TAC Monitor – Hexavalent Chromium & 1 - Metal TAC Monitor – Non-Hexavalent Chromium	\$13,000	\$8,500	\$6,500	\$4,500
Additional	1- Metal TAC Monitor – Hexavalent Chromium	\$4,000	\$3,500	\$2,500	\$2,000
	1- Metal TAC Monitor – Non-Hexavalent Chromium	\$2,500	\$2,000	\$1,500	\$1,000

Table 3-3 lists the three facilities that were designated as Potentially Significant Risk Level Facilities under Rule 1402 and the various timeframes of when a facility would begin monitoring and sampling (1 in 3 days), when the facility would be eligible to reduce their monitoring and sampling (1 in 6 days), and when the facility would be required to revert back to a basic monitoring and sampling schedule (1 in 3 days). Since these facilities were designated under Rule 1402 based on hexavalent chromium ambient monitoring and sampling that was conducted near each of these three facilities, actual ambient monitoring and sampling data was used to identify the timeframes for each of the three facilities. It was assumed that the facilities would be designated as a Metal TAC Monitoring Facility under PR 1480 at the same time as designation as a Potentially High Risk Level Facility under Rule 1402 and that the timeframe between designation as a Metal TAC Monitoring Facility and implementing a Basic or Basic Alternative Monitoring and Sampling Plan is three months. Once a Metal TAC Facility is notified of its designation, the owner or operator has 30 days to submit a draft Monitoring and Sampling Plan or to elect to have the South Coast AQMD conduct Monitoring and Sampling. Assuming that review of the Monitoring and Sampling Plan would take 30 days, the owner or operator would have an additional 30 days to hire contractors and begin Monitoring and Sampling. The PR 1480 criteria of when a facility could be eligible to reduce the frequency of monitoring and sampling or revert to the basic frequency of monitoring and sampling was applied to the actual monitoring and sampling data for each of the three facilities. Staff also accounted for the required monitoring schedules specific to each facility based on benchmark concentration, in which a facility would be eligible for a reduced frequency (1 in 6 day) or revert back to the 1 in 3 day sampling frequency.

**Table 3-3**  
**Facilities that Exceeded PR 1480 Triggers during South Coast AQMD Special Monitoring Surveillance**

Facility	Date PR1480 Designation would have occurred	Date Basic Monitoring 1 in 3 Days	Eligible to Submit Reduced Monitoring 1 in 6 Days	Required to Revert to Basic Monitoring 1 in 3 Days*
Anaplex	12/14/2016	3/14/2016	8/29/2017	12/2/2017
			6/28/2018	8/12/2018**
Aerocraft	12/14/2016	3/14/2017	N/A	N/A
Lubeco	9/28/2017	12/27/2017	5/23/2018	N/A

\*Per subdivision (h), if the benchmark concentration is exceeded by four times for three consecutive samples, the facility is required to revert to 1 in 3 monitoring schedule.

\*\*Per subparagraph (e)(5)(D) a facility will be ineligible for another reduced Monitoring and Sampling Plan if it has exceeded the benchmark concentration after implementing a reduced Monitoring and Sampling Plan a second time.

### Cost Estimate for Facilities Historically Exceeding PR 1480 Triggers in South Coast AQMD Special Monitoring Surveillance

Table 3-4 shows the compliance cost estimate for facilities using historical ambient monitoring data and the requirements in PR 1480. Although a minimum of one monitor is required and is expected for most facilities, a conservative assumption of two monitors was used for each facility. It was assumed that one staff person would be used, and the facility would provide safe access to collect samples. No additional fee for wind monitoring was included as it was assumed that the owner or operator would either use a nearby wind monitor or elect not to have a wind monitor. A flat fee of \$6,000 was added for the preparation of an Alternative Monitoring and Sampling Plan, while all other costs are ongoing based on the per month fees found in Table 1 of Appendix 1 in PR 1480. At the time of analysis, none of the three facilities have completed their Rule 1402 Risk Reduction Plans, therefore, for the purposes of this analysis, the costs were estimated till the date of this analysis.

**Table 3-4**  
**PR 1480 Compliance Cost for Paramount Facilities Using Historical Monitoring Data\***

	Designation Date	Date Sampling Began	# of Monitors Used	Plan Prep Fee	Cost While On 1 in 3 day Schedule	Cost While On 1 in 6 day Schedule	Total Monitoring Cost	Average Annual Cost
<b>Anaplex</b>	12/14/2016	3/14/2017	2	\$6,000	\$101,000	\$70,000	\$177,000	\$142,000
<b>Aerocraft</b>	12/14/2016	3/14/2017	2	\$6,000	\$302,000	\$ -**	\$308,000	\$246,000
<b>Lubeco</b>	9/28/2017	12/27/2017	2	\$6,000	\$47,000	\$82,000	\$135,000	\$135,000

\* Costs were calculated from the actual intervals for 1 in 3 day and 1 in 6 day sampling schedules using start and end dates that facility monitoring data would make it eligible for reduced sampling or required to revert to a standard schedule because of a benchmark concentration exceedance.

\*\* Based on historical monitoring data, Aerocraft would not have been eligible to reduce the sampling frequency from 1 in ~~6~~3 days to 1 in ~~3~~6 days.

After a facility receives an Initial Notice and prior to the issuance of a Notice of Finding, South Coast AQMD would incur the same per sample costs for monitoring as part of the facility's investigation. The duration of monitoring activities would be no less than 30 days under at least 1 in 3 day sampling schedule, but could last six months or longer until sources of emissions and maximum concentrations are determined.

### **Caveats to the Cost Estimate**

#### ***Siting & Accessibility of Sampling Equipment***

There are some caveats to applying South Coast AQMD monitoring fees. Sampling conducted by South Coast AQMD in the cities of Paramount and Compton from 2016 to present were sited *beyond* the fenceline of the facilities being monitored, while PR 1480 requires that at least one monitor is sited in a location representative of the maximum ground level concentration of the metal TACs accessible to the facility, which may be *inside* the fenceline of the facility depending on the siting approved in the Monitoring and Sampling Plan. South Coast AQMD's use of ladder-accessible telephone pole-mounted samplers required that two field staff be sent out to retrieve a sample due to required safety protocols, and a facility would likely choose a more practical siting for its sampler that allows for a single field staff to retrieve a sample safely without the assistance of a second field staff. For this reason, the cost estimate assumed one field staff.

#### ***Sampling Equipment***

A facility's PR 1480 designation will require the monitoring of specific analytes based on the processes and emissions specific to the facility, which in some cases may necessitate multiple monitors collocated in each location. For instance, a facility that emits both hexavalent chromium and nickel, which requires two different sampling filter media and laboratory analysis methods (Hexavalent Chromium and Total Metals analysis, respectively), would require either two TSP monitors (i.e. BGI PQ100 or BGI OMNI) or a multi-channel metals monitor (i.e. Xontech 924 Toxics sampler). Sampling equipment selection will depend on practical considerations specific to the siting of the instrumentation such as available power, accessibility and safety, site security, noise/vibration, and overall cost. The cost estimate based on South Coast AQMD metal TAC monitoring and sampling practices may differ from the practical considerations recommended by a contractor/consultant for a particular facility.

#### ***Timeline***

The timeline used in the cost estimate delineates the initial date upon which a facility was identified and is contributing to a health risk related to Metal TACs, and therefore would have been subject to the initial steps defined in the PR 1480 Initial Notice. Staff identified retroactively the date at which each facility would likely have been designated into PR 1480 monitoring requirements as a starting point for compliance costs, and then projected forward towards the date the same facility would be able to implement a Rule 1402 Risk Reduction Plan as the end point for PR 1480 compliance costs. Since the dates used in this timeline represent pre-PR 1480 scenarios, the timeline does not reflect the regulatory impact in which a facility would likely accelerate mitigations in order to avoid prolonged and unnecessary compliance costs. The three facilities selected to estimate compliance costs of PR 1480 did not bear financial responsibility for metal TAC monitoring and sampling during this period, but in some cases have implemented mitigation measures through the South Coast AQMD's AB2588 Air Toxics 'Hot Spots' program.

### **Rule 1402 Compliance Costs for PR 1480 Affected Facilities**

During the rulemaking process, stakeholders requested that Rule 1402 cost be included as part of the implementation costs associated with PR 1480. Staff has responded that implementation of PR 1402 is separate from PR 1480 and each of these rules have similar, but separate designation processes. A facility that is designated as a Potentially Significant Risk Level Facility under Rule 1402, will not necessarily be designated as a PR 1480 Metal TAC Monitoring Facility.

Although the Rule 1402 cost is not required to be included, staff has included cost information for implementation of Rule 1402. The June 2015 Socioeconomic Report for Rules 212, 1401, 1401.1, and 1402<sup>8</sup> analyzed compliance costs for implementing the 2015 OEHHA Guidelines. Cost information from the 2015 Socioeconomic Report has been updated to 2019 dollars.

#### ***Cost of Health Risk Assessments***

The cost of a health risk assessment varies depending on the complexity. The complexity of the HRA is determined by the number of different processes contributing toxic emissions. In the 2015 Socioeconomic Analysis, it was assumed that an HRA is considered basic if there are 1-2 processes that contribute to the health risk, intermediate if 3-5 processes contribute to the health risk, and complex if more than five processes that contribute to the health risk. Furthermore, HRAs conducted for the first time at a facility are considered more costly (complex) than updated HRAs. Since these facilities would be over a Significant Risk Level, they would also be subject to Public Notification Requirements. Based on the 2015 Socioeconomic Analysis the Public Notification Cost is \$1,800 (2019 dollars). A summary of the estimated cost from the 2015 Socioeconomic Analysis for Rule 1402 for preparing a Health Risk Assessment is presented in Table 3-5.

**Table 3-5  
Projected HRA Costs (2019 Dollars)**

<b>Complexity of HRA</b>	<b>HRA Cost</b>
Basic	\$16,000
Intermediate	\$49,000
Complex	\$81,000

Based on 2015 Socioeconomic Analysis for Rules 212, 1401, 1401.1, and 1402

#### ***Cost of Risk Reduction Measures***

PAR 1402 requires facilities to implement risk reductions if the estimated cancer risk is 25 in one million or greater, which is the existing action risk level threshold. The 2015 Socioeconomic Analysis included estimated costs for HEPA and scrubbers, which is the primary pollution controls that will be needed to address metal particulates. Table 3-6 shows the compliance cost for pollution controls in PR 1480 affected industries, adjusted to 2019 dollars from the June 2015 Socioeconomic Analysis for Rules 212, 1401, 1401.1, and 1402.

<sup>8</sup> The 2015 Socioeconomic Analysis can be found here: <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2015/brd/pkg-2015-jun5.pdf#page=633>

**Table 3-6**  
**Estimated Cost for HEPA and Scrubbers from 2015 Socioeconomic Analysis for Rules 212, 1401, 1401.1, and 1402 (2019 Dollars)**

General Industry Category	Industry Classification (6-Digit NAICS Code)	Typical Control Device(s)	Estimated Cost (2019 Dollars)
Metal Forging and Heat Treating	Machine Tool Manufacturing (333517)	<ul style="list-style-type: none"> <li>• HEPA</li> <li>• Scrubber</li> </ul>	HEPA Costs <ul style="list-style-type: none"> <li>• Capital cost of \$86,700</li> <li>• Annual electricity cost is \$18,600</li> <li>• Filter replacement cost is \$1,100 annually</li> </ul> Scrubber <ul style="list-style-type: none"> <li>• Capital cost of \$59,300</li> <li>• Annual electricity cost is \$6,000</li> </ul>
Metal Melting	Industrial Process Furnace and Oven Manufacturing (332813)		
Metal Plating and Finishing	Electroplating, plating, polishing, anodizing, and coloring (332813)		

## **DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727**

### **Requirements to Make Findings**

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the South Coast AQMD 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.

### **Necessity**

PR 1480 is needed to further protect public health by requiring a Metal TAC Monitoring Facility to conduct ~~Metal TAC Monitoring and Sampling~~ to demonstrate what the monitored values would be. PR 1480 serves as both a tool to identify Metal TAC emissions and a method to verify that the Enforceable Measures enacted by an owner or operator of a Metal TAC Monitoring Facility were effective. ~~Metal TAC Monitoring and Sampling~~ will monitor emissions coming from the facility and provide monitored values of Metal TAC to which a neighboring community is potentially exposed. The findings from PR 1480 may lead to the development of rules that reduces Metal TAC Emissions. Further, PR 1480 is needed to establish a fee schedule for Metal TAC Monitoring Facility that elect to have the Executive Officer conduct ~~Metal TAC Monitoring and Sampling~~.

### **Authority**

The South Coast AQMD Governing Board has authority to adopt PR 1480 pursuant to the California Health and Safety Code Sections 39656 et seq., 40000, 40001, 40702, 40725 through 40728, 41510, 41511, 41512, 41512.5, 41700, 42303.

**Clarity**

PR 1480 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

**Consistency**

PR 1480 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

**Non-Duplication**

PR 1480 will not impose the same requirements as or in conflict with any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

**Reference**

By adopting PR 1480, the South Coast AQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Section 39656 et seq. (toxic air contaminants), 40001 (non-vehicular air pollution), 40702 (adopt regulations & execute duties), 41700 (nuisance), 41510 (right of entry), 41511 (rules to require source to determine emissions), 41512 (fees), 41512.5 (fees), 42303 (requests for information), and Federal Clean Air Act Section 116 (Retention of State authority).

**COMPARATIVE ANALYSIS**

California Health and Safety Code Section 40727.2 requires a comparative analysis of the proposed rule requirements with those of any Federal or South Coast AQMD rules and regulations applicable to the same equipment or source category.

The following regulations are compared to PR 1480 in this analysis:

- South Coast AQMD – Rule 1420 – Emission Standards for Lead
- South Coast AQMD – Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities
- South Coast AQMD – Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities
- South Coast AQMD – Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities



**Table 3-7  
Comparative Analysis**

<b>Rule Element</b>	<b>PR 1480</b>	<b>Rule 1420</b>	<b>Rule 1420.1</b>	<b>Rule 1420.2</b>	<b>Rule 1156</b>
<b>Applicability</b>	Facilities that receive an Initial Notice from Executive Officer	Facilities that use or process lead-containing materials	Lead-acid battery recycling facilities that process more than 50,000 tons of lead a year	Facilities that melt 100 tons or more of lead in any calendar year	All operations, material handling, and transport at a cement manufacturing facility
<b>Designation</b>	Based on Health Risk above the Significant Risk Level using air dispersion modeling and risk assessment procedures	Not applicable	Not applicable	Not applicable	Not applicable
<b>Compliance Plan or Monitoring Plan</b>	Monitoring and Sampling Plans: <ul style="list-style-type: none"> <li>• Basic</li> <li>• Alternative</li> <li>• Reduced Basic</li> <li>• Reduced Alternative</li> </ul>	Specifies general facility information	Only required if a facility exceeds ambient lead concentration of 0.100 µg/m <sup>3</sup> . Identifies additional lead control measures beyond the rule.	Only required if facility exceeds ambient lead concentration of 0.100 µg/m <sup>3</sup> or total facility point source emissions greater than 0.080 lbs/hour. Identifies additional lead control measures beyond the rule	Compliance Monitoring Plan

<b>Minimum Number of Ambient Monitors</b>	Minimum of one monitor at facility location approved by the Executive Officer  Provisions included for monitor failure	Minimum of two monitors at facility locations approved by the Executive Officer	Minimum of four monitors at facility locations approved by the Executive Officer	Minimum of three monitors at locations approved by the Executive Officer  Provisions included for monitor failure	Minimum of three monitors at facility approved by the Executive Officer.  Minimum on one monitor with 12 continuous months without any exceedance of limit.  Return to minimum of three monitors with three exceedances within 12 months.
<b>Metal TAC(s) Monitored</b>	Specific metal TAC(s) identified by Executive Officer upon designation	Lead	Lead, arsenic, (benzene and 1,3-butadiene)	Lead	Hexavalent chromium (and PM monitoring with three Notices of Violation for Rule 403 – Dust, within three years)

<b>Sample Collection (Monitoring Frequency)</b>	Once every three days initially;  Once every six days on Reduced Plans upon full implementation of Rule 1402 Early Action Reduction Plan and 30-day average concentration below the Benchmark Concentration, which represents the Reduced Risk Level at Sensitive Receptor  Provisions included for monitor failure	Once every six days	Daily for lead and arsenic  Provisions included for monitor failure	Once every three days or daily depending on the exceedance of ambient air concentration limits, and the severity	Once every three days.  Once every six days with no single exceedance of limit during 12 continuous months of monitoring
<b>Sample Retention Requirements</b>	Six month sample retention (unless specified otherwise in plan)		One year sample retention	One year sample retention	
<b>Discontinuing Monitoring</b>	Upon completion of approved Risk Reduction Plan or if Risk Reduction Plan was not required with an approved Health Risk Assessment			Concentration is below 0.070 µg/m <sup>3</sup> averaged over 30 consecutive days, no single day exceeding 0.070 µg/m <sup>3</sup> for one full, and total facility mass lead emissions are less than 0.040 lb/hour	Upon Reclamation Plan or clean-up/rehabilitation for Post Closure Activities

<b>Reporting Requirements</b>	Results reported monthly	Results reported quarterly	Results reported monthly	Results reported monthly	Results reported monthly
	<p>Reporting to Executive Officer within 24 hours of third consecutive sample results showing exceedance of four times the Benchmark Concentration</p> <p>Failure to collect sample within 2 hours of knowing sample was not collected and follow up report for cause of equipment failure within 7 days</p>	<p>Ambient air lead and wind monitoring for any lead-processing facility that is required or elects to do ambient air monitoring</p>	<p>Reporting to Executive Officer with 72 hours of daily ambient air lead concentration of 0.300 µg/m3</p> <p>Annual Ongoing Facility Status Report</p>	<p>Reporting to Executive Officer within 24 hours</p> <p>Failure to collect sample within 2 hours of knowing sample was not collected</p> <p>Source test results within 90 days</p>	<p>Source test results within 60 days</p>

## **APPENDIX A: RESPONSE TO COMMENTS**

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**LIST OF COMMENT LETTERS RECEIVED**

1. Los Angeles County Department of Public Health Comment Letter (10/1/18)
2. California Metals Coalition (CMC) Comment Letter (3/18/19)
3. Metal Finishing Association of Southern California (MFASC) Comment Letter (3/22/19)
4. California Metals Coalition (CMC) Comment Letter (6/20/19)
5. Metal Finishing Association of Southern California (MFASC) Comment Letter (8/14/19)
6. Metal Finishing Association of Southern California (MFASC) Comment Letter (10/4/19)
7. Arconic Inc Comment Letter (10/21/19)
8. California Metals Coalition (CMC) Comment Letter (10/29/19)
9. City of Los Angeles Sanitation and Environment (LASAN) Comment Letter (11/21/19)

**SCAQMD Proposed Rule 1480 - Toxic Metals Monitoring  
Initial Input from the Department of Public Health Toxicology and Environmental Assessment  
Branch – October 1, 2018**

Recommendations for Disseminating Test Results to the Community

- Multilingual website(s) that includes easy to read information on contaminants being tested, health risks, health risk thresholds, and results.
- Persons accessing the website(s) should have the ability to query test results by location to easily create frequency tables and maps.
- Data for at least the past 6 months should be available on the website(s) with a straightforward process for requesting data older than 6 months.
- The website(s) should be available on mobile platforms (e.g. tablets, cell phones, etc.).
- Outreach for the website(s) should be conducted via television, radio and newspapers in English and other predominant languages.

1-1

Community Considerations

- Many community members will not trust data that is generated and reported by operators. Every effort to ensure transparency in the process as well as the accuracy and integrity of the data must be made to address community concerns.
- Technical guidelines must be given to set a minimum detection level and other operational specifications of the monitoring systems. This should include guidelines for ensuring that equipment is operational during any type of weather or other conditions typical to the sites operations and location. There should be enforcement related to the reliability of the monitoring system and penalties for a system that is offline more than rarely. Detection levels should be set to address community concerns such that results can be compared to appropriate health standards for sensitive populations (e.g. detection levels must be lower than residential air screening levels as promulgated by Cal/EPA and USEPA).

1-2

**Responses to Los Angeles County Department of Public Health Comment Letter,  
submitted 10/01/18**

- 1-1 Response: The South Coast AQMD will post the available Monitoring and Sampling data on the South Coast AQMD website. Monitoring and Sampling data that is not posted (i.e. older data) can be obtained by submitting a Public Records Request (available on South Coast AQMD's website at <https://www.aqmd.gov/nav/online-services/public-records>). South Coast AQMD staff will continue to work with County of Los Angeles Public Health staff on the format of how the information is disseminated.
- 1-2 Response: The PR 1480 Monitoring and Sampling Plan Guidance document will provide the minimum specifications for Monitoring and Sampling, which includes sample analysis and quality control, that both the that South Coast AQMD and the Metal TAC Monitoring facility or its third party contractors would use.





March 18, 2019

Min Sue, Air Quality Specialist  
South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, California 91765

Dear Mr. Sue:

The California Metals Coalition appreciates the opportunity to comment on the South Coast Air Quality Management District ("District" or "SCAQMD") workshop proceedings and consideration of **SCAQMD Proposed Rule (PR) 1480**.

These comments on PR 1480 are divided into the following sections: Summary; Background on CMC; Comments on Slides; and Recommendations for Further Scoping and Development.

#### **SUMMARY**

This comment letter addresses the PR 1480 slides presented on February 5, 2019 at working group meeting #4. At working group meeting #4, the SCAQMD explained Rule 1402, and discussed 1480 concepts and framework.

#### **BACKGROUND ON CMC**

California is home to approximately 4,000 metalworking facilities, employing over 350,000 Californians. The average industry salary is \$66,400/year in wages and benefits.

8 out of 10 employees in the metalworking sector are considered ethnic minorities or reside in disadvantaged communities throughout Southern California. A job in the metals sector is often the only path to the middle class for many of these Californians.

Here is a breakdown of the metalworking industry's impact on the 4 counties within SCAQMD jurisdiction:

- **Los Angeles County:** 54,290 Direct Jobs | 52,741 Indirect Jobs | \$7 billion wages | \$26 billion economic activity

- **Orange County:** 25,448 Direct Jobs | 18,912 Indirect Jobs | \$2.9 billion wages | \$10.8 billion economic activity
- **San Bernardino:** 9,778 Direct Jobs | 8,378 Indirect Jobs | \$1.2 billion wages | \$4.5 billion economic activity
- **Riverside:** 6,971 Direct Jobs | 7,712 Indirect Jobs | \$957 million wages | \$3.2 billion economic activities
- **Total:** 96,487 Direct Jobs | 87,743 Indirect Jobs | \$12 billion wages | \$33.8 billion economic activity

California metal manufacturers use recycled metal (ex: aluminum, brass, iron and steel) to make parts for the aerospace industry, clean energy technologies, electric cars, biotech apparatuses, medical devices, national defense items, agriculture, infrastructure, construction machinery, household appliances, food processing and storage, movement of water, and millions of other products demanded by society.

#### COMMENTS ON SLIDES

##### Item #1, SLIDES 4-9: PR 1480 Triggers Could Have a Lower Evidentiary Standard than Rule 1402.

Rule 1402 was established to implement California's Assembly Bill 2588 (AB2588) program. The rule provides applicability criteria for facilities. If the District Executive Officer (EO) determines, based on quadrennial emissions reporting, that emissions levels from the facility have the potential to cause an exceedance of specified risk thresholds, the facility is notified that it is considered a High Risk Facility.

SCAQMD also has pulled facilities into Rule 1402 working outside the standard applicability process based on an EO determination. But in these situations, the evidentiary standard for pulling facilities into Rule 1402 has varied from case to case.

2-1

CMC is concerned that PR 1480 will have a lower applicability threshold than the Rule 1402 threshold used to designate High Risk Facilities. To resolve this issue, PR 1480 must include specific guidelines that the District would follow before deeming a facility as a Potentially Significant Source. At a minimum, these guidelines should mirror the Rule 1402 criteria used when notifying a facility that it is considered a High Risk Facility. Without these criteria, facilities impacted by PR 1480 will be held to a lower evidentiary standard than those deemed a High Risk Facility through Rule 1402.

##### Item #2, SLIDES 4-9: Oppose Concurrent Applicability for Rule 1402 and Proposed Rule PR 1480

CMC appreciates District staff discussing the details of Rule 1402 with Working Group participants. However, CMC has concerns regarding the District's proposal to concurrently link Rule 1402 applicability with PR 1480.

2-2

CMC recommends not linking Rule 1402 applicability to the initial PR 1480 determination. Rather, CMC recommends that a facility considered a Potentially Significant Source would initially be subject only to PR 1480 requirements. If based on PR 1480 monitoring and/or source attribution analysis the facility is confirmed as a Potentially Significant Source, then Rule 1402 requirements could be triggered.

**Item #3, SLIDE 12 and 13, The District Should Provide a Quantitative Technical Assessment before Designating a Facility as a Potentially Significant Source. Such an Assessment Should Include an Affirmative Source Attribution Demonstration.**

CMC recommends that as part of the PR 1480 rulemaking process, the District should specify the methods by which ambient air monitoring would be conducted. As an example, what procedures will be followed by the District in collecting ambient air data? CMC requests SCAQMD to identify and list specific EPA, CARB, SCAQMD, or any other guidance that the District would follow in collecting air samples under PR1480. The rule should clearly establish this requirement to use published guidance to be followed by SCAQMD—and the facility—when collecting samples.

2-3

CMC would also suggest that the SCAQMD establish quantitative guidelines for ambient air measurements so that there can be confidence in the technical evidence used in the designation of a Potentially Significant Source.

Any data collected outside established guidance for ‘screening purposes’ should not be used for such a determination. This should hold true for ambient measurements as well as any non-protocol source tests. For example, the District has acknowledged there is no established guidance for glass plate sampling so any information collected in this manner would be qualitative at best. Since the PR1480 determination requires a quantitative determination, such information would be of limited value.

**Item #4, SLIDE 12-13, Facilities Should Be Allowed the Opportunity to Fully Review SCAQMD Data Before Being Responsible to Respond**

Before notifying a facility to start monitoring for toxics under PR1480, facilities should be provided reasonable time to review the SCAQMD’s findings, monitoring data and any technical analysis.

Results from other near-by stations would also be useful to understand the full picture. Along with the data, the District should share information regarding methodologies used to collect data, and any deviation from established methods should be listed. The District should also be required to share information regarding surrounding facilities or other possible emission sources in the area.

2-4

CMC would request that a facility’s response to these findings be reviewed and responded to by SCAQMD prior to any further action under PR1480 or Rule 1402. CMC expects that PR 1480 establish definitive timelines for the above-described actions.

**Item #5: SLIDES 13-14: Screening Tools Are Not Sufficient for Quantitative Determinations under PR 1480 (or Rule 1402):**

CMC opposes the use of screening tools (ex: glass plate sampling, staff observations, and permits) as a basis for PR 1480 determinations. While screening tools may be useful for deciding where quantitative assessment is needed, they are not a substitute for quantitative assessment when the District is making a regulatory determination that is inherently quantitative.

2-5

Glass plate samples do not align with the goal set in the SCAQMD Air Toxic Action plan. SCAQMD's Air Toxic Action Plan states the District will systematically identify and prioritize high-risk facilities, then use the latest air monitoring technology to confirm specific sources causing high emissions.

If screening tools indicate the possibility of a high TAC source, the District can conduct an investigation using approved methods pursuant to applicable protocols. Any data collected outside of applicable protocols for 'screening purposes' is not a valid basis for identifying a facility as a Potentially Significant Source in PR 1480.

2-5  
cont.

Lastly, PR 1480 should require the same test requirements be applied by facilities and the District, alike. If a facility is required to conduct PR 1480 monitoring, it should be the same scope and approach that the District adopts to reach the conclusion of a Potentially Significant Source, with similar frequency and methods.

**Item #6: SLIDE 15: 14-day Response Period is Too Short and Should Be Removed:**

As discussed previously in Item #4, facilities impacted by PR 1480 should be given ample time to review technical evidence, including air monitoring data, collected by SCAQMD. CMC suggests the 14-day response period be removed and updated to allow facilities reasonable time to review the District's data and respond.

2-6

**Item #7: SLIDE 16: No Description of How SCAQMD Will Account for Other Pollution Sources:**

In most Southern California locations, community air monitors will measure pollution from any number of surrounding sources. There needs to be a clear mechanism in PR 1480 that describes how the SCAQMD will conduct source attribution and control for other potential sources (e.g., trucks, trains, fireworks, street sweepers<sup>2</sup>, etc.).

2-7

**Item #8: SLIDE 17: SCAQMD Staff Should Re-Do Flow Chart:**

As commented at the last Working Group Meeting, the flow chart on Slide 17 should include more detail. As noted above, this flow chart should be revised such that Rule 1402 is only triggered after 1480 monitoring results from the facility have been collected/analyzed. Facility monitoring could indicate the facility is not a Potentially Significant Source. Such a sequential approach would limit the possibility of a facility being erroneously encumbered with the economic burden of 1402.

2-8

**Item #9: SLIDE 29: Costs Are Known and Should be Presented at Next Working Group Meeting on March 26, 2019:**

Per SCAQMD's estimate in the Air Toxics Action Plan, deploying just two air monitors near a facility could cost about \$6,000 per week, including all costs for monitoring and analysis. This does not include costs the facilities would incur on preparing a monitoring plans for approval by the District. Based on this estimate,

2-9

<sup>2</sup> ["Application of Next Generation Air Monitoring Methods in the South Coast Air Basin" January 2019 \(page 19\)](#)

the proposed one-in-three-day monitoring will be very expensive. This economic burden will be felt more severely by smaller facilities. For additional guidance, the District should reference the July 12, 2017 letter attached to this comments letter.

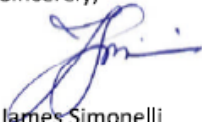
2-9  
cont.

Finally, the costs related to a Health Risk Assessment (HRA) are also known and should be presented at the next working group meeting.

2-10

Thank you for your time, and for allowing CMC to participate and comment on PR 1480. We look forward to continued discussions.

Sincerely,



James Simonelli  
Executive Director

CC: Mike Morris, SCAQMD





July 12, 2017

Governor Jerry Brown  
Members of the California Legislature  
State Capitol  
Sacramento, CA, 95814

Re: Air Districts' Opposition to GHG Cap & Trade Proposal Unfunded Mandates and Lack of Funding to Reduce Air Pollution in Impacted Communities

Dear Governor Brown and Members of the California Legislature:

The undersigned California Air Districts strongly support the goals of improving air quality in disadvantaged communities and reducing greenhouse gas emissions through the proposed legislation, AB 398 and AB 617. Reduction of criteria and toxic emissions will yield significant public and environmental health benefits, including, but not limited to, reduced mortality and illnesses associated with high air pollution levels. We also appreciate the proposed amendments to increase the air districts' penalty authority, and the reaffirmation of the air districts' primary authority over criteria and air toxic emissions from stationary sources. *However, as currently written, AB 398 and AB 617 would impose enormous new workloads on air districts without any funding source and without the needed funding to reduce air pollution in impacted communities.* It will be impossible to comply with the far-reaching new mandates of better protecting and improving public health without significant and sustained funding, including both funding to carry out the new work required, and funding to provide incentives to reduce mobile source pollution. Statewide, more than a billion dollars would be needed. Therefore, we must respectfully **oppose these new mandates.**

While there may be opportunities to further reduce toxic emissions from stationary sources, to really benefit disadvantaged communities, **diesel emissions** must be drastically reduced. AB 617 does not recognize that the best way to reduce exposure to toxics in disadvantaged communities is to significantly increase funding for diesel emission reduction from mobile sources. *The air districts do not have any ability to raise funds for these purposes on their own.* In South Coast and San Joaquin Valley, over 80% of NO<sub>x</sub> emissions contributing to ozone and PM<sub>2.5</sub>, and about 90% of the basin-wide risk from air toxics, comes from mobile sources (70% from diesel particulates). AB 617 needs to explicitly require reductions from mobile sources, and since the California Air Resources Board (CARB) and the districts have **limited regulatory ability to further reduce emissions from mobile sources**, incentive funding in the range of more than a billion dollars per year is needed.

AB 617 also requires CARB to prepare a monitoring plan requiring "advanced sensing monitoring networks" for criteria and toxic air pollutants, and requires CARB to identify the

Governor Jerry Brown  
Air Districts' Opposition to GHG Cap & Trade Proposal

2

July 12, 2017

highest priority locations around the state for these networks. The districts must implement such networks, however, the bill does not limit the number of networks that will be required, provide an end date for monitoring, or define "advanced sensing monitoring." For the air districts, new workloads and expenditures could be unlimited. *While the districts have the ability to charge fees for their work related to permitted sources, as a practical matter these fees cannot support the significant new mandates required by this bill.* As an example, assuming the use of filter-based PM2.5 samplers for toxic metals such as hexavalent chromium (not some unspecified advanced technology), it costs \$6,000 per week, or over \$300,000 per year, just to maintain one upwind and one downwind sampler at a single location or facility. It is unrealistic to expect a small plating shop or other metalworking facility to be able to support the amount of monitoring required, and this does not even consider the monitoring that is not focused on a given facility, but used to identify areas of high exposure. If the districts were to try to impose fees for this monitoring, it would likely be very controversial as to who should pay the fees when the source of high emissions is likely to be mobile sources or a specific facility that has not yet been identified. Therefore it is not realistic to think the districts could raise their fees sufficiently to support the required monitoring.

Moreover, the South Coast Air Quality Management District, Bay Area Air Quality Management District, Sacramento Metropolitan Air Quality Management District, and the San Joaquin Valley Air Pollution Control District recently increased their permit fees to help cover the costs of existing programs. It would not be realistic to expect permitted sources to pay yet another fee increase, of unknown but likely very large dimensions, to support AB 617 mandates.

AB 617 also requires CARB to select areas in the state for the development of a community emission reduction program, then require the districts adopt and implement such programs. Further, if CARB rejects the community plan, we would need at least 180 days to resubmit a revised plan, not the 30 days currently provided. We expect that the majority of areas selected would be in the larger districts, which already have robust programs to reduce air toxics and criteria pollutants, including in disadvantaged areas. Developing such plans may not be the most cost-effective way to achieve emission reductions, compared to increasing mobile source incentive funding for programs such as Carl Moyer, which sets a goal of expending 50% of its funds in disproportionately impacted areas, which in South Coast is defined as low-income areas that are disproportionately exposed to air toxics and/or particulate air pollution. In South Coast, the program has typically exceeded the 50% goal.

We also have concerns about the new mandates relative to imposing best available retrofit control technology (BARCT). Full implementation by 2023 may be too aggressive given the time it takes to determine BARCT, and the number of source types to consider. In the past, these determinations for a limited number of source types have typically involved at least a 1 to 2 year public process, and another three to five years for implementation. We also request clarification that the law's provisions do not preempt the districts from using information other than the CARB clearinghouse to establish BARCT or BACT.

Governor Jerry Brown  
Air Districts' Opposition to GHG Cap & Trade Proposal

3

July 12, 2017

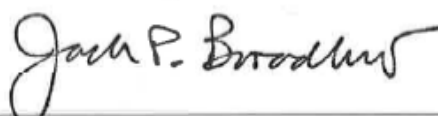
Furthermore, our public health objectives and the emission reduction goals require all interested parties to do their parts. Preempting local districts from working to achieve these goals is a strategic mistake.

Based on the foregoing, the undersigned air districts oppose AB 617 unless the bill is amended to provide that the mandates imposed on air districts must be implemented only to the extent the state provides significant and sustained funding to local air districts to help reduce air pollution in impacted communities

Sincerely,



Wayne Nastri  
Executive Officer  
South Coast AQMD



Jack Broadbent  
Executive Officer  
Bay Area AQMD



Seyed Sadredin  
Executive Director  
San Joaquin Valley APCD



Larry Greene  
Executive Director  
Sacramento Metropolitan AQMD



**Responses to California Metals Coalition (CMC) Comment Letter, submitted 3/18/19**

- 2-1 Response: PR 1480 includes a detailed process for designation of a Metal TAC Monitoring Facility (see subdivision (d)) and the criteria for designation is specified in paragraph (d)(7). PR 1480 has a more rigorous process to designate a Metal TAC Monitoring Facility than the process under Rule 1402 for designating Potentially High Risk Level facilities. Some key distinctions between designation process for PR 1480 and Rule 1402 is the criteria for estimating the health risk, the applicability of toxic air contaminants, exclusions, and receptor types. One of the key criteria under PR 1480 is that the designation is based on facility-specific information where the estimated health risk is based on air dispersion modeling. Under Rule 1402, the demonstration that the estimated health risk is above the Significant Risk Level, can be based on modeled, monitored, or emissions data. Another distinction is the applicability of the type of toxic air contaminants. PR 1480 applies to metal toxic air contaminants while Rule 1402 applies to all toxic air contaminants. In the designation process, PR 1480 accounts for emission reductions or elimination of emissions due to for enforceable measures and toxics rules with future effective compliance dates, while these exclusions in estimating the health risk are not allowed under Rule 1402. Lastly, the criteria for evaluation the estimated health risk under PR 1480 is based on a sensitive receptor, while Rule 1402 considers all receptors. One of the designation criteria for PR 1480 is that the facility must be designated as a Potentially High Risk Level Facility under Rule 1402.
- 2-2 Response: PR 1480 and Rule 1402 have distinct designation processes as described in Response to Comment 2-1. A facility designated under Rule 1402 as a Potentially High Risk Level Facility may or may not be designated as a Metal TAC Monitoring Facility under PR 1480.
- PR 1480 is designed to complement Rule 1402. PR 1480 will require the monitoring of some Rule 1402 Potentially High Risk Level Facilities. Rule 1402 has a process to designate a Potentially High Risk Level Facility based on whether the Significant Risk Level has been exceeded at any sensitive receptor or worker receptor location for all TACs emitted from the facility. PR 1480 has a process to designate a Metal TAC Monitoring Facility based on whether the Significant Risk Level has been exceeded at any sensitive receptor for Metal TACs emitted from the facility. One of the designation criteria for PR 1480 is that the facility must be designated as a Potentially High Risk Level Facility under Rule 1402. Thus, before a facility is designated a PR 1480 Metal TAC Monitoring Facility, it must first be designated a Rule 1402 Potentially High Risk Level Facility.
- 2-3 Response: The monitoring and sampling methods that the South Coast AQMD will use prior to designating a facility are the same methods that would be used if a

facility is designated as a Metal TAC Monitoring Facility. A Rule 1480 Monitoring and Sampling Plan Guidance (Guidance) has been prepared to assist owners and operators of Metal TAC Monitoring Facilities and their third party contractors in the preparation of the plan. The South Coast AQMD would use this same Guidance when monitoring and sampling.

Glass plate sampling is useful when investigating whether a facility is a source of Metal TACs emissions. Screening tests would be used by South Coast AQMD staff when investigating whether a facility is a source of Metal TAC emissions. However, when performing the air dispersion modeling and calculating the health risks from the Metal TACs emitted from a facility, the South Coast AQMD would use emission rate information from source tests or other default factors to conduct air dispersion modeling and estimate the health risks to Sensitive Receptors from Metal TAC emissions from the facility. The South Coast AQMD staff will use the Tier 4 detailed risk assessment procedures in Rule 1401 when conducting air dispersion modeling and estimating health risks.

- 2-4 Response: PR 1480 includes up to 90 days for a facility to review the data used by South Coast AQMD in the designation process. First, an Initial Notice would be given to the owner or operator of a facility at least 30 days prior to the Notice of Findings and the owner or operator may request up to 90 days following the Notice of Findings to review the data and results of information provided in the Notice of Findings and provide additional information on why the facility should not be designated a Metal TAC Monitoring Facility. South Coast AQMD staff would work with a facility during this process and take into consideration any responses and additional information provided. Paragraph (d)(3) specifies the information the owner or operator would be provided.
- 2-5 Response: Screening tests and screening tools would be used by South Coast AQMD staff when investigating whether a facility is a source of Metal TAC emissions. However, air dispersion modeling using emissions data from the facility will be used to calculate the health risks at the sensitive receptors from the Metal TACs emitted from a facility. The South Coast AQMD would use emission rate information from source tests or other default factors to conduct air dispersion modeling and estimate the health risks to Sensitive Receptors from Metal TAC emissions from the facility. The Monitoring and Sampling requirements in PR 1480 are based on South Coast AQMD's past experience with Monitoring and Sampling focused on facilities.
- 2-6 Response: Please see response to comment 2-4. The 14 day response time has been extended to 30 days, with an option for up to 90 days following the Notice of Findings for an owner or operator of a facility to provide information to the Executive Officer.

- 2-7 Response: Community air monitors are one of the various ways that South Coast AQMD staff can be alerted that there is an air quality issue. When an air quality issue is identified, South Coast AQMD staff conducts an investigation of the sources and initiates Monitoring and Sampling. After receiving a Notice of Findings, an owner or operator of a facility has the opportunity to provide information to the Executive Officer of other sources which may be contributing to the ambient monitors and South Coast AQMD staff would investigate those sources. However, designation as a Metal TAC Monitoring Facility is solely based on the Metal TAC emissions from the facility. Therefore, it is not necessary to attribute measured ambient concentrations to other sources.
- 2-8 Response: PR 1480 and Rule 1402 are separate rules with separate designation processes. Please see response to Comment 2-2.
- 2-9 Response: The comment refers to a letter from the air districts to Governor Jerry Brown on AB 617 ambient air monitoring costs. As discussed at Working Group Meeting #7 on 8/6/2019, this was based on South Coast AQMD's cost to monitor several facilities in the City of Paramount which were under Orders for Abatement. The annual cost of \$300,000 was based on fully burdened rates for two field staff to setup, conduct, and retrieve samples from monitors mounted in locations which were not easily accessible (i.e. elevated on utility poles). Sample analysis was also expedited because the results were the basis for the Order for Abatement conditions to curtail operations if a concentration limit was exceeded. PR 1480 does not require expedited sample analysis and the monitors will likely be placed near the fence line within the facility where the location should be accessible by one field staff.

The costs of PR 1480 have been analyzed in the Socioeconomic Impact Assessment included in Chapter 3 of the Staff Report. Fees for Monitoring and Sampling for a facility that elects to use South Coast AQMD staff to conduct the Monitoring and Sampling have been substantially reduced through the rulemaking process. The South Coast AQMD was able to provide a number of allowances such as reducing the number of South Coast AQMD personnel from 2 to 1 if the monitor could be safely accessed and reducing the minimum monitors from 2 to 1. This reduced the cost by more than 50%. Some facilities have commented through the rulemaking process that they would keep an upwind monitor. PR 1480 would not require that upwind monitor and it would be the choice of the operator to have an upwind monitor. In addition, the fees under the Alternative Monitoring and Sampling are expected to be higher than a third party consultant that the facility is allowed to hire to conduct the ambient monitoring and sampling. Additionally, smaller facilities with 25 or fewer employees and gross receipts of three million dollars or less, averaged over the previous three

years, are exempt from the provisions of PR 1480 except paragraphs (d)(1) and (d)(2).

2-10 Response: PR 1480 does not require a facility to prepare a health risk assessment. At the Working Group Meeting #5, South Coast AQMD staff presented information regarding the AB 2588 program and health risk assessments.



March 22, 2019

**Via Email**

Min Sue [msue@aqmd.gov](mailto:msue@aqmd.gov)  
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South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, CA 91765

**RE: Proposed Rule 1480 –Toxic Metal Air Emission Monitoring**

Dear Min, Dan, Susan and Neil -

With the approaching Workshop #5 on March 26, the Metal Finishing Association of Southern California [MFASC] would like to reiterate and emphasize several key issues that we have raised in previous workshops.

**Metal Finishing Industry**

The Metal Finishing Association of Southern California, together with the Metal Finishing Association of Northern California, together represent over 130 companies throughout Northern and Southern California, which comprise a diverse industrial base of metal finishing and related businesses that employ thousands of workers.

Our members provide necessary products and services to manufacturers in various other industries, including, automotive, consumer products, industrial, energy, aerospace and numerous others. In particular, a large segment of our memberships provide mission critical parts and components for military aircraft, satellites, telecommunications, defense and the like. In addition, well over 90% of the associations' members meet the federal definition of Small Business with fewer than 150 employees, and these are typically private family businesses or otherwise small closely held companies.

Our industry has a statewide economic impact of more than \$13 billion per year, and it is responsible for more than 130,000 jobs.

**Context – PAR 1469**

Metal finishing facilities are now endeavoring to meet the significant new requirements and related compliance costs now that the district has adopted Proposed Amended Rule 1469 (PAR 1469). This follows almost two years of meetings and negotiations.

The rule addresses hexavalent chromium containing tanks not previously known to be sources of hexavalent chromium

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emissions and includes requirements such as building enclosures, best management practices, and housekeeping provisions that minimize the release of fugitive emissions from chromium electroplating and chromic acid anodizing operations.

PAR 1469 also has provisions to ensure continuous proper operation of point source pollution controls and contingency provisions to add pollution controls for a building enclosure for any facility that repeatedly fails to comply with the point source emission requirements or fails to shut down a tank after not passing a test to evaluate the collection efficiency of a tank with pollution controls.

The District estimates that small decorative plating facilities will experience an average impact of 3.4% to 7.4% of their revenues, and that this will increase dramatically if chemical fume suppressants are not certified and they are required to install add-on pollution controls. The district also projects that approximately 37 to 63 jobs will be lost each year.

**Toxic Metal Air Emission Monitoring**

The District is now proposing a new Rule 1480. Under this rule, if data collected by SCAQMD demonstrates that a facility is a *Potentially Significant Source* of toxic metal emissions, the district would notify the facility and could subject the facility to new air monitoring requirements including sampling, monitoring and analysis.

The metals addressed by the rule include Arsenic (As), Cadmium (Cd), Copper (Cu), Hexavalent Chromium (CrVI), Nickel (Ni), and Manganese (Mn). The emissions processes include metal finishing, metal heat treating, metal forging, chromate coatings, metal shredding, metal melting, and metal buffing and grinding.

A facility designated as a Potentially Significant Source would be required to:

- Submit an ambient air monitoring plan, and
- Comply with the requirements for a Potentially High Risk Level facility pursuant to Rule 1402 (e.g. Early Action Reduction Plan)

These proposed new requirements are substantial and metal finishing facilities will be required to incur significant time, workload, and economic burdens in their efforts to comply. The District has already mentioned potential costs in the amount of several thousands of dollars each week for the monitoring and analysis. These are in addition to the new costs being incurred in compliance with the new PAR 1469.

The metal finishing industry is urging the District to address key issues prior to finalization. These include:

1. *Adequate time to respond* – facilities should be provided a reasonable period of time to respond to a District notification that they are a Potentially Significant Source.

The current proposal - 14 days - is an insufficient amount of time for a facility to develop and submit its response to this significant notification. This is especially true with regard to the District’s example of the type of response it desires to receive within this timeframe: “Substantiate why the facility is not a source.”

The rule should also address the information that will be made available to facilities with this significant notification, in order to enable them to prepare an informed response. This information should include not only the data itself but also the data collection methodologies, as well as other potential sources of emissions.

3-1

3-2

3-3

2. *Clear and separate regulatory process* – facilities should be able to reference and rely upon a distinct set of rules and procedures, as opposed to the current rule that references Rule 1402.

3-4

The current proposal references Rule 1402 early action reduction plan procedures that currently apply to other facilities and could be revised over time.

It is also important that Rule 1480 clearly provide for:

- The identification and quantification of all other sources of the emissions.
- The methodology to be utilized for ambient air monitoring.
- The quantitative guidelines for ambient air measurements.
- The quantitative determination the District will employ to
- The criteria for the determination that a facility is a Potentially Significant Source.
- The criteria for notifying a facility that it is a Potentially Significant Source.

3-5

3. *Cost Impacts* – the industry should be provided with the District’s cost estimates in sufficient advance time that will allow the impacted facilities to review the information and provide a response.

The cost estimates should address every cost to be borne by facilities including but not limited to the preparation of the response to the District’s notification that they are a Potentially Significant Source, the preparation of an air monitoring plan, the performance of sampling and analysis, and the review of air monitoring data.

3-6

MFASC also requests, consistent with our comments in the recent PAR 1469 process, that the district include within this rulemaking the financial measures it will adopt in acknowledgement of the public statements that: “It is unrealistic to expect a small plating shop or other metalworking facility to be able to support the amount of monitoring required.” [July 27, 2017 joint air district letter to Governor Brown and the Legislature regarding AB 938 and AB 617].

3-7

Thank you for the consideration of these and the other issues that our association and its members are raising in this rulemaking. MFASC and our representatives look forward to continued discussions on the PR 1480 with the District.

Sincerely,



Dale Watkins,  
President

**Responses to Metal Finishing Association of Southern California (MFASC) Comment Letter, submitted 3/22/19**

- 3-1 Response: Paragraph (d)(5) recognizes the compliance efforts by affected facilities to comply with existing South Coast AQMD rules and that information will be considered in the designation process. The costs of PR 1480 have been analyzed in the Socioeconomic Impact Assessment included in Chapter 3 of the Staff Report. Fees for Monitoring and Sampling for a facility that elects to use South Coast AQMD staff to conduct the Monitoring and Sampling have been substantially reduced through the rulemaking process. The South Coast AQMD was able to provide a number of allowances such as reducing the number of South Coast AQMD personnel from 2 to 1 if the monitor could be safely accessed and reducing the minimum monitors from 2 to 1. This reduced the cost by more than 50%. Some facilities have commented through the rulemaking process that they would keep an upwind monitor. PR 1480 would not require that upwind monitor and it would be the choice of the operator to have an upwind monitor. In addition, the fees under the Alternative Monitoring and Sampling are expected to be higher than a third party consultant that the facility is allowed to hire to conduct the ambient monitoring and sampling. Additionally, smaller facilities with 25 or fewer employees and gross receipts of three million dollars or less, averaged over the previous three years, are exempt from the provisions of PR 1480 except paragraphs (d)(1) and (d)(2).
- 3-2 Response: Please see response to Comment 2-4. To provide the owner or operator of facilities additional time to provide additional information, an Initial Notice would be given to the owner or operator of a facility at least 30 days prior to the Notice of Findings and the owner or operator may request up to 90 days following the Notice of Findings to provide information on why the facility should not be designated a Metal TAC Monitoring Facility. Therefore, the owner or operator has at least 120 days to prepare information should a Notice of Findings be issued to the facility.
- 3-3 Response: Please see response to Comment 2-4. Subparagraph (d)(3) specifies the information included in a Notice of Findings, which includes the results of Monitoring and Sampling conducted by the South Coast AQMD, results of data collected from any Information Requests following the Initial Notice, findings that the facility has equipment or processes with Metal TAC emissions capable of being released into the ambient air, and the highest health risk value, broken down by the Metal TACs, at the Sensitive Receptor location that exceeds the Significant Risk Level based on the Metal TAC emissions from the facility.
- 3-4 Response: PR 1480 and Rule 1402 are separate rules with separate requirements, but are complementary to each other where Rule 1402 will require risk reduction and PR 1480 monitors emissions while permanent risk reduction



measures are implemented for facilities with high health risk levels. PR 1480 relies on the milestones within Rule 1402 for Potentially High Risk Level Facilities (i.e. implementation of an Early Action Reduction Plan and implementation of a Risk Reduction Plan) since that is one of the criteria for designation as a Metal TAC Monitoring Facility under PR 1480.

- 3-5 Response: Please see responses to Comments 2-3 and 2-7. After a Notice of Findings, the owner or operator of a facility can submit information to the Executive Officer to identify other Metal TAC sources (see paragraph (d)(4) and subparagraph (d)(5)(E)). Subparagraph (d)(7)(D) specifies that designation of a Metal TAC Monitoring Facility only relies on the Metal TAC emissions from the facility, therefore, it is not necessary to identify and quantify all other sources of Metal TAC emissions.

The methods used by a Metal TAC Monitoring Facility for Monitoring and Sampling are to be specified in the Monitoring and Sampling Plan. A Rule 1480 Monitoring and Sampling Plan Guidance has been prepared to assist owners and operators of Metal TAC Monitoring Facilities and their third party contractors in the preparation of the plan. The South Coast AQMD follows the same guidance when conducting ambient monitoring and sampling.

The “Potentially Significant Source” has been renamed “Metal TAC Monitoring Facility”. The criteria for designation of a Metal TAC Monitoring Facility is specified in paragraph (d)(7) and the information to be included in the notification to a facility of designation is specified in paragraph (d)(8). Additionally, Appendix 2 includes an Alternative Methodology to establishing the Benchmark Concentration.

- 3-6 Response: The South Coast AQMD fees for conducting Monitoring and Sampling pursuant to subdivision (g) were provided to the Working Group Meeting #8 on 8/29/2019. The costs of PR 1480 have been analyzed in the Socioeconomic Impact Assessment included in Chapter 3 of the Staff Report. The criteria used to designate a facility as a Metal TAC Monitoring Facility under PR 1480 will result in a subset of facilities designated as Potentially High Risk Level facilities under Rule 1402. Implementation costs associated with Rule 1402 were evaluated during that rulemaking and those cost impacts are separate from PR 1480. However, at the request of stakeholders the Socioeconomic Impact Assessment does include information regarding implementation costs associated with Rule 1402 are provided.

- 3-7 Response: The comment refers to a joint air district letter to Governor Brown and the Legislature regarding AB 617 and was discussed at the Working Group Meeting #7 on 8/6/2019. When an air quality issue is identified, South Coast AQMD staff conducts an investigation of the sources and initiates

Monitoring and Sampling. However, it can take months to years for a facility to install permanent emission controls. During this time, South Coast AQMD continues Monitoring and Sampling to ensure that public health is protected. Once a facility is designated under PR 1480, the Monitoring and Sampling responsibility is shifted from South Coast AQMD to the facility responsible for the Metal TAC emissions and that responsibility continues until verification that all the permanent emission controls have been implemented and are operating.

Fees for Monitoring and Sampling for a facility that elects to use South Coast AQMD staff to conduct the Monitoring and Sampling have been substantially reduced through the rulemaking process. The South Coast AQMD was able to provide a number of allowances such as reducing the number of South Coast AQMD personnel from 2 to 1 if the monitor could be safely accessed and reducing the minimum monitors from 2 to 1. This reduced the cost by more than 50%. Some facilities have commented through the rulemaking process that they would keep an upwind monitor. PR 1480 would not require that upwind monitor and it would be the choice of the operator to have an upwind monitor. In addition, the fees under the Alternative Monitoring and Sampling are expected to be higher than a third party consultant that the facility is allowed to hire to conduct the ambient monitoring and sampling. Additionally, smaller facilities with 25 or fewer employees and gross receipts of three million dollars or less, averaged over the previous three years, are exempt from the provisions of PR 1480 except paragraphs (d)(1) and (d)(2).



June 20, 2019

Min Sue, Air Quality Specialist  
South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, California 91765

Dear Mr. Sue:

The California Metals Coalition appreciates the opportunity to comment on the South Coast Air Quality Management District (“District” or “SCAQMD”) workshop proceedings and consideration of **SCAQMD Proposed Rule (PR) 1480**.

These comments on PR 1480 are divided into the following sections: Summary; Background on CMC; Comments on Slides; and Recommendations for Further Scoping and Development.

#### SUMMARY

This comment letter addresses the PR 1480 slides presented on May 23, 2019 at working group meeting #6. At working group meeting #6, the SCAQMD provided examples of how it identified sources, and discussed 1480 draft rule provisions and cost considerations.

#### BACKGROUND ON CMC

California is home to approximately 4,000 metalworking facilities, employing over 350,000 Californians. The average industry salary is \$66,400/year in wages and benefits.

8 out of 10 employees in the metalworking sector are considered ethnic minorities or reside in disadvantaged communities throughout Southern California. A job in the metals sector is often the only path to the middle class for many of these Californians.

Here is a breakdown of the metalworking industry’s impact on the 4 counties within SCAQMD jurisdiction:

- **Los Angeles County:** 54,290 Direct Jobs | 52,741 Indirect Jobs | \$7 billion wages | \$26 billion economic activity

- **Orange County:** 25,448 Direct Jobs | 18,912 Indirect Jobs | \$2.9 billion wages | \$10.8 billion economic activity
- **San Bernardino:** 9,778 Direct Jobs | 8,378 Indirect Jobs | \$1.2 billion wages | \$4.5 billion economic activity
- **Riverside:** 6,971 Direct Jobs | 7,712 Indirect Jobs | \$957 million wages | \$3.2 billion economic activities
- **Total:** 96,487 Direct Jobs | 87,743 Indirect Jobs | \$12 billion wages | \$33.8 billion economic activity

California metal manufacturers use recycled metal (ex: aluminum, brass, iron and steel) to make parts for the aerospace industry, clean energy technologies, electric cars, biotech apparatuses, medical devices, national defense items, agriculture, infrastructure, construction machinery, household appliances, food processing and storage, movement of water, and millions of other products demanded by society.

#### COMMENTS ON SLIDES

##### Item #1, SLIDE 7: General Process for Identifying a Facility Should be Explicit in Staff Report

At the working group meeting on May 23, 2019, CMC requested clarification on what steps would be taken by the SCAQMD before triggering a "Notice of Findings" letter (Slide 37) to a facility.

Staff presented a concise 4-Step process to address CMC's concerns. CMC would prefer that this 4-Step process be included in PR 1480. 4-1

But if the 4-Step process is not included in the rule language, it should be detailed in the staff report and presented at the Stationary Source Committee and Governing Board Meetings.

##### Item #2, SLIDES 8-12: General 4-Step Process to Identify a Facility Contributing to Ambient Levels

CMC was concerned that a facility could be designated a Potentially Significant Source without an in-depth review and data collection by the SCAQMD.

- **Step 1: Identifying a Facility as Possibly Contributing to an Air Issue.** CMC agrees with staff that the SCAQMD should conduct air monitoring prior to triggering a "Notice of Findings" letter. All of the examples presented at the working group meeting included this step.
  - **SUGGESTION:** The SCAQMD should notify the facility when air monitoring begins near the facility. The 1480 process is a process of sharing information and correcting problems. It is concerning if the SCAQMD does not believe it should alert the facility that air monitoring is occurring outside of the facility. 4-2
- **Step 2: Within Facility, Identify the Source or Sources.**
  - **SUGGESTION:** In order to best respond to the identification of source(s), a facility may want to conduct on-site ambient air monitoring. This data could be compared to the SCAQMD data. If the SCAQMD does not alert the facility that it has initiated monitoring near the facility, then the opportunity is lost and the facility will be one step behind in the process.
- **Step 3: Determine if Sources are Capable of Generating Emissions.** 4-3

- **SUGGESTION:** During this process, the SCAQMD and facility should also focus on fixing any problems. Time is important, and if an issue can be resolved—and emissions reduced—action should be encouraged prior to triggering PR 1480.
- **Step 4: Determine if Emissions Can be Released to the Ambient Air.**
  - **SUGGESTION:** Similar to Step 3, the SCAQMD and facility should also focus on remedies. Changing a vent or eliminating cross drafts should be part of this step.

4-3  
cont.

**Item #3, Unclear If Data Currently Being Collected Can Immediately be Used to Trigger PR 1480**

It is unclear whether or not the SCAQMD can use data collected prior to PR 1480 to trigger a “Notice of Findings” letter. The concern is that a facility could immediately receive a “Notice of Findings” letter after PR 1480 is adopted, or that the SCAQMD staff might be on steps 3 or 4 of the process before PR 1480 is placed before the Board.

4-4

Staff should describe how this will be handled after the adoption of PR 1480, and if the facility could immediately receive a letter.

**Item #4: No Description of How SCAQMD Will Account for Other Pollution Sources:**

Community air monitors will be sampling pollutant concentrations from ambient air which can potentially include other surrounding emissions sources. These could include stationary sources, mobile sources, and/or area emissions sources. Some of these may be temporary or intermittent sources. It is unclear how SCAQMD will be attributing measured ambient air concentrations to potential sources. There needs to be a clear mechanism in PR 1480 that describes how SCAQMD conduct such source attribution and consider all potential source types such as trucks, trains, constructions, street sweepers, unpermitted stationary sources, fireworks, etc. The burden of identifying and quantifying these sources should not be the sole responsibility of the facility when responding to a “Notice of Findings” letter.

4-5

**Item #5: SLIDE 36: Opportunity to Commit to Changes Prior to Triggering PR 1480**

When a facility receives a “Notice of Findings” letter, it is expected that the 4-Step process will have occurred—roughly spanning over 6 months.

During this time, if the problem has been pinpointed, why can’t a facility be given the opportunity under section (d) to commit to fixing the issue? As an example, if the issue is to add a HEPA filter or enclose part of the building, why should the facility be forced to spent \$300,000+ in testing under PR 1480 when the fix is already available?

4-6

**Item #6: SLIDE 37: Providing All Test Data and Requested Information Prior to Triggering the 14-day Response Time.**

When the facility receives the “Notice of Findings” letter, the SCAQMD should also provide all of the data and information leading to this determination. The 14-day response period should not begin until the SCAQMD has provided all the data and information. If the facility has to wait for a period of time to receive these materials, it should not be counted against the 14-day response period.

4-7

**Item #7: SLIDES 50-56: Costs for PR 1480 Will Exceed \$300,000.**

In CMC's March 18, 2019 comment letter, we included specific information on the cost of ambient air monitoring. Based on the last working group meeting, this information did not get included in the presentation.

On July 12, 2017, the South Coast AQMD, Bay Area AQMD, San Joaquin Valley AQMD, and Sacramento Metropolitan AQMD submitted a letter to Governor Jerry Brown<sup>1</sup>. The letter detailed the cost of ambient air monitoring and estimated this cost at \$6,000/week or \$300,000 per year.

4-8

These numbers should be at least roughly accurate given the authors of the letter, and the fact it is being sent to the Governor of California. SCAQMD staff working on PR 1480 could use this information for their cost evaluation unless more recent information is available.

**Item #8: SLIDES 50-56: Costs for 1402 Must Be Included.**

PR 1480 has a direct trigger into Rule 1402. The cost of complying with 1402 should be included in PR 1480 economic assessment. A full Health Risk Assessment (HRA) under 1402 is not less than \$250,000.

4-9

**Item #9: CMC Disagrees with Using OEHHA's Risk Factor for Hexavalent Chromium.**

While OEHHA may be the preferred source for health risk values, it is not required that SCAQMD use OEHHA. This is important because there are inherent problems with OEHHA's analysis of the inhalation of hexavalent chromium. As an example, SCAQMD would be relying on OEHHA's data records that come from the 1940s and 1950s.

4-10

At the PR 1480 working group meeting that staff discusses inhalation of hexavalent chromium, CMC requests that we spend time discussing industry's problems with OEHHA's data.

**RECOMMENDATIONS FOR FURTHER SCOPING AND DEVELOPMENT**

Thank you for your time, and for allowing CMC to participate and comment on PAR 1480. We look forward to continued discussions.

Sincerely,



James Simonelli  
Executive Director

<sup>1</sup> [http://www.metalscoalition.com/uploads/2/4/3/5/24359359/aqmd\\_letter\\_to\\_jerry\\_brown\\_7-12-17\\_official\\_.pdf](http://www.metalscoalition.com/uploads/2/4/3/5/24359359/aqmd_letter_to_jerry_brown_7-12-17_official_.pdf)

**Responses to California Metals Coalition (CMC) Comment Letter, submitted 6/20/19**

- 4-1 Response: The Four-Step Process is included in the Staff Report. The designation process for Metal TAC Monitoring Facilities generally follows the Four-Step process, which form the basis for the information for the Notice of Findings and the criteria for designating a Metal TAC Monitoring Facility.
- 4-2 Response: Paragraph (d)(1) includes an Initial Notice as an early notification that the South Coast AQMD is conducting ambient monitoring of Metal TACs near the facility.
- 4-3 Response: An Initial Notice would be given to the owner or operator of a facility at least 30 days prior to the Notice of Findings and the facility may request up to 90 days following the Notice of Findings to provide information on why the facility should not be designated a Metal TAC Monitoring Facility. During this time, the owner or operator can work with South Coast AQMD staff on measures to reduce emissions prior to designation. PR 1480 allows the operator under paragraph (d)(5) to provide a list of enforceable measures that have been implemented and enforceable measures that will be implemented within 90 days of the Notice of Findings. This allows the operator the opportunity to implement enforceable measures that can reduce or eliminate the estimated health risk at the sensitive receptor to a level that is less than the Significant Risk Level. The focus is on implementation of permanent and enforceable measures. The South Coast AQMD staff agrees that modifications to a building enclosure can significantly reduce fugitive emissions and there are mechanisms to ensure that these modifications are enforceable. However, permanent reductions at the source are also needed.
- 4-4 Response: Historical data gathered prior to the passage of Rule 1480 may be used to designate a facility. However, the South Coast AQMD staff would have to follow the designation process in subdivision (d). This means that an Initial Notice would be provided and the owner or operator of a facility would have an opportunity to provide additional information. Further, the facility would have to meet the criteria in paragraph (d)(7) in order to be designated a Metal TAC Monitoring Facility. One of the criteria for designation is that the facility has been designated as a Potentially High Risk Level Facility under Rule 1402. A facility could not be designated under PR 1480 until the facility was designated under Rule 1402 as a Potentially High Risk Level Facility. To date, there are only three facilities that have been designated as Potentially High Risk Level Facilities, two facilities in Paramount and one facility in Long Beach.
- 4-5 Response: Please see response to Comment 2-7 and Appendix 2, Alternative Methodology for establishing the Benchmark Concentration. Community air monitors are one of the various ways that South Coast AQMD staff can be alerted that there is an air quality issue. When an air quality issue is



identified, South Coast AQMD staff conducts an investigation of the sources and initiates Monitoring and Sampling. After receiving a Notice of Findings, an owner or operator of a facility has the opportunity to provide information to the Executive Officer of other sources which may be contributing to the ambient monitors and South Coast AQMD staff would investigate those sources. However, designation as a Metal TAC Monitoring Facility is solely based on the Metal TAC emissions from the facility. Therefore, it is not necessary to attribute measured ambient concentrations to other sources.

- 4-6 Response: Please see response to Comment 4-3. Paragraph (d)(5) recognizes that there will be emission reductions from Enforceable Measures that will be fully operational within 90 days of the Notice of Findings and the compliance efforts by affected facilities to comply with existing South Coast AQMD rules. Therefore, the Executive Officer will take this information into consideration when designating a Metal TAC Monitoring Facility. In addition, subparagraph (d)(5)(D) includes a provision where the owner or operator can provide a list of equipment or sources where there is an applicable Regulation XIV rule that has a future effective compliance date. Provided the owner or operator has met all of the interim requirements specified in the Regulation XIV rule, the emission reductions associated with these measures would be accounted for when estimating the health risk at the sensitive receptor as part of the designation process.
- 4-7 Response: Please see response to Comment 2-4. The 14 day response time has been extended to 30 days following the Notice of Findings to provide information, with the option to provide information up to 90 days following the Notice of Findings. Paragraph (d)(3) provides specifics on the information which will be provided to the facility within the Notice of Findings and it includes the data and information the Executive Officer has that indicates a facility may be designated as a Metal TAC Monitoring Facility.
- 4-8 Response: Please see response to Comments 2-9 and 3-7. The comment refers to a letter from the air districts to Governor Jerry Brown on AB 617 ambient air monitoring costs. As discussed at the Working Group Meeting #7 on 8/6/2019, this was based on South Coast AQMD's cost to monitor several facilities in the City of Paramount which were under Orders for Abatement. The annual cost of \$300,000 was based on fully burdened rates for two field staff to setup, conduct, and retrieve samples from monitors mounted in locations which were not easily accessible (i.e. elevated on utility poles). Sample analysis was also expedited because the results were the basis for the Order for Abatement conditions to curtail operations if a concentration limit was exceeded. PR 1480 does not require expedited



sample analysis and the monitors will likely be placed near the fenceline within the facility where the location should be accessible by one field staff.

The costs of PR 1480 have been analyzed in the Socioeconomic Impact Assessment included in Chapter 3 of the Staff Report. Fees for Monitoring and Sampling for a facility that elects to use South Coast AQMD staff to conduct the Monitoring and Sampling have been substantially reduced through the rulemaking process. The South Coast AQMD was able to provide a number of allowances such as reducing the number of South Coast AQMD personnel from 2 to 1 if the monitor could be safely accessed and reducing the minimum monitors from 2 to 1. This reduced the cost by more than 50%. Some facilities have commented through the rulemaking process that they would keep an upwind monitor. PR 1480 would not require that upwind monitor and it would be the choice of the operator to have an upwind monitor. In addition, the fees under the Alternative Monitoring and Sampling are expected to be higher than a third party consultant that the facility is allowed to hire to conduct the ambient monitoring and sampling. Additionally, smaller facilities with 25 or fewer employees and gross receipts of three million dollars or less, averaged over the previous three years are exempt from PR 1480 except paragraphs (d)(1) and (d)(2).

- 4-9 Response: Please see response to Comment 3-4. PR 1480 and Rule 1402 are separate rules and PR 1480 does not have a direct trigger into Rule 1402. PR 1480 includes an additional criteria that the facility must be designated as a Potentially High Risk Level Facility under Rule 1402 before designation in PR 1480. Rule 1402 has a process to designate a Potentially High Risk Level Facility, which is based on exceeding the Significant Risk Level at a Sensitive Receptor or Worker receptor from all TAC emissions from a facility. Similarly, PR 1480 has a process to designate a Metal TAC Monitoring Facility, which is based on exceeding the Significant Risk Level at a Sensitive Receptor from the Metal TAC emissions from a facility. In order to be designated under either rule, the designation process must be followed and the facility has to meet criteria specific to each rule. Implementation costs associated with Rule 1402 were evaluated during that rulemaking and staff believes that those cost impacts are separate from PR 1480. However, at the request of stakeholders the Socioeconomic Impact Assessment does include information regarding implementation costs associated with Rule 1402 are provided.
- 4-10 Response: South Coast AQMD's Risk Assessment Procedures rely on OEHHA's methodology. Stakeholder concerns with OEHHA's methodology or data should be discussed with OEHHA directly.



August 14, 2019

**Via Email**

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

**RE: Proposed Rule 1480 –Toxic Metal Air Emission Monitoring**

Dear Min, Dan, Susan and Neil -

Following the Working Group Meeting #7 on August 6, the Metal Finishing Association of California [MFASC] would like to provide additional written comments highlighting the key issues we have identified with Proposed Rule 1480, Air Toxic Metals Monitoring.

MFASC continues to have significant concerns with PR 1480. The association members and representatives have raised these concerns in the workshops, and MFASC submitted a substantive comment letter on March 22.

As is clear from the comments and requested revisions that follow, the regulation as currently drafted would provide the district with unfettered authority and discretion, without clear criteria for key district decisions, that would enable the district to easily designate every facility as a Potentially Significant Facility [PSF], subjecting them to expensive and onerous requirements to place monitors, frequently collect and analyze samples, and submit reports.

In addition, the specific costs remain unidentified and potentially extremely significant, especially when consideration is given to the new costs and burdens on facilities working to comply with PAR 1469.

Page | 1

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We urge the district to address and resolve these issues prior to the presentation of the rule to the district Governing Board for adoption. Until the issues are resolved, MFASC is not in a position to support the new rule.

The specific provisions of the draft regulation, and our concerns, follow here:

**Initial notice – Subdivision (d) (1)** – the regulation must set forth clear criteria for important decisions the district will be making. The text must clearly state what is considered “*contributing*” and what is considered “*emitting a substantial amount*” as these are the determinations that trigger the initial notice.

The regulation must include a provision requiring the district to provide a facility, within the initial notice, with information on the process, timeframes, and available options.

In addition, the regulation must require the district to notify the facility that it is monitoring and the potential sources of emissions that are being monitored.

Finally, yet importantly, the regulation must include a provision requiring the district to inform the facility of the information that is serving as the basis for the initial notice, together with a provision enabling the facility to address and potentially resolve the basis for the notice as an alternative to potentially being designated a PSF.

**Compliance with Initial Notice – Subdivision (d) (2)** – it must be clear in subdivision (A) that a facility will not be required to perform source testing. It should be clear in subdivision (C) that the records to be provided are for the metals addressed by this rule and not any toxic air contaminants.

**Notice of Findings – Subdivision (d) (3)** – the regulation must require the district to provide facilities with the information that will enable them to respond to the notice of findings. The text must state that the notice shall include all of the data that the district has, including sampling results from all other sources of emissions.

In addition, the regulation must provide that, if the district decides to proceed with a notice of findings, it shall do so no later than 6 months following the issuance of an initial notice.

**Notice of Findings - Subdivision (d) (5)** – the regulation must provide additional time for a facility to provide a response to the notice of findings. Even with a potential 30 –day extension, the requirement that a facility respond in writing within 30 days of the Notice of Findings provides insufficient time for the facility to review the district’s information and prepare its response.

**Written List – Subdivision (d) (6)** – the regulation must clearly state what is considered “*enforceable measures*” that permanently reduce emissions.

**Designation of a Potentially Significant Facility [PSF] – Subdivision (d) (8)** – the regulation must set forth clear criteria for the district to designate a facility as a PSF.

Page | 2

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5-1

5-2

5-3

5-4

5-5

5-6

<p>Authorizing the district to make a designation “based on information, including but not limited to...” is vague and ambiguous, provides unlimited discretion to the district, fails to set forth prioritization of information, and does not provide for weighing of information.</p>	5-6 cont.
<p>This is further complicated by the definition of a PSF in subdivision (a) (10) as facility the district has determined “is likely to either exceed or has exceeded the Significant Risk Level for any Sensitive Receptor location...”. The regulation must clearly state what is considered “likely.” Subdivisions (d) (8) and (a) (10) must be consistent.</p>	
<p><b>Notification of Designation or Nondesignation – Subdivision (d) (9)</b> – the regulation must provide a reasonable deadline for the district to notify the facility that a determination has been made to designate it as a PSF or not to designate it as a PSF.</p>	5-7
<p>In addition, the list of metals and values must be listed in specific subdivision (C).</p>	
<p><b>Monitoring and Sampling Plan – Subdivision (e) (2)</b> – the regulation must set forth clear criteria for a decision to approve or disapprove a draft monitoring and sampling plan, rather than the merely stating that the decision “will be based on information submitted...”.</p>	5-8
<p>The regulation must more clearly state in subdivision (A) that the district shall provide a facility with a deficiency letter that shall identify each deficiency when it disapproves a draft monitoring and sampling plan.</p>	
<p><b>Metal TAC Monitoring Requirements – Subdivision (f) (4)</b> – the regulation must clearly state that the facility shall not miss a valid sample for more than one day over a consecutive 30 <i>calendar</i> day period, so that the requirement is not misunderstood as referring to missing a valid sample over a 30 <i>sample</i> day period.</p>	5-9
<p><b>Metal TAC Monitoring Requirements – Subdivision (f) (7)</b> – the regulation must provide the opportunity for a hexavalent chromium sample to be submitted for analysis more than one calendar day after collection when the shipment to a laboratory will take a longer period of time. The regulation must also provide more than one business day for a facility to provide a sample to the district upon request.</p>	5-10
<p>It would also be helpful if the District would provide the association with a list of the laboratories it has identified that conduct hexavalent chromium sample analysis.</p>	
<p>It is foreseeable that the requirement that valid samples or sample extracts be retained for one year will create a significant compliance cost for facilities.</p>	5-11
<p><b>Alternative Monitoring and Sampling - Subdivision (g)</b> – the regulation must list the specific sampling methods that the district will utilize.</p>	5-12
<p><b>Reduced Monitoring and Sampling Frequency – Subdivision (h) (1) (A)</b> – the regulation must clearly state that both the 30 day rolling average and the 180 consecutive day calculation are 30 and 180</p>	5-13

Page | 3

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<p><i>calendar days</i>, so that the periods are not misunderstood as referring to sampling days.</p>	<p>5-13 cont.</p>
<p><b>Reduced Monitoring and Sampling Frequency – Subdivision (h) (1) (B)</b> – the regulation must include a maximum period of years after which a facility that is ineligible to modify its sampling schedule may once again submit a request to reduce the frequency of monitoring and sampling. Otherwise, the ineligibility would continue forever.</p>	<p>5-14</p>
<p><b>Request to Discontinue Metal TAC Monitoring – Subdivision (j)</b> – the regulation in subdivisions (1) and (1) (A) must clearly state that the 180 consecutive day monitoring and sampling period is calendar days, so that the period is not misunderstood as referring to sampling days.</p>	<p>5-15</p>
<p>The regulation in subdivision (1) (C) must not require a description of the enforceable measures in those situations where monitoring results demonstrated low emission levels.</p>	<p>5-15</p>
<p>The regulation in subdivision (3) must provide a maximum period of time for the district to notify a facility as to whether the request to discontinue monitoring has been approved or disapproved.</p>	<p>5-15</p>
<p><b>Costs –Appendix 1</b> – while we appreciate the inclusion of a preliminary and incomplete Appendix 1, it remains critical for the industry to be able to have information on the district’s cost estimates in sufficient advance time that will allow the impacted facilities to review the information and provide a response.</p>	<p>5-16</p>
<p>The cost estimates must address every cost to be borne by facilities for each potential compliance pathway including but not limited to the preparation of the response to the district’s notification that they are a Potentially Significant Source, the preparation of an air monitoring plan, the performance of sampling and analysis, and the review of air monitoring data.</p>	<p>5-16</p>
<p><b>Multiple Sources of Emissions – new provision</b> - as mentioned near the conclusion of the workshop, the regulation must include provisions that address the situations where there are multiple sources of emissions.</p>	<p>5-17</p>
<p><b>Context – PAR 1469</b></p>	<p>5-17</p>
<p>It remains important to recognize that metal finishing facilities are now endeavoring to meet the significant new requirements and related compliance costs now that the district has adopted Proposed Amended Rule 1469 (PAR 1469). This follows almost two years of meetings and negotiations.</p>	<p>5-18</p>
<p>The rule addresses hexavalent chromium containing tanks not previously known to be sources of hexavalent chromium emissions and includes requirements such as building enclosures, best management practices, and housekeeping provisions that minimize the release of fugitive emissions from chromium electroplating and chromic acid anodizing operations.</p>	<p>5-18</p>
<p>PAR 1469 also has provisions to ensure continuous proper operation of point source pollution controls and contingency provisions to add pollution controls for a building enclosure for any facility that</p>	<p>5-18</p>

repeatedly fails to comply with the point source emission requirements or fails to shut down a tank after not passing a test to evaluate the collection efficiency of a tank with pollution controls.

The District estimates that small decorative plating facilities will experience an average impact of 3.4% to 7.4% of their revenues, and that this will increase dramatically if chemical fume suppressants are not certified and they are required to install add-on pollution controls. The district also projects that approximately 37 to 63 jobs will be lost each year.

5-18  
cont.

Thank you for the consideration of these and the other issues that our association and its members are raising in this rulemaking. MFASC and our representatives look forward to continued discussions on the PR 1480 with the District.

Sincerely,

*Justin Guzman*

Justin Guzman, MFASC Executive Officer

*Jerry Desmond*

Jerry Desmond, MFASC Advocate



**Responses to Metal Finishing Association of Southern California (MFASC) Comment Letter, submitted 8/14/19**

5-1 Response: The Initial Notice in paragraph (d)(1) is an early written notice that the Executive Officer is conducting ambient monitoring of Metal TACs near the facility and does not have any criteria associated with it as it is an informational early notice to the owner or operator. The owner or operator of a facility may schedule a meeting with the Executive Officer at any time to discuss any aspects of PR 1480. During this initial stage, the Executive Officer may also issue Information Requests for the purposes of gathering the information required to determine if a facility meets the criteria to be designated a Metal TAC Monitoring Facility. Paragraph (d)(3) includes the specific information which will be provided in the Notice of Findings to an owner or operator of a facility prior to designation. The criteria for designation as a Metal TAC Monitoring Facility is based on the facility's Metal TAC emissions causing the Significant Risk Level of 100 in one million to be exceeded at a Sensitive Receptor.

Provisions referring to “contributions” and “emitting a substantial amount” have been removed. PR 1480 bases the criteria for designating a Metal TAC Monitoring Facility on facility-specific information that will be inputted in an air dispersion model to estimate the health risk at a sensitive receptor. This approach eliminates the need to determine the contribution of another source.

5-2 Response: The Information Requests pursuant to paragraph (d)(2) would give the owner or operator of a facility the option to either conduct any required source tests or to allow the Executive Officer to conduct the source tests. Additionally, it was clarified that the Information Requests would be limited to Metal TACs.

5-3 Response: Please see response to Comment 3-3. Paragraph (d)(3) lists the information that will be provided in the Notice of Findings and states that the Notice of Findings would be issued no later than 180 days of the Initial Notice or 180 days of the due date of the most recent Information Request, whichever is later.

5-4 Response: Please see response to Comment 2-4. The 14 day response time has been extended to 30 days following the Notice of Findings for an owner or operator of a facility to provide information to the Executive Officer. To provide the owner or operator of facilities additional time to prepare a response, an Initial Notice would be given to the owner or operator of a facility at least 30 days prior to the Notice of Findings and the owner or operator may request up to 90 days following the Notice of Findings to provide information on why the facility should not be designated a Metal TAC Monitoring Facility. Therefore, the owner or operator has at least 120

days to prepare information from the date of the Initial Notice should a Notice of Findings be issued to the facility.

- 5-5 Response: The term “Enforceable Measures” has been defined in paragraph (c)(4). Paragraph (d)(5) has been expanded to clarify what information should be included in a response to the Notice of Findings, including those related to Enforceable Measures.
- 5-6 Response: Paragraph (d)(7) states the criteria the Executive Officer will use when designating a Metal TAC Monitoring Facility. The vague and ambiguous terms referred to in the comment have been removed from PR 1480.
- 5-7 Response: There is no deadline by which the Executive Officer must notify an owner or operator whether or not their facility has been designated. Once the owner or operator provides information to the Executive Officer pursuant to paragraph (d)(5), the Executive Officer needs to review and consider the information prior to making the designation. By not placing a deadline, this allows the Executive Officer to continue working with the owner or operator prior to designation.
- If a facility is designated as a Metal TAC Monitoring Facility, the designation letter would specify the Metals of Concern and the corresponding Benchmark Concentration.
- 5-8 Response: Subdivision (e) has been expanded to further detail the review and approval process for the various types of Monitoring and Sampling Plans including language for deficiency letters that provide the facility the information on how to correct and resubmit a revised draft Monitoring and Sampling Plan.
- 5-9 Response: PR 1480 was revised to include a reference to “calendar day” where appropriate.
- 5-10 Response: PR 1480 does not require expedited sample analysis. Results have to be provided to the Executive Officer on the 21st of every month, which takes into account the two week turnaround on sample analysis. The sample analysis turnaround time should be specified in the Monitoring and Sampling Plan. Paragraph (f)(7) allows an owner or operator of a facility to provide Valid Samples or sample extracts to the Executive Officer five days after the request is made. South Coast AQMD staff does not maintain a list of laboratories capable of performing hexavalent chromium analyses.
- 5-11 Response: Retention of Valid Samples or sample extracts has been reduced from one year to six months.



- 5-12 Response: The Rule 1480 Monitoring and Sampling Plan Guidance provides information on the recommended Monitoring and Sampling methods to be used.
- 5-13 Response: This criteria is no longer used to allow a Metal TAC Monitoring Facility to reduce the sampling frequency and/or number of monitors.
- 5-14 Response: Subparagraph (e)(5)(D) clarifies that a Metal TAC Monitoring Facility has a total of two opportunities to be on a Reduced Monitoring and Sampling Plan.
- 5-15 Response: The proposed rule language has been revised and the discontinuation of Monitoring and Sampling occurs when the owner or operator receives written notification from the Executive Officer that the facility's approved Risk Reduction Plan has been fully implemented or if a Risk Reduction Plan is not necessary, that the Health Risk Assessment has been approved.
- 5-16 Response: The costs of PR 1480 have been analyzed in the Socioeconomic Impact Assessment included in Chapter 3 of the Staff Report.
- 5-17 Response: The PR 1480 designation as a Metal TAC Monitoring Facility is solely based on the Metal TAC emissions from the facility. In situations where there are multiple sources of emissions, the Executive Officer would consider the emissions from those other sources during the designation process. Additionally, if there are multiple sources of the same Metal of Concern, Appendix 2 includes an alternative approach to determining the Benchmark Concentration that acknowledges the other sources, if they meet certain criteria.
- 5-18 Response: Paragraph (d)(5) recognizes the compliance efforts by affected facilities to comply with existing South Coast AQMD rules and that information will be considered in the designation process. Subparagraph (d)(5)(D) includes a provision where the owner or operator can provide a list of equipment or sources where there is an applicable Regulation XIV rule that has a future effective compliance date. Provided the owner or operator has met all of the interim requirements specified in the Regulation XIV rule, the emission reductions associated with these measures would be accounted for when estimating the health risk at the sensitive receptor as part of the designation process.
- Additionally in paragraph (k)(3), facilities with 25 or fewer employees and average annual gross receipts of three million dollars (\$3,000,000) or less, averaged over the previous three years, are exempt from the provisions of PR 1480 except paragraphs (d)(1) and (d)(2)..



October 4, 2019

**Via Email**

Min Sue	<a href="mailto:msue@aqmd.gov">msue@aqmd.gov</a>
Dan Garcia	<a href="mailto:dgarcia@aqmd.gov">dgarcia@aqmd.gov</a>
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South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, CA 91765

**RE: Proposed Rule 1480 –Toxic Metal Air Emission Monitoring [Updated Comments]**

Dear Min, Dan, Susan and Neil -

Following up on Wednesday's Public Workshop, and in advance of the Working Group Meeting #9 that will be held next Tuesday, October 8, the Metal Finishing Association of California [MFASC] would like to provide additional written comments highlighting the key issues of concern with Proposed Rule [PR] 1480, Air Toxic Metals Monitoring. As we continue to engage in a meaningful dialogue concerning the Rule, MFASC continues to have significant concerns with PR 1480.

The association members and representatives have raised these concerns in the working group meetings and the public workshop, and MFASC submitted substantive comment letters on March 22 and August 14. We appreciate the revisions that have been made to date as the rule has been developed, but the work is far from done.

First and most significantly, the costs associated with the efforts of facilities to comply with the new rule are quite strenuous and would cause many businesses to close their operations with a detrimental impact to their communities including the loss of jobs to the thousands of local residents they employ.

6-1

Page | 1

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Based on information recently provided by the District, the estimated annual cost for each impacted facility would be approximately \$300,000. For the many businesses that have annual gross revenues in the range of \$1 million to \$2 million, this impact would be a death knell.

It is also important to note the costs and burdens associated with proposed new Rule 1480 are in addition to the significant costs and impacts of the recently-adopted revisions to Rule 1469 that address the same air emissions from our facilities. Metal finishing businesses are devoting significant financial resources and efforts to implement the numerous mandates of that rule. The negative impacts of revised Rule 1469 will easily exceed the District’s estimates that impacted facilities will cease operations and significant jobs will be lost. The work and the jobs will move outside of this state.

6-1  
cont.

Proposed Rule 1480 presents several additional concerns and challenges. These include:

- The rule would impose requirements on metal finishing facilities that are out of proportion to the contributions that an individual facility makes to the emissions of toxic air contaminants.
  - For example, we contribute less than 1/3 of 1% of the emissions of hexavalent chromium.
  - There are numerous other sources of emissions that are not permitted by the District and would not be subject to this rule – yet the rule would only impose expensive monitoring and sampling requirements on the permitted facilities.
- The rule would impose requirements on facilities regardless of either the amount of their emissions or the proportion of their contribution to an exceedance of a significant risk level for a toxic air contaminant.
  - Any contribution would trigger a Notice of Findings and a designation that a facility is a Metal TAC Monitoring Facility – with the resulting costs and burdens.
- The rule would establish timeframes that are unreasonably short and would provide insufficient time for affected facilities to provide meaningful responses. These include:
  - *Two hours* - to report a failed sample to the District.
  - *Twenty-four hours* - to report three consecutive exceedances and provide information that they are not attributable to a facility.
  - *Fourteen days* – to respond to a District Notification of Findings and request a meeting.
  - *Thirty days* – to develop and provide a response to a denial of a draft monitoring and sampling plan.
  - *Sixty days* – to develop and provide information challenging the Notice of Findings.
- The rule would unfairly place challenging if not impossible burdens on facilities to develop and provide evidence proving negatives:
  - That they are not contributing to an exceedance of a significant risk level for a toxic air contaminant; and
  - That the emissions are not attributable to that specific facility.
- The rule would fail to recognize, with regard to facilities subject to Rule 1469, that significant efforts are being made to comply with the rule with the result that emissions have been significantly reduced.
- The rule would fail to provide a sensible process for facilities to work together with the District to identify and implement measures that prevent the facility from being designated as a Metal

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TAC Monitoring Facility and incurring the significant expenses and undergoing the significant monitoring and sampling burdens.

6-6  
cont.

We urge the district to address and resolve these issues prior to the presentation of the rule to the district Governing Board for adoption. MFASC will continue to be engaged. Until the issues are resolved, MFASC is not in a position to support the new rule.

Thank you for the consideration of these and the other issues that our association and its members are raising in this rulemaking. MFASC and our representatives look forward to continued discussions on the PR 1480 with the District.

Sincerely,

*Justin Guzman*

Justin Guzman, MFASC Executive Officer

*Jerry Desmond*

Jerry Desmond, MFASC Advocate

**Responses to Metal Finishing Association of Southern California (MFASC) Comment Letter, submitted 10/4/19**

6-1 Response: Please see response to Comment 4-8. Fees for monitoring and sampling for a facility that elects to use South Coast AQMD staff to conduct the monitoring and sampling have been substantially reduced through the rulemaking process. The South Coast AQMD was able to provide a number of allowances such as reducing the number of South Coast AQMD personnel from 2 to 1 if the monitor could be safely accessed and reducing the minimum monitors from 2 to 1. This reduced the cost by more than 50%. Some facilities have commented through the rulemaking process that they would keep an upwind monitor. PR 1480 would not require that upwind monitor and it would be the choice of the operator to have an upwind monitor. In addition, the fees under the Alternative Monitoring and Sampling are expected to be higher than a third party consultant that the facility is allowed to hire to conduct the ambient monitoring and sampling.

Paragraph (d)(5) recognizes the compliance efforts by affected facilities to comply with existing South Coast AQMD rules and that information will be considered in the designation process. The costs of PR 1480 have been analyzed in the Socioeconomic Impact Assessment included in Chapter 3 of the Staff Report.

Additionally in paragraph (k)(3), facilities with 25 or fewer employees and average annual gross receipts of three million dollars (\$3,000,000) or less, averaged over the previous three years, will not be subject to this rule

6-2 Response: PR 1480 affects all facilities with Metal TAC emissions. Designation under PR 1480 would be based solely on the Metal TAC emissions coming from the facility causing the Significant Risk Level to be exceeded at any Sensitive Receptor. This approach eliminates the need to decipher the contribution from other sources when estimating the health risk at the sensitive receptor.

When evaluating toxic emissions and their associated health risk, there are a variety of factors in addition to the emissions that are accounted for. Some key parameters in estimating the health risk include the potency of the toxic air contaminant, the health effects (cancer or non-cancer), the proximity to the sensitive and worker receptors. The South Coast AQMD appreciates that toxic emissions Basin-wide have reduced, however, there still remains facilities that pose significant health risk to neighboring communities.6-3

Response: The requirement to notify the Executive Officer by telephone within two hours of knowing whether a sample is invalid, or whether a sample has not or will not be taken, is an adequate amount of time. The deadline for providing written follow up report has been extended to three calendar days following the call.

Once an owner or operator of a Metal TAC Monitoring Facility is aware of the first and second exceedances, they would be more vigilant about the next Valid Sample result. Therefore, the requirement to provide notification to the Executive Officer by telephone 24 hours after the receiving the third consecutive Valid Sample results that exceeds the Benchmark Concentration is reasonable. The deadline for providing a written report on the possible causes not attributed to the facility has been extended to three calendar days.

The 14 day response time has been extended to 30 days following the Notice of Findings for an owner or operator of a facility to provide information to the Executive Officer, with the option to provide information 90 days following the Notice of Findings. The provision requiring an owner or operator to request a meeting within 14 days of receiving the Notice of Findings has been removed. An owner or operator can request meetings with the Executive Officer and South Coast AQMD staff at any time during the designation process.

When a draft Monitoring and Sampling Plan is not approved, the Executive Officer will provide the owner or operator of a Metal TAC Monitoring Facility with a letter that specifies all deficiencies in the Plan. Therefore, the owner or operator of a Metal TAC Monitoring Facility would be aware of what needs to be updated and 30 days is sufficient to correct the deficiencies and submit the revised draft Monitoring and Sampling Plan.

The time for an owner or operator to respond to a Notice of Findings was extended from 60 days to 90 days. This is sufficient time for an owner or operator to review the information contained in the Notice of Findings and prepare a response or provide additional information.

- 6-4 Response: The designation of a Metal TAC Monitoring Facility under PR 1480 would be based solely on the Metal TAC emissions from the facility causing an exceedance of the Significant Risk Level at a Sensitive Receptor. Throughout the designation process, the owner or operator of a facility has the opportunity to provide evidence to the Executive Officer of other sources or that the Metal TAC concentrations at the monitor are not attributed to the facility. PR 1480 includes specific criteria the Executive Officer would use to designate a facility.
- 6-5 Response: Paragraph (d)(5) recognizes the compliance efforts by affected facilities to comply with existing South Coast AQMD rules and that information will be considered in the designation process. Subparagraph (d)(5)(D) includes a provision where the owner or operator can provide a list of equipment or sources where there is an applicable Regulation XIV rule measure to reduce emissions that has a future effective compliance date. Provided the owner

or operator has met all of the interim requirements specified in the Regulation XIV rule, the emission reductions associated with these measures would be accounted for when estimating the health risk at the sensitive receptor as part of the designation process.

- 6-6 Response: One of the criteria for designation as a Metal TAC Monitoring Facility is that the facility must first be designated as a Potentially High Risk Level Facility under Rule 1402. Through the Rule 1402 process that the facility would work with the South Coast AQMD to develop measures that will reduce the emissions from a facility. PR 1480 does include three mechanisms to provide information to reduce or eliminate emissions that will be used when calculating the health risk at the sensitive receptor which include enforceable measures that have been implemented, enforceable measures that will be implemented within 90 days of a Notice of Findings, and implementation of Regulation XIV rules with future effective compliance dates. The designation process in PR 1480 is separate and the goal of PR 1480 is to transfer the responsibility of Monitoring and Sampling from the South Coast AQMD to the facility responsible for the emissions causing the health risks.



**Henk J. van der Meyden, PG**  
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October 21, 2019

Min Sue  
 Planning, Rule Development and Area Sources  
 SCAQMD  
 21865 Copley Drive  
 Diamond Bar, CA 91765

via e-mail - [msue@aqmd.gov](mailto:msue@aqmd.gov)

**RE: Comments on SCAQMD Proposed Rule 1480: Ambient Monitoring and Sampling of Metal Toxic Air Contaminants**

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Dear Mr. Sue:

Arconic Inc. (Arconic) is pleased to submit the following comments on the September 20, 2019 proposed draft rule language of South Coast Air Quality Management District's (SCAQMD) Proposed Rule 1480 - Ambient Monitoring and Sampling of Metal Toxic Air Contaminants (Proposed Rule 1480). Our California operations include several facilities<sup>1</sup> located in the SCAQMD that potentially could be impacted by Proposed Rule 1480.

Arconic (NYSE: ARNC) creates breakthrough products that shape industries. Working in close partnership with our customers, we solve complex engineering challenges to transform the way we fly, drive, build and power. Through the ingenuity of our people and cutting-edge advanced manufacturing techniques, we deliver these products at a quality and efficiency that ensure customer success and shareholder value.

Arconic is generally supportive of the SCAQMD's effort to develop regulations in order to ensure that ambient air concentrations of toxic metals remain protective of human health and the environment. We appreciate SCAQMD's continued interest in developing sound regulations that protect public health and the environment while minimizing unnecessary regulatory burdens on industry and offer the following comments to the SCAQMD for its consideration into the final Rule 1480.

**1.0 Arconic supports further clarification of the criteria for designating a facility as a Metal TAC Monitoring Facility.**

During Working Group Meeting #9, SCAQMD staff presented information on stakeholder comments received since the September 20, 2019 version of Proposed Rule 1480<sup>2</sup>. Several comments were directed at the words "contributing" and "contributions" in proposed paragraphs (d)(3), (d)(6), (d)(8) and

7-1

<sup>1</sup> Forged Metals, Inc. in Fontana, CA; Schlosser Forge Company in Rancho Cucamonga, CA; and Valley-Todeco, Inc. in Sylmar, CA

<sup>2</sup> Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, Working Group Meeting #9, October 8, 2019, [http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1480/pr1480\\_wg9\\_100619.pdf?sfvrsn=8](http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1480/pr1480_wg9_100619.pdf?sfvrsn=8), (accessed October 16, 2019).



Arconic Inc. Comments on SCAQMD Proposed Rule 1480  
 October 21, 2019  
 Page 2

(d)(9), and the ambiguity that these words bring to the process of designating a facility as a Metal TAC Monitoring Facility. SCAQMD staff acknowledged in the presentation made during Working Group Meeting #9 that they are looking at possibly revising the wording in these paragraphs to clarify the intent. Arconic shares the stakeholder concerns that have been raised with the use of the words "contributing" and "contribution" and supports the efforts by the SCAQMD to revise the wording.

During Working Group Meeting #9, SCAQMD staff also clarified that the designation of a facility as a Metal TAC Monitoring Facility under Proposed Rule 1480 will be based on the results of air dispersion modeling of Metal TAC emission(s) from an individual facility that indicate that the significant risk level has been met or exceeded at any sensitive receptor. Arconic appreciates this clarification that SCAQMD staff made and looks forward to this being further clarified in section (d) of the Proposed Rule 1480.

Therefore, Arconic recommends that the draft language of several subparagraphs in Proposed Rule 1480(d) be revised to read as follows:

(d)(3)(C) Findings that demonstrate the facility emissions of Metal TAC(s) are the sole source causing is contributing to ambient levels of the Metal TAC(s) identified in subparagraph (d)(3)(A) to be met or exceed the Significant Risk Level at any Sensitive Receptor; and...

(d)(6)(A) Additional data to substantiate that some or all Metal TAC emissions from equipment or processes at the individual facility of the owner or operator are not the sole source cause of contributing to the ambient monitors or meeting or exceeding the Significant Risk Level at any Sensitive Receptor;...

(d)(8)(C) Based on the Metal TAC emissions, the Executive Officer finds that the Significant Risk Level has been met or exceeded for any Sensitive Receptor using air dispersion modeling and the Risk Assessment Procedures referenced in Rule 1401 and the facility's emissions were the individual sole source that caused contributed to the Significant Risk Level to be met or exceeded, taking into account the following to the extent available:

- (i) Results of Metal TAC emissions testing and sampling analyses;
- (ii) Results of Monitoring and Sampling;
- (iii) Records of Metal TAC material usages, manifests, and other records;
- (iv) Information provided in paragraphs (d)(3), (d)(5), (d)(6), and (d)(7);
- (v) Background concentrations ~~and contributions from other sources~~; and
- (vi) Other information available to the Executive Officer.

(d)(9)(D) The facility equipment and processes are the individual sole source causing contributing to meeting or exceeding the Significant Risk Level to be met or exceeded at the Sensitive Receptors; and

**2.0 The ability to reduce the monitoring and sampling frequency and/or number of monitors should only be based on estimated health risk below Reduced Risk Level and implementation of Early Action Reduction Plan measures or Enforceable Measures**

The requirements for reduced monitoring and sampling and/or number of monitors are contained in section (h) of Proposed Rule 1480. It is Arconic's understanding that the ability to obtain approval for reduced monitoring is a one-time deal based on the criteria of paragraph (h)(1) which includes reference

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 cont.

7-2

Arconic Inc. Comments on SCAQMD Proposed Rule 1480  
 October 21, 2019  
 Page 3

to subparagraphs (e)(5)(A through (e)(5)(C). Specifically, subparagraph (e)(5)(C) stipulates that a draft Reduced Monitoring and Sampling Plan ("Plan") cannot be approved if a Metal TAC Monitoring Facility ("Facility") previously had an approved Plan in place. Under paragraph (h)(3), once a Facility is found to have exceeded the Benchmark Concentration in its approved Plan by 10X for three consecutive Valid Samples, the Facility must revert to monitoring at a frequency of one Valid Sample every three days at each site and can never obtain approval of a subsequent Plan. Even in the extreme case where a Facility subsequently implemented additional work practices, installed additional pollution control equipment, etc., and was consistently achieving monitoring results that were at levels below the Benchmark Concentration that was included in the approved initial Plan, the Facility would not be eligible to submit a new Plan for approval.

While Arconic agrees that a Facility operating under an approved Plan must take the necessary steps to ensure that the Benchmark Concentration is never exceeded by 10X, it is possible that this could occur. The criteria for the initial approval of a Plan are specified in subparagraphs (e)(5)(A) and (e)(5)(B), and Arconic believes that the ability to obtain approval of a Plan should be based on a Facility these criteria:

- (A) The estimated health risk associated with the facility's Metal TAC emissions are below the Reduced Risk Level for any Sensitive Receptor;
- (B) The measures identified in an approved Early Action Reduction Plan pursuant to Rule 1402 – Control of Toxic Air Contaminants from Existing Sources or Enforceable Measures have been implemented; and...

Arconic also believes that the SCAQMD should not be burdened with ongoing review of Plans from Facilities that are not capable of staying below the 10X Benchmark concentration on a consistent basis.

Therefore, Arconic recommends that the draft language of Proposed Rule 1480(e)(5)(C) be revised to read as follows:

(e)(5)(C) The owner or operator of a Metal TAC Facility has not been notified in the last 90 days by the Executive Director under paragraph (h)(3) or paragraph (h)(6). ~~did not previously have an approved Reduced Monitoring and Sampling Plan.~~

### **3.0 The contents of the Executive Officer's response to a request to discontinue monitoring and sampling need to be defined in Rule 1480(j)(3).**

Proposed Rule 1480(j)(3) currently requires that the Executive Officer will notify the owner or operator of a Metal TAC Monitoring Facility ("facility") in writing of the status of the Monitoring and Sampling Relief Plan ("Plan") review within 90 days after receiving the Plan. Per proposed Rule 1480(j)(1), the submittal of a Plan is required to request discontinuing sampling and monitoring.

Arconic is concerned that the proposed language of Rule 1480(j)(3) does not require the Executive Director to render a decision regarding the approval or denial of a request to discontinue monitoring and sampling. In fact, once the Executive Director has satisfied the notification of the status of the Plan review under Proposed Rule 1480(j)(3), there is no clear driver to get to the approval under Proposed Rule 1480(j)(4). Given the high costs associated with continued monitoring and sampling for a facility, Arconic believes that a timely review of a Plan for completeness with the requirements of Proposed Rule 1480(j)(1) and 1480(j)(2) and a decision to approve or deny a Plan are in the interest of both a facility

7-2  
 cont.

7-3

Arconic Inc. Comments on SCAQMD Proposed Rule 1480  
 October 21, 2019  
 Page 4

and the SCAQMD.

Therefore, Arconic recommends that the draft language of Proposed Rule 1480(j)(3) be revised to read as follows:

- (3) No later than 90 days after receiving the Monitoring and Sampling Relief Plan, the Executive Officer will notify an owner or operator of a Metal TAC Monitoring Facility in writing whether of the status of the Monitoring and Sampling Relief Plan is approved review.
- (A) If the Monitoring and Sampling Relief Plan is not approved, the notification letter will specify all deficiencies with the requirements of paragraphs (j)(1) and (j)(2) that kept the Executive Director from approving the Monitoring and Sampling Relief Plan.
- (B) Within 30 days of receiving a notification letter that states that a Monitoring and Sampling Relief Plan is not approved, the owner or operator of a Metal TAC Monitoring Facility shall submit a revised Monitoring and Sampling Relief Plan.
- (C) The review and approval of revised Monitoring and Sampling Relief Plan shall follow the requirements of paragraph (j)(3).
- (D) If 90 days elapse with no action by the Executive Officer, such inaction shall be deemed a final appealable agency action.

7-3  
 cont.

#### Conclusion

Arconic appreciates the opportunity to comment on Proposed Rule 1480. We are hopeful that our comments will help SCAQMD to further improve the proposed rule and create a final rule which incorporates flexible and cost-effective compliance provisions for our facilities and other potentially affected facilities.

Should you require clarification or further discussion of our comments, please contact me.

Sincerely,



Henk van der Meijden, PG  
 Sr. Environmental Consultant  
 Arconic, Inc.

cc.:

Philip M. Fine, Ph.D., Deputy Executive Officer Planning, Rule Development and Area Sources, SCAQMD  
 Susan Nakamura, Assistant Deputy Executive Officer Planning, Rule Development and Area Sources, SCAQMD  
 Jillian Wong, Ph.D., Planning and Rules Manager Planning, Rule Development and Area Sources, SCAQMD  
 Neil Fujiwara, Air Quality Specialist, SCAQMD  
 Yunnice Osias, Air Quality Specialist, SCAQMD

**Responses to Arconic Inc. Comment Letter, submitted 10/21/19**

- 7-1 Response: Paragraph (d)(7) states the criteria the Executive Officer will use when designating a Metal TAC Monitoring Facility. Subparagraph (d)(7)(D) specifies use of air dispersion modeling and the Risk Assessment Procedures referenced in Rule 1401 to estimate the health risk from Metal TAC emissions from the facility. Similar change was made for the Notice of Findings in subparagraph (d)(3)(D) to include air dispersion modeling. The PR 1480 designation as a Metal TAC Monitoring Facility is solely based on the Metal TAC emissions from the facility. In situations where there are multiple sources of emissions, the Executive Officer would consider the emissions from those other sources during the designation process.
- 7-2 Response: The criteria specified in subparagraph (e)(5)(D) requires that the facility did not previously have more than one approved Reduced Monitoring and Sampling Plan. A facility may be eligible for a Reduced Monitoring and Sampling Plan twice provided they meet all requirements in paragraph (e)(5).
- 7-3 Response: The proposed rule language has been revised and discontinuation of Monitoring and Sampling occurs when the owner or operator receives written notification from the Executive Officer that the facility's approved Risk Reduction Plan has been fully implemented or if a Risk Reduction Plan is not necessary, that the Health Risk Assessment has been approved. Submittal of a Monitoring and Sampling Relief Plan is no longer required in PR 1480.





October 29, 2019

Min Sue, Air Quality Specialist  
South Coast Air Quality Management District  
21865 East Copley Drive  
Diamond Bar, California 91765

Dear Mr. Sue:

The California Metals Coalition appreciates the opportunity to comment on the South Coast Air Quality Management District ("District" or "SCAQMD") workshop proceedings and consideration of **SCAQMD Proposed Rule (PR) 1480**.

These comments on PR 1480 are divided into the following sections: Summary; Background on CMC; Comments on Slides and Draft Language; and Closing Comments.

#### SUMMARY

This comment letter addresses the PR 1480 slides presented on October 23, 2019 at working group meeting #10. At working group meeting #10, SCAQMD staff further explained Proposed Rule 1480, draft language, and Rule 1402.

#### BACKGROUND ON CMC

California is home to approximately 4,000 metalworking facilities, employing over 350,000 Californians. The average industry salary is \$66,400/year in wages and benefits.

8 out of 10 employees in the metalworking sector are considered ethnic minorities or reside in disadvantaged communities throughout Southern California. A job in the metals sector is often the only path to the middle class for many of these Californians.

Here is a breakdown of the metalworking industry's impact on the 4 counties within SCAQMD jurisdiction:

- **Los Angeles County:** 54,290 Direct Jobs | 52,741 Indirect Jobs | \$7 billion wages | \$26 billion economic activity

- **Orange County:** 25,448 Direct Jobs | 18,912 Indirect Jobs | \$2.9 billion wages | \$10.8 billion economic activity
- **San Bernardino:** 9,778 Direct Jobs | 8,378 Indirect Jobs | \$1.2 billion wages | \$4.5 billion economic activity
- **Riverside:** 6,971 Direct Jobs | 7,712 Indirect Jobs | \$957 million wages | \$3.2 billion economic activities
- **Total:** 96,487 Direct Jobs | 87,743 Indirect Jobs | \$12 billion wages | \$33.8 billion economic activity

California metal manufacturers use recycled metal (ex: aluminum, brass, iron and steel) to make parts for the aerospace industry, clean energy technologies, electric cars, biotech apparatuses, medical devices, national defense items, agriculture, infrastructure, construction machinery, household appliances, food processing and storage, movement of water, and millions of other products demanded by society.

#### COMMENTS ON SLIDES AND/OR DRAFT LANGUAGE

##### Item #1, Draft Language (d)(5)(D)(iv): Creating a Guidance Document on Multi-TAC Source Apportionment:

Draft language in (d)(5)(D)(iv) states that the facility can provide “Evidence demonstrating that the cause(s) and source(s) of the Metal TAC emissions is not attributed to the facility.”

The following concerns were raised at the October 23, 2019, working group meeting:

- PR 1480’s model does not effectively account for multiple TAC sources. The model presupposes that differences between the modeled and monitored concentrations are due to “fugitive” in-facility sources despite multiple examples<sup>1</sup> in Paramount and Compton. The January 19, 2019 report *Application of Next Generation Air Monitoring Methods in the South Coast Air Basin* pinpoints several outside sources that have potentially major impacts:
  - “Unexpected emission sources were encountered numerous times during neighborhood surveys or during drives focused on other potential sources.” (Page 2)
  - “A significant enhancement of Cr(VI) was observed on Freeway 91, and in fact, throughout the campaign, several Cr(VI) enhancements were noted during highway drives.” (Page 16)
  - “One notable area of enhanced particulate matter chromium (PMCr) occurred during a measurements where the AML followed a street sweeper in the Longwood neighborhood.” (Page 19)
- As currently written, PR 1480 puts the burden on the facility to demonstrate whether or not other sources are contributing to exceedances. But there is not guidance for this demonstration.

8-1

CMC suggests that with no established guidance for the facilities or SCAQMD on how to set apportionment to potential sources, the guidance document staff is preparing should detail the apportionment information. This guidance should define the types and quality of information a facility would need to record in preparation for this type of demonstration and guidance to the SCAQMD as to the level of evidence needed (ex: freeways, construction, street sweeping, fires, etc.) that would be sufficient to

<sup>1</sup> <http://www.aqmd.gov/docs/default-source/compliance/Paramount/mobile-monitoring.pdf?sfvrsn=8>

accept such a demonstration. This guidance for source apportionment will directly impact (d)(7), and if the facility will be designated as a Metal TAC Facility. Given the criticality of such guidance to the implementation of the rule, it should be developed before 30 days rule adoption to inform stakeholders and the Governing Board.

8-1  
cont.

**Item #2, Draft Language (d)(8)(F) & Appendix 2: Guidance for Source Apportionment in Benchmark Concentration.**

Section (d)(8)(F) includes the “Benchmark Concentration” as part of the Metal TAC Monitoring Facility designation. As noted in the previous comment (Item #1), there is no guidance for how the SCAQMD will consider the impact of other sources on the Benchmark Concentration.

8-2

CMC suggests adding to the guidance document how source apportionment will be determined when establishing the Benchmark Concentration.

**Item #3, Draft Language (d)(2): What is the Trigger for the Information Request?**

Section (d)(2) of the draft language states: “No later than the date specified in an Information Request, an owner or operator of a facility shall comply with all Information Requests from the Executive Officer...”

8-3

What is the trigger for the Information Request? Without clear guidelines for what triggers an Information Request, it must be assumed that the Information Request has no requirements.

CMC suggests including what will trigger the facility to receive an Information Request.

**Item #4, Slide #20 and (d)(5)(C): Artificially Negates Deadlines and Investments in Other Rules (a.k.a. Cumulative Impact of Multiple Metal Rules).**

Draft language states in section (d)(5)(C) that “A written list of Enforceable Measures where equipment or processes will be implemented within 90 days of the Notice of Findings...”. This section attempts to recognize the significant efforts being made by the metals sector through other SCAQMD rules to target emission reductions.

As reference, over the last 48 months, the metals sector has seen the passage of Rules 1420, 1420.1, 1420.2, 1430, 1469, and 1407. Anticipated metal rules include, but may not be limited to, 1435, 1426, 1469.1, 1147, 1147.1, and 1147.2. Twelve rules are anticipated to cost the metals sector at least \$250 million.

8-4

The current provisions in (d)(5)(C)(i)(ii) and (iii) are too restrictive and do not recognize the significant time and investment being placed on small businesses through the other rules listed above.

CMC suggests:

- Deferring to the actual emission-reducing deadlines in a specific rule (ex: Rule 1407, 1469 or 1435) rather than the arbitrary requirements in (d)(5)(C)(i) (ii) and (iii).

- o As an example, section (d)(5)(C)(i) states that “Equipment will be installed within 60 days from the Notice of Findings...”. What if the facility is implementing emission-reducing measures in a SCAQMD rule that will take 61 days? CMC believes that if the facility is committing to the emission-reducing measures in another rule, PR 1480 should not create an artificial timeline that will negate this investment.
- o As a second example, section (d)(5)(C)(iii) states that “Equipment will be routinely operated no later than 90 Days from the Notice of Findings...” Again, this is unnecessarily restrictive. If a facility is installing a \$1 million baghouse to control the TACs of concern, an arbitrary 90 day requirement in PR 1480 should not negate this investment.
- o As a third example, section (d)(5)(C)(i) states that “Permit to Construct has been issued.” What if there is not a permit to construct needed in the emission-reducing measure? All of the new metal rules include housekeeping and facility enclosure requirements that will reduce emissions, but do not always require a permit to construct. Based on the current PR 1480 draft language, these emission-reducing measures will not be recognized.

8-4  
cont.

**Item #5, Slide #6: Additional Costs for Ambient Air Monitoring: Back-Up Power.**

On October 11, 2019, Governor Gavin Newsom stated that the power outages occurring in Northern California (PG&E territory) are the new “norm” for the state. Some businesses, and residents, have experienced up to 5 days of no electricity. These unscheduled power outages during the fire season may also impact areas within the SCAQMD jurisdiction.

8-5

Slide #6 of the presentation describes the anticipated costs of ambient air monitoring. CMC requests that the cost of back-up power to the unit(s) be incorporated. The staff report should also describe if the power outage counts as a “mechanical failure.”

Lastly, it should also be noted that CMC expects most metal facilities—especially the larger facilities—to utilize at least 2 monitors per facility.

**Item #6, SLIDE #6 and Draft Language Appendix Table 1, Section 4 “Payment Deadline” Pre-Payment:**

Draft language states that operating and maintenance fees be billed “in advance of any three month period.” CMC disagrees with the requirement. Pre-payment occurs when the vendor believes the facility is financially unstable or may not pay for services after receiving them.

8-6

CMC suggests eliminating the pre-payment requirement and replacing it with a 5% down payment on services, and then the balance being due 45 days after the ambient air monitoring data is provided to the facility.

**Item #7, SLIDE #6 and Draft Language Appendix Table 1, Section 4 “Payment Deadline” Penalties:**

Draft language states that unpaid operating and maintenance fees will incur a 10% surcharge every 60 calendar days, which equates to a 60% annual rate. As an example, the expected annual fee of \$168,000 for 2 monitors and 2 staff would generate a penalty of \$100,800/year. CMC disagrees with this steep requirement in PR 1480.

8-7



On October 11, 2019, Governor Newsom signed into law AB 539, which limits the interest rates on installment loans in the state of California. California's legislature recognized the excessive interest rates, 30-40%/year, being charged by lenders. For PR 1480, CMC suggests using market rates, approximately 6%-8%/year, as the annual interest rate on late payments.

8-7  
cont.

**Item #8, Adding a Provision to Report on the Rule in 3 Years**

There are many new concepts and significant costs being introduced in PR 1480. As an example, "Benchmark Concentration" was introduced for the first time on October 23, 2019 —approximately one week before the November 1, 2019 set hearing date.

The Benchmark Concentration calculation includes a series of calculations and related risk results that cannot be determined intuitively. This is true for long-term, advanced degree consultants and air experts, much less the average metal facility operator.

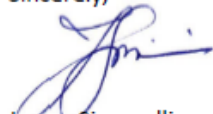
8-8

CMC suggests that PR 1480 include a provision requiring that staff present to the SCAQMD Board (2 years from adoption), how well the key aspects of the rule are working.

**CONCLUSION**

Thank you for your time, and for allowing CMC to participate and comment on PR 1480. We look forward to continued discussions.

Sincerely,



James Simonelli  
Executive Director

CC: Susan Nakamura, SCAQMD

**Responses to California Metals Coalition (CMC) Comment Letter, submitted 10/29/19**

8-1 Response: Paragraph (d)(7) states the criteria the Executive Officer will use when designating a Metal TAC Monitoring Facility. Subparagraph (d)(7)(D) specifies use of air dispersion modeling and the Risk Assessment Procedures referenced in Rule 1401 to estimate the health risk from Metal TAC emissions from the facility. The PR 1480 designation as a Metal TAC Monitoring Facility is solely based on the Metal TAC emissions from the facility. In situations where there are multiple sources of emissions, the Executive Officer would consider the emissions from those other sources during the designation process.

Paragraph (d)(5) incorporates Enforceable Measures that may be provided by the facility which go into the air dispersion modeling and Risk Assessment Procedures. These may include those measure already implemented by the facility, those that will be implemented before the 90 day deadline specified in paragraph (d)(6) for this information, and finally the measures required by Regulation XIV rules with final compliance deadlines. Upon verification by the Executive Officer, the Metal TAC emission reductions or elimination would be considered by the Executive Officer during the designation process.

8-2 Response: Staff presented an example how the Benchmark Concentration is calculated at Working Group Meeting #11, the afternoon of day the comment was received, based on Appendix 2 – Methodology for Calculating Benchmark Concentration. The calculation involves taking the highest 30 calendar day average prior to the designation of the facility as a Metal TAC Monitoring Facility and dividing it by a ratio based exclusively on the Facility’s Metal TAC emissions. Staff explained that the facility may request that the Executive Officer to adjust the average concentration based on outside sources, but it would reduce the Benchmark Concentration resulting in being more difficult for the facility to be eligible for a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan.

A provision was added in Appendix 2 for an Alternative Methodology for the Benchmark Concentration when there are multiple sources with the same Metals of Concern. The Executive Officer may utilize an alternative methodology for establishing a Benchmark Concentration that better represents the Metals of Concern that are emitted from a facility and captured by their downwind monitor, when there are multiple facilities that have emissions of the same Metals of Concern. The alternative methodology shall establish a Benchmark Concentration that is representative of the Reduced Risk Level at a sensitive receptor for each Metal of Concern taking into account facilities that are in close proximity (1,000 feet of the Metal TAC Monitoring Facility) that have the same Metals of Concern. (Please refer to Appendix 2)

- 8-3 Response: Paragraph (d)(2) specifies that the Information Requests are for additional information that the Executive Officer needs to make a determination if the facility meets the criteria specified in paragraph (d)(7).
- 8-4 Response: Paragraph (d)(5) incorporates Enforceable Measures that may be provided by the facility which will be used as inputs into the air dispersion modeling and Risk Assessment Procedures. Subparagraph (d)(5)(D) includes a provision where the owner or operator can provide a list of equipment or sources where there is an applicable Regulation XIV rule that has a future effective compliance date. Provided the owner or operator has met all of the interim requirements specified in the Regulation XIV rule, the emission reductions associated with these measures would be accounted for when estimating the health risk at the sensitive receptor as part of the designation process.
- 8-5 Response: Paragraph (f)(9) has provisions for mechanical failures, including power outages therefore back-up power due to power outages would not be required.
- 8-6 Response: Fee payments changed from quarterly billing to monthly billing to address the concern with large lump sum upfront payments. Invoice would be issued at the beginning of the month with payment due at the end of each month of Monitoring and Sampling conducted by the Executive Officer.
- 8-7 Response: The 10% surcharge is applied once on the unpaid balance after the fee is 60 days past due and is not compounded. The surcharge is not an interest rate fee but is needed for fee recovery for additional staff resources needed to collect the payments.
- 8-8 Response: The methodology to calculate the Benchmark Concentration was revised in the proposed rule language on October 20, 2019. Previously, the Benchmark Concentration was based on the Monitoring and Sampling results for the 30 days prior to submittal of the Reduced Monitoring and Sampling Plan. In the October 20, 2019 version, staff proposed an updated methodology and provided a detailed description in Appendix 2 of PR 1480. The updated methodology was based on calculating the reductions needed at the Sensitive Receptor to get below the Reduced Risk Level and applying that ratio to the highest 30 consecutive calendar day average concentration at the monitor or the concentration which represents the Reduced Risk Level plus the Basin-wide background concentration from the most recent Multiple Air Toxics Study (MATES). The Benchmark Concentration now corresponds to the Reduced Risk Level of a Sensitive Receptor, rather than the 30 day average concentration preceding a submission of a Reduced Monitoring and Sampling Plan on the previous version of the draft rule language. The Benchmark Concentration is specific

for each facility and each Metal of Concern and would be specified in the designation letter pursuant to subparagraph (d)(8)(F).

Staff will include a resolution to report back to the Stationary Source Committee on the implementation status in two years from the adoption of PR 1480.

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November 21, 2019

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Min Sue, Air Quality Specialist  
South Coast Air Quality Management District  
Planning, Rule Development and Area Sources  
21865 Copley Drive  
Diamond Bar, CA 91765

Dear Mr. Sue:

**COMMENTS ON THE SCAQMD PROPOSED RULE 1480: AMBIENT MONITORING AND SAMPLING OF METAL TOXIC AIR CONTAMINANTS**

The City of Los Angeles (City) Sanitation and Environment (LASAN), is pleased to submit the following comments on the South Coast Air Quality Management District's (SCAQMD) Proposed Rule 1480 - *Ambient Monitoring and Sampling of Metal Toxic Air Contaminants* Staff Report, dated November 6, 2019. LASAN has a number of existing facilities with approved Health Risk Assessments in our service area that could be potentially impacted by Rule 1480.

We support businesses that invest in processes and products aimed at reducing emissions and waste. Our Clean-up Green-up and LA Industry programs link businesses to resources and provide guidance to improve products and update processes so that they can comply with regulations and become green businesses. We also advocate for the development of regulations that ensure that ambient air concentrations of toxic metals is protective of public health and the environment.

We support the SCAQMD's efforts in developing sound regulations that protect public health and the environment while minimizing unnecessary regulatory burdens on the industry and offer the following comments to the SCAQMD for its consideration on final Rule 1480.

We suggest that non-substantive changes could clarify several requirements for the regulated community. Some of this language is well-used in the Socioeconomic Impact Assessment, and should also be presented in the rule itself.

9-1

We request a modification to R1480(j) so that when a business has made the investment to reduce emissions and has demonstrated this reduction, Rule 1480 shall require the SCAQMD to respond to that request to discontinue monitoring within 30 days. Per R1480 (j) Discontinuation

9-2

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Mr. Sue  
November 21, 2019  
Page 2 of 2

of Monitoring and Sampling Upon receiving notification from the Executive Officer that the required Risk Reduction Plan under Rule 1402 has been fully implemented or if a Risk Reduction Plan is not required, that the Health Risk Assessment under Rule 1402 has been approved, the facility shall no longer be designated as a Metal TAC Monitoring Facility and no longer be subject to paragraph (d)(9). As currently written, there is no defined period of time that the SCAQMD must respond.

9-2  
cont.

We suggest that a definition for "Initial Notice" be included in PR 1480(c), drawing largely from the language on page 3-2 of the November 6, 2019, Staff Report, "...that the South Coast AQMD is conducting ambient monitoring and sampling outside the fence line of the facility..."

9-3

We suggest that the R1480(c) definition for Metal TAC Monitoring Facility be expanded to include the two primary triggers to invoke and suspend this designation: the R1402 Risk Reduction Plan and R1401 Risk Assessment Procedures.

9-4

LASAN looks forward to continuing our collaboration with the SCAQMD on the Proposed Amended Rule 1480 - *Ambient Monitoring and Sampling of Metal Toxic Air Contaminants* through the adoption of new regulation just as we did on Adopted Rule 1469 *Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations*. In partnership with the SCAQMD, the City is taking proactive steps to identify and address potential sources of toxic metals that may impact communities within the city.

If you have any questions or require further discussion please contact Mr. Hassan Rad, Division Manager, Regulatory Affairs Division at (213) 847-5186.

Sincerely,



ENRIQUE C. ZALDIVAR, P.E.  
Director and General Manager  
LA Sanitation and Environment

ECZ/JM:jm

c: Susan Nakamura, SCAQMD, Rule Development  
Mas Dojiri, LASAN - Executive Office  
Michael Simpson, LASAN - IWMD  
Lonnie Ayers, LASAN - IWMD  
Hassan Rad, LASAN - RAD  
Jim Marchese, LASAN - RAD

**Responses to the City of Los Angeles Sanitation and Environment (LASAN) Comment Letter, submitted 11/21/19**

- 9-1 Response: The comment did not specify the requirements or sections of the rule language that required clarification using the Socioeconomic Impact Assessment. Therefore, no changes were incorporated.
- 9-2 Response: Subdivision (j) does not require the owner or operator of a Metal TAC Monitoring Facility to submit a request to discontinue Monitoring and Sampling. The facility may discontinue Monitoring and Sampling upon receiving notification from the Executive Officer that the required Rule 1402 Risk Reduction Plan has been fully implemented or if a Risk Reduction Plan is not required, that the Health Risk Assessment is approved. Earlier versions of PR 1480 did require that the owner or operator submit a request. To simplify the process to discontinue Monitoring and Sampling, the submittal request was removed from PR 1480 such that a defined period of time for the South Coast AQMD to respond is not needed.
- 9-3 Response: The Initial Notice is an early notification to the facility that the South Coast AQMD is conducting Monitoring and Sampling and paragraph (d)(1) includes this information. Monitoring and Sampling is defined in paragraph (c)(10) as ambient air monitoring that is designed to measure concentrations of Metal TAC(s) from a facility. Therefore, a definition for “Initial Notice” is not necessary.
- 9-4 Response: Paragraph (c)(9) defines a Metal TAC Monitoring Facility as a facility that meets the criteria in paragraph (d)(7), which includes designation under Rule 1402 as a Potentially High Risk Level Facility. A Metal TAC Monitoring Facility would no longer be designated once the criteria specified in subdivision (j) are met. Therefore, it would be redundant to place the criteria in the definition.

**APPENDIX B: ITEMIZATION OF MONTHLY FEES FOR MONITORING  
AND SAMPLING**

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**TABLE OF CONTENTS**

1. Table B-1 – Base - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 2 Staff
2. Table B-2 – Base - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 1 Staff
3. Table B-3 – Additional - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 2 Staff
4. Table B-4 – Additional - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 1 Staff
5. Table B-5 – Base - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 2 Staff
6. Table B-6 – Base - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 1 Staff
7. Table B-7 – Additional - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 2 Staff
8. Table B-8 – Additional - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 1 Staff
9. Table B-9 – Base - 1 Metal Monitor - 1 in 3 days Frequency - 2 Staff
10. Table B-10 – Base - 1 Metal Monitor - 1 in 3 days Frequency - 1 Staff
11. Table B-11 – Additional - 1 Metal Monitor - 1 in 3 days Frequency - 2 Staff
12. Table B-12 – Additional - 1 Metal Monitor - 1 in 3 days Frequency – 1 Staff
13. Table B-13 – Base - 1 Metal Monitor - 1 in 6 days Frequency - 2 Staff
14. Table B-14 – Base - 1 Metal Monitor - 1 in 6 days Frequency - 1 Staff
15. Table B-15 – Additional - 1 Metal Monitor - 1 in 6 days Frequency - 2 Staff
16. Table B-16 – Additional - 1 Metal Monitor - 1 in 6 days Frequency - 1 Staff
17. Table B-17 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 3 days Frequency - 2 Staff
18. Table B-18 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 3 days Frequency - 1 Staff
19. Table B-19 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 6 days Frequency - 2 Staff
20. Table B-20 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 6 days Frequency - 1 Staff

**Table B-1 – Base - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>
<b>Sampler Cost Estimate and Non-Labor</b>	<b>Cost</b>	<b>Anticipated life time of equipment</b>					<b>Sampler Annual Fee</b>
Omni sampler	\$5,720.00	4 years					\$1,430.00
Annual maintenance & battery	\$420.00						\$420.00
<b>Vehicle Usage</b>	<b>Miles</b>		<b>Mileage Rate</b>	<b>Number of Occurrences in a Year</b>		<b>Vehicle Annual Fee</b>	
Standard Mileage	60		\$ 0.58	243		\$8,456.40	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						<i>\$10,306.40</i>	
<b>Sampling and Monitoring Labor</b>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pick-up, and drive time	2	\$86.85	2	AQIS I	\$347.40	120	\$41,688.00
Pick-up, sample collection, and drive time	2	\$86.85	2	AQIS I	\$347.40	120	\$41,688.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						<i>\$83,938.30</i>	
<b>Sampling and Monitoring Total</b>						<b>\$94,244.70</b>	
<b>Hexavalent Chromium Analysis</b>							
<b>Materials</b>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
Filter & Petri Dish	\$ 9.60					120	\$ 1,152.00
Reagents Consumables	\$ 10.10					120	\$ 1,212.00
Instrument & Service Plan	\$ 10.68					120	\$ 1,281.60
<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>						<i>\$ 3,645.60</i>	
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Prep light inspection	0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	120	\$ 103.43
Filter impregnation, solution, and cassette	0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	120	\$ 770.55
Labeling	0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	120	\$ 1,344.53
Sample Extraction	0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	120	\$ 3,698.64
Sample Analysis	0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	120	\$ 7,397.28
QA/QC-Data Prep & Analyst Review	0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	120	\$ 1,849.32
QA/QC-Peer Review	0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	120	\$ 1,232.88
QA/QC-Senior Review & Report Prep	0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	120	\$ 1,960.74
QA/QC-Final Review	0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	120	\$ 1,476.00
QA/QC-Final Review	0.01	\$ 137.45	1	Lab Manager	\$ 1.37	120	\$ 164.94
QA/QC-Data Reporting	0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	120	\$ 413.70
<i>Labor Subtotal</i>						<i>\$ 20,412.00</i>	
<b>Hexavalent Chromium Analysis Total</b>						<b>\$ 24,057.60</b>	
<b>Annual Total</b>						<b>\$118,302.30</b>	
<b>Monthly Total</b>						<b>\$9,858.53</b>	
<b>Appendix 1 Total</b>						<b>\$10,000.00</b>	

**Table B-2 – Base - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 1 Staff**

Sampling Monitoring							Annual Fee
<i>Sampler Cost Estimate and Non-Labor</i>	Cost	Anticipated lifetime of equipment					Sampler Annual Fee
Omni sampler	\$5,720.00	4 years					\$1,430.00
Annual maintenance & battery	\$420.00						\$420.00
<i>Vehicle Usage</i>	Miles		Mileage Rate			Number of Occurrences in a Year	Vehicle Annual Fee
Standard Mileage	60		\$ 0.58			243	\$8,456.40
						<i>Non-Labor Subtotal for Monitoring and Sampling</i>	\$10,306.40
<i>Sampling and Monitoring Labor</i>	Hours	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, and drive time	2	\$86.85	1	AQIS I	\$173.70	120	\$20,844.00
Pick-up, sample collection, and drive time	2	\$86.85	1	AQIS I	\$173.70	120	\$20,844.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
						<i>Labor Subtotal</i>	\$42,250.30
						<b>Sampling and Monitoring Total</b>	\$52,556.70
Hexavalent Chromium Analysis							
<i>Materials</i>	Cost Per Sample					Number of Occurrences in a Year	Material Annual Fee
Filter & Petri Dish	\$ 9.60					120	\$ 1,152.00
Reagents Consumables	\$ 10.10					120	\$ 1,212.00
Instrument & Service Plan	\$ 10.68					120	\$ 1,281.60
						<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>	\$ 3,645.60
<i>Labor</i>	Hours Per Sample	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Prep light inspection	0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	120	\$ 103.43
Filter impregnation, solution, and cassette	0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	120	\$ 770.55
Labeling	0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	120	\$ 1,344.53
Sample Extraction	0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	120	\$ 3,698.64
Sample Analysis	0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	120	\$ 7,397.28
QA/QC-Data Prep & Analyst Review	0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	120	\$ 1,849.32
QA/QC-Peer Review	0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	120	\$ 1,232.88
QA/QC-Senior Review & Report Prep	0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	120	\$ 1,960.74
QA/QC-Final Review	0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	120	\$ 1,476.00
QA/QC-Final Review	0.01	\$ 137.45	1	Lab Manager	\$ 1.37	120	\$ 164.94
QA/QC-Data Reporting	0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	120	\$ 413.70
						<i>Labor Subtotal</i>	\$ 20,412.00
						<b>Hexavalent Chromium Analysis Total</b>	\$ 24,057.60
						<b>Annual Total</b>	\$76,614.30
						<b>Monthly Total</b>	<b>\$6,384.53</b>
						<b>Appendix 1 Total</b>	<b>\$6,500.00</b>

**Table B-3 – Additional - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 2 Staff**

Sampling Monitoring						Annual Fee		
Sampler Cost Estimate and Non-Labor		Cost	Anticipated lifetime of equipment			Sampler Annual Fee		
Omni sampler		\$5,720.00	4 years			\$1,430.00		
Annual maintenance & battery		\$420.00				\$420.00		
Vehicle Usage		Miles	Mileage Rate		Number of Occurrences in a Year	Vehicle Annual Fee		
Standard Mileage (sampling, calibration, and audit included in the base)		60	\$ 0.58		0	\$0.00		
					<i>Non-Labor Subtotal for Monitoring and Sampling</i>	\$1,850.00		
Sampling and Monitoring Labor		Hours	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, and drive time		0.5	\$86.85	2	AQIS I	\$86.85	120	\$10,422.00
Pick-up, sample collection, and drive time		0.5	\$86.85	2	AQIS I	\$86.85	120	\$10,422.00
Semi annual calibration		2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit		2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
					<i>Labor Subtotal</i>			\$21,406.30
<b>Sampling and Monitoring Total</b>						\$23,256.30		
Hexavalent Chromium Analysis								
Materials		Cost Per Sample					Number of Occurrences in a Year	Material Annual Fee
Filter & Petri Dish		\$ 9.60					120	\$ 1,152.00
Reagents Consumables		\$ 10.10					120	\$ 1,212.00
Instrument & Service Plan		\$ 10.68					120	\$ 1,281.60
					<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>			\$ 3,645.60
Labor		Hours Per Sample	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Prep light inspection		0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	120	\$ 103.43
Filter impregnation, solution, and cassette		0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	120	\$ 770.55
Labeling		0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	120	\$ 1,344.53
Sample Extraction		0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	120	\$ 3,698.64
Sample Analysis		0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	120	\$ 7,397.28
QA/QC-Data Prep & Analyst Review		0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	120	\$ 1,849.32
QA/QC-Peer Review		0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	120	\$ 1,232.88
QA/QC-Senior Review & Report Prep		0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	120	\$ 1,960.74
QA/QC-Final Review		0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	120	\$ 1,476.00
QA/QC-Final Review		0.01	\$ 137.45	1	Lab Manager	\$ 1.37	120	\$ 164.94
QA/QC-Data Reporting		0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	120	\$ 413.70
					<i>Labor Subtotal</i>			\$ 20,412.00
<b>Hexavalent Chromium Analysis Total</b>						\$ 24,057.60		
						<b>Annual Total</b>	\$47,313.90	
						<b>Monthly</b>	\$3,942.83	
						<b>Appendix 1 Total</b>	\$4,000.00	

**Table B-4 – Additional - 1 Hexavalent Chromium Monitor - 1 in 3 days Frequency - 1 Staff**

Sampling Monitoring							Annual Fee
Sampler Cost Estimate and Non-Labor	Cost	Anticipated lifetime of equipment				Sampler Annual Fee	
Omni sampler	\$5,720.00	4 years				\$1,430.00	
Annual maintenance & battery	\$420.00					\$420.00	
Vehicle Usage	Miles	Mileage Rate			Number of Occurrences in a Year	Vehicle Annual Fee	
Standard Mileage (Sampling including in base-only audit and calibration)	60	\$ 0.58			3	\$104.40	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						\$1,954.40	
Sampling and Monitoring Labor	Hours	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, and drive time	0.5	\$86.85	1	AQIS I	\$43.43	120	\$5,211.00
Pick-up, sample collection, and drive time	0.5	\$86.85	1	AQIS I	\$43.43	120	\$5,211.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						\$10,984.30	
<b>Sampling and Monitoring Total</b>						\$12,938.70	
Hexavalent Chromium Analysis							
Materials	Cost Per Sample					Number of Occurrences in a Year	Material Annual Fee
Filter & Petri Dish	\$ 9.60					120	\$ 1,152.00
Reagents Consumables	\$ 10.10					120	\$ 1,212.00
Instrument & Service Plan	\$ 10.68					120	\$ 1,281.60
<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>						\$ 3,645.60	
Labor	Hours Per Sample	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Prep light inspection	0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	120	\$ 103.43
Filter impregnation, solution, and cassette	0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	120	\$ 770.55
Labeling	0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	120	\$ 1,344.53
Sample Extraction	0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	120	\$ 3,698.64
Sample Analysis	0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	120	\$ 7,397.28
QA/QC-Data Prep & Analyst Review	0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	120	\$ 1,849.32
QA/QC-Peer Review	0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	120	\$ 1,232.88
QA/QC-Senior Review & Report Prep	0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	120	\$ 1,960.74
QA/QC-Final Review	0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	120	\$ 1,476.00
QA/QC-Final Review	0.01	\$ 137.45	1	Lab Manager	\$ 1.37	120	\$ 164.94
QA/QC-Data Reporting	0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	120	\$ 413.70
<i>Labor Subtotal</i>						\$ 20,412.00	
<b>Hexavalent Chromium Analysis Total</b>						\$ 24,057.60	
<b>Annual Total</b>						\$36,996.30	
<b>Monthly Total</b>						\$3,083.03	
<b>Appendix 1 Total</b>						\$3,500.00	

**Table B-5 – Base - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>	
<b>Sampler Cost Estimate and Non-Labor</b>		<b>Cost</b>	<b>Anticipated lifetime of equipment</b>			<b>Sampler Annual Fee</b>		
Omni sampler		\$5,720.00	8 years			\$715.00		
Annual maintenance & battery		\$420.00				\$420.00		
<b>Vehicle Usage</b>		<b>Miles</b>	<b>Mileage Rate</b>	<b>Number of Occurrences in a Year</b>		<b>Vehicle Annual Fee</b>		
Standard Mileage		60	\$ 0.58	123		\$4,280.40		
						<i>Non-Labor Subtotal for Monitoring and Sampling</i>	\$5,415.40	
<b>Sampling and Monitoring Labor</b>		<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pick-up, and drive time		2	\$86.85	2	AQIS I	\$347.40	60	\$20,844.00
Pick-up, sample collection, and drive time		2	\$86.85	2	AQIS I	\$347.40	60	\$20,844.00
Semi annual calibration		2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit		2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
						<i>Labor Subtotal</i>		\$42,250.30
						<b>Sampling and Monitoring Total</b>		\$47,665.70
<b>Hexavalent Chromium Analysis</b>								
<b>Materials</b>		<b>Cost Per Sample</b>				<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>	
Filter & Petri Dish		\$ 9.60				60	\$ 576.00	
Reagents Consumables		\$ 10.10				60	\$ 606.00	
Instrument & Service Plan		\$ 10.68				60	\$ 640.80	
						<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>	\$ 1,822.80	
<b>Labor</b>		<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Prep light inspection		0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	60	\$ 51.71
Filter impregnation, solution, and cassette		0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	60	\$ 385.28
Labeling		0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	60	\$ 672.26
Sample Extraction		0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	60	\$ 1,849.32
Sample Analysis		0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	60	\$ 3,698.64
QA/QC-Data Prep & Analyst Review		0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	60	\$ 924.66
QA/QC-Peer Review		0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	60	\$ 616.44
QA/QC-Senior Review & Report Prep		0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	60	\$ 980.37
QA/QC-Final Review		0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	60	\$ 738.00
QA/QC-Final Review		0.01	\$ 137.45	1	Lab Manager	\$ 1.37	60	\$ 82.47
QA/QC-Data Reporting		0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	60	\$ 206.85
						<i>Labor Subtotal</i>		\$ 10,206.00
						<b>Hexavalent Chromium Analysis Total</b>		\$ 12,028.80
						<b>Annual Total</b>		\$59,694.50
						<b>Monthly Total</b>		\$4,974.54
						<b>Appendix 1 Total</b>		\$5,000.00

**Table B-6 – Base - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 1 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>
<i>Sampler Cost Estimate and Non-Labor</i>	<b>Cost</b>		<b>Anticipated lifetime of equipment</b>				<b>Sampler Annual Fee</b>
Omni sampler	\$5,720.00		8 years				\$715.00
Annual maintenance & battery	\$420.00						\$420.00
<i>Vehicle Usage</i>	<b>Miles</b>		<b>Mileage Rate</b>			<b>Number of Occurrences in a Year</b>	<b>Vehicle Annual Fee</b>
Standard Mileage	60		\$ 0.58			123	\$4,280.40
<i>Non-Labor Subtotal for Monitoring and Sampling</i>							\$5,415.40
<i>Sampling and Monitoring Labor</i>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, and drive time	2	\$86.85	1	AQIS I	\$173.70	60	\$10,422.00
Pick-up, sample collection, and drive time	2	\$86.85	1	AQIS I	\$173.70	60	\$10,422.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>							\$21,406.30
<b>Sampling and Monitoring Total</b>							\$26,821.70
<b>Hexavalent Chromium Analysis</b>							
<i>Materials</i>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
Filter & Petri Dish	\$ 9.60					60	\$ 576.00
Reagents Consumables	\$ 10.10					60	\$ 606.00
Instrument & Service Plan	\$ 10.68					60	\$ 640.80
<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>							\$ 1,822.80
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Prep Light Inspection	0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	60	\$ 51.71
Filter impregnation, solution, and cassette	0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	60	\$ 385.28
Labeling	0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	60	\$ 672.26
Sample Extraction	0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	60	\$ 1,849.32
Sample Analysis	0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	60	\$ 3,698.64
QA/QC-Data Prep & Analyst Review	0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	60	\$ 924.66
QA/QC-Peer Review	0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	60	\$ 616.44
QA/QC-Senior Review & Report Prep	0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	60	\$ 980.37
QA/QC-Final Review	0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	60	\$ 738.00
QA/QC-Final Review	0.01	\$ 137.45	1	Lab Manager	\$ 1.37	60	\$ 82.47
QA/QC-Data Reporting	0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	60	\$ 206.85
<i>Labor Subtotal</i>							\$ 10,206.00
<b>Hexavalent Chromium Analysis Total</b>							\$ 12,028.80
<b>Annual Total</b>							\$38,850.50
<b>Monthly Total</b>							\$3,237.54
<b>Appendix 1 Total</b>							\$3,500.00

**Table B-7 – Additional - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>	
<b>Sampler Cost Estimate and Non-Labor</b>		<b>Cost</b>	<b>Anticipated lifetime of equipment</b>			<b>Sampler Annual Fee</b>		
Omni sampler		\$5,720.00	8 years			\$715.00		
Annual maintenance & battery		\$420.00				\$420.00		
<b>Vehicle Usage</b>		<b>Miles</b>	<b>Mileage Rate</b>	<b>Number of Occurrences in a Year</b>		<b>Vehicle Annual Fee</b>		
Standard Mileage (sampling, calibration, and audit included in the base)		60	\$ 0.58	0		\$0.00		
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						<i>\$1,135.00</i>		
<b>Sampling and Monitoring Labor</b>		<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, and drive time		0.5	\$86.85	2	AQIS I	\$86.85	60	\$5,211.00
Pick-up, sample collection, and drive time		0.5	\$86.85	2	AQIS I	\$86.85	60	\$5,211.00
Semi annual calibration		2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit		2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						<i>\$10,984.30</i>		
<b>Sampling and Monitoring Total</b>							<b>\$12,119.30</b>	
<b>Hexavalent Chromium Analysis</b>								
<b>Materials</b>		<b>Cost Per Sample</b>				<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>	
Filter & Petri Dish		\$ 9.60				60	\$ 576.00	
Reagents Consumables		\$ 10.10				60	\$ 606.00	
Instrument & Service Plan		\$ 10.68				60	\$ 640.80	
<i>Non-Labor Subtotal of Hexavalent Chromium</i>						<i>\$ 1,822.80</i>		
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>	
Prep light inspection	0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	60	\$ 51.71	
Filter impregnation, solution, and cassette	0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	60	\$ 385.28	
Labeling	0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	60	\$ 672.26	
Sample Extraction	0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	60	\$ 1,849.32	
Sample Analysis	0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	60	\$ 3,698.64	
QA/QC-Data Prep & Analyst Review	0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	60	\$ 924.66	
QA/QC-Peer Review	0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	60	\$ 616.44	
QA/QC-Senior Review & Report Prep	0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	60	\$ 980.37	
QA/QC-Final Review	0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	60	\$ 738.00	
QA/QC-Final Review	0.01	\$ 137.45	1	Lab Manager	\$ 1.37	60	\$ 82.47	
QA/QC-Data Reporting	0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	60	\$ 206.85	
<i>Labor Subtotal</i>						<i>\$ 10,206.00</i>		
<b>Hexavalent Chromium Analysis Total</b>							<b>\$ 12,028.80</b>	
<b>Annual Total</b>							<b>\$24,148.10</b>	
<b>Monthly Total</b>							<b>\$2,012.34</b>	
<b>Appendix 1 Total</b>							<b>\$2,500.00</b>	



**Table B-8 – Additional - 1 Hexavalent Chromium Monitor - 1 in 6 days Frequency - 1 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>
<i>Sampler Cost Estimate and Non-Labor</i>	<b>Cost</b>	<b>Anticipated lifetime of equipment</b>				<b>Sampler Annual Fee</b>	
Omni sampler	\$5,720.00	8 years				\$715.00	
Annual maintenance & battery	\$420.00					\$420.00	
<i>Vehicle Usage</i>	<b>Miles</b>		<b>Mileage Rate</b>	<b>Number of Occurrences in a Year</b>		<b>Vehicle Annual Fee</b>	
Standard Mileage (sampling, calibration, and audit included in the base)	60		\$ 0.58	0		\$0.00	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						\$1,135.00	
<i>Sampling and Monitoring Labor</i>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, and drive time	0.5	\$86.85	1	AQIS I	\$43.43	60	\$2,605.50
Pick-up, sample collection, and drive time	0.5	\$86.85	1	AQIS I	\$43.43	60	\$2,605.50
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						\$5,773.30	
<b>Sampling and Monitoring Total</b>						\$6,908.30	
<b>Hexavalent Chromium Analysis</b>							
<i>Materials</i>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
Filter & Petri Dish	\$	9.60				60	\$ 576.00
Reagents Consumables	\$	10.10				60	\$ 606.00
Instrument & Service Plan	\$	10.68				60	\$ 640.80
<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>						\$	1,822.80
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Prep light inspection	0.0125	\$ 68.95	1	Senior Office Assistant	\$ 0.86	60	\$ 51.71
Filter impregnation, solution, and cassette	0.0625	\$ 102.74	1	AQ Chemist	\$ 6.42	60	\$ 385.28
Labeling	0.1625	\$ 68.95	1	Senior Office Assistant	\$ 11.20	60	\$ 672.26
Sample Extraction	0.3	\$ 102.74	1	AQ Chemist	\$ 30.82	60	\$ 1,849.32
Sample Analysis	0.6	\$ 102.74	1	AQ Chemist	\$ 61.64	60	\$ 3,698.64
QA/QC-Data Prep & Analyst Review	0.15	\$ 102.74	1	AQ Chemist	\$ 15.41	60	\$ 924.66
QA/QC-Peer Review	0.1	\$ 102.74	1	AQ Chemist	\$ 10.27	60	\$ 616.44
QA/QC-Senior Review & Report Prep	0.15	\$ 108.93	1	AQ Chemist	\$ 16.34	60	\$ 980.37
QA/QC-Final Review	0.1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	60	\$ 738.00
QA/QC-Final Review	0.01	\$ 137.45	1	Lab Manager	\$ 1.37	60	\$ 82.47
QA/QC-Data Reporting	0.05	\$ 68.95	1	Senior Office Assistant	\$ 3.45	60	\$ 206.85
<i>Labor Subtotal</i>						\$	10,206.00
<b>Hexavalent Chromium Analysis Total</b>						\$	12,028.80
<b>Annual Total</b>						\$18,937.10	
<b>Monthly</b>						\$1,578.09	
<b>Appendix 1 Total</b>						\$2,000.00	

**Table B-9 – Base - 1 Metal Monitor - 1 in 3 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>
<b>Sampler Cost Estimate and Non-Labor</b>	<b>Cost</b>	<b>Anticipated lifetime of equipment</b>				<b>Sampler Annual Fee</b>	
Omni sampler	\$8,290.00	4 years				\$2,072.50	
Annual maintenance & battery	\$252.00					\$252.00	
<b>Vehicle Usage</b>	<b>Miles</b>	<b>Mileage Rate</b>	<b>Number of Occurrences in a Year</b>			<b>Vehicle Annual Fee</b>	
Standard Mileage	60	\$ 0.58	123			\$4,280.40	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						\$6,604.90	
<b>Sampling and Monitoring Labor</b>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	2	\$86.85	2	AQIS I	\$347.40	120	\$41,688.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						\$42,250.30	
<b>Sampling and Monitoring Total</b>						\$48,855.20	
<b>Multi-Metal Analysis</b>							
<b>Materials</b>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
ICPMS supplies, reagents, and other supplies	\$ 10.17					120	\$ 1,220.46
Annual preventative maintenance contracts	\$ 10.75					120	\$ 1,290.36
Instrument	\$ 7.15					120	\$ 858.42
<i>Non-Labor Subtotal of Multi-Metals</i>						\$ 3,369.24	
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	120	\$ 2,383.20
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	120	\$ 4,315.08
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	120	\$ 1,541.10
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	120	\$ 369.00
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	120	\$ 103.43
<i>Labor Subtotal</i>						\$ 8,711.81	
<b>Multi-Metal Analysis Total</b>						\$ 12,081.05	
<b>Annual Total</b>						\$60,936.25	
<b>Monthly Total</b>						\$5,078.02	
<b>Appendix 1 Total</b>						\$5,500.00	

**Table B-10 – Base - 1 Metal Monitor - 1 in 3 days Frequency - 1 Staff**

Sampling Monitoring							Annual Fee
<i>Sampler Cost Estimate and Non-Labor</i>	Cost	Anticipated lifetime of equipment				Sampler Annual Fee	
PQ 100	\$8,290.00	4 years				\$2,072.50	
Annual maintenance & battery	\$252.00					\$252.00	
<i>Vehicle Usage</i>	Miles	Mileage Rate		Number of Occurrences in a Year		Vehicle Annual Fee	
Standard Mileage	60	\$ 0.58		123		\$4,280.40	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						\$6,604.90	
<i>Sampling and Monitoring Labor</i>	Hours	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	2	\$86.85	1	AQIS I	\$173.70	120	\$20,844.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						\$21,406.30	
<b>Sampling and Monitoring Total</b>						\$28,011.20	
Multi-Metal Analysis							
<i>Materials</i>	Cost Per Sample					Number of Occurrences in a Year	Material Annual Fee
ICPMS supplies, reagents, and other supplies	\$ 10.17					120	\$ 1,220.46
Annual preventative maintenance contracts	\$ 10.75					120	\$ 1,290.36
Instrument	\$ 7.15					120	\$ 858.42
<i>Non-Labor Subtotal of Multi-Metals</i>						\$ 3,369.24	
<i>Labor</i>	Hours Per Sample	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	120	\$ 2,383.20
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	120	\$ 4,315.08
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	120	\$ 1,541.10
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	120	\$ 369.00
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	120	\$ 103.43
<i>Labor Subtotal</i>						\$ 8,711.81	
<b>Multi-Metal Analysis Totals</b>						\$ 12,081.05	
<b>Annual Total</b>						\$40,092.25	
<b>Monthly Total</b>						\$3,341.02	
<b>Appendix 1 Total</b>						\$3,500.00	

**Table B-11 – Additional - 1 Metal Monitor - 1 in 3 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>
<b>Sampler Cost Estimate and Non-Labor</b>	<b>Cost</b>	<b>Anticipated lifetime of equipment</b>					<b>Sampler Annual Fee</b>
Omni sampler	\$8,290.00	4 years					\$2,072.50
Annual maintenance & battery	\$252.00						\$252.00
<b>Vehicle Usage</b>	<b>Miles</b>		<b>Mileage Rate</b>			<b>Number of Occurrences in a Year</b>	<b>Vehicle Annual Fee</b>
Standard Mileage (sampling, calibration, and audit included in the base)	60		\$ 0.58			0	\$0.00
<i>Non-Labor Subtotal for Monitoring and Sampling</i>							\$2,324.50
<b>Sampling and Monitoring Labor</b>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	0.5	\$86.85	2	AQIS I	\$86.85	120	\$10,422.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>							\$10,984.30
<b>Sampling and Monitoring Total</b>							\$13,308.80
<b>Multi-Metal Analysis</b>							
<b>Materials</b>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
ICPMS supplies, reagents, and other supplies	\$ 10.17					120	\$ 1,220.46
Annual preventative maintenance contracts	\$ 10.75					120	\$ 1,290.36
Instrument	\$ 7.15					120	\$ 858.42
<i>Non-Labor Subtotal of Multi-Metals</i>							\$ 3,369.24
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	120	\$ 2,383.20
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	120	\$ 4,315.08
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	120	\$ 1,541.10
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	120	\$ 369.00
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	120	\$ 103.43
<i>Labor Subtotal</i>							\$ 8,711.81
<b>Multi-Metals Analysis Total</b>							\$ 12,081.05
<b>Annual Total</b>							\$25,389.85
<b>Monthly Total</b>							\$2,115.82
<b>Appendix 1 Total</b>							\$2,500.00

**Table B-12 – Additional - 1 Metal Monitor - 1 in 3 days Frequency – 1 Staff**

Sampling Monitoring							Annual Fee
<i>Sampler Cost Estimate and Non-Labor</i>	Cost	Anticipated lifetime of equipment				Sampler Annual Fee	
PQ 100	\$8,290.00	4 years				\$2,072.50	
Annual maintenance & battery	\$252.00					\$252.00	
<i>Vehicle Usage</i>	Miles	Mileage Rate		Number of Occurrences in a Year		Vehicle Annual Fee	
Standard Mileage (sampling, calibration, and audit included in the base)	60	\$ 0.58		0		\$0.00	
						<i>Non-Labor Subtotal for Monitoring and Sampling</i>	\$2,324.50
<i>Sampling and Monitoring Labor</i>	Hours	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	0.5	\$86.85	1	AQIS I	\$43.43	120	\$5,211.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
						<i>Labor Subtotal</i>	\$5,773.30
						<b>Sampling and Monitoring Total</b>	\$8,097.80
Multi-Metal Analysis							
<i>Materials</i>	Cost Per Sample					Number of Occurrences in a Year	Material Annual Fee
ICPMS supplies, reagents, and other supplies	\$ 10.17					120	\$ 1,220.46
Annual preventative maintenance contracts	\$ 10.75					120	\$ 1,290.36
Instrument	\$ 7.15					120	\$ 858.42
						<i>Non-Labor Subtotal of Multi-Metals</i>	\$ 3,369.24
<i>Labor</i>	Hours Per Sample	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	120	\$ 2,383.20
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	120	\$ 4,315.08
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	120	\$ 1,541.10
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	120	\$ 369.00
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	120	\$ 103.43
						<i>Labor Subtotal</i>	\$ 8,711.81
						<b>Multi-Metal Analysis Totals</b>	\$ 12,081.05
						<b>Annual Total</b>	\$20,178.85
						<b>Quarterly Total</b>	\$1,681.57
						<b>Appendix 1 Total</b>	\$2,000.00

**Table B-13 – Base - 1 Metal Monitor - 1 in 6 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>	
<i>Sampler Cost Estimate and Non-Labor</i>	<b>Cost</b>	<b>Anticipated lifetime of equipment</b>				<b>Sampler Annual Fee</b>		
Omni sampler	\$8,290.00	8 years				\$1,036.25		
Annual maintenance & battery	\$252.00					\$252.00		
<i>Vehicle Usage</i>	<b>Miles</b>	<b>Mileage Rate</b>			<b>Number of Occurrences in a Year</b>	<b>Vehicle Annual Fee</b>		
Standard Mileage	60	\$ 0.58			63	\$2,192.40		
					<i>Non-Labor Subtotal for Monitoring and Sampling</i>		\$3,480.65	
<i>Sampling and Monitoring Labor</i>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>	
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	2	\$86.85	2	AQIS I	\$347.40	60	\$20,844.00	
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24	
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06	
					<i>Labor Subtotal</i>		\$21,406.30	
						<b>Sampling and Monitoring Total</b>		\$24,886.95
<b>Multi-Metal Analysis</b>								
<b>Materials</b>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>	
ICPMS supplies, reagents, and other supplies	\$ 10.17					60	\$ 610.23	
Annual preventative maintenance contracts	\$ 10.75					60	\$ 645.18	
Instrument	\$ 7.15					60	\$ 429.21	
					<i>Non-Labor Subtotal of Multi-Metals</i>		\$ 1,684.62	
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>	
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	60	\$ 1,191.60	
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	60	\$ 2,157.54	
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	60	\$ 770.55	
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	60	\$ 184.50	
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	60	\$ 51.71	
					<i>Labor Subtotal</i>		\$ 4,355.90	
						<b>Multi-Metal Analysis Total</b>		\$ 6,040.52
						<b>Annual Total</b>		\$30,927.47
						<b>Monthly Total</b>		\$2,577.29
						<b>Appendix 1 Total</b>		\$3,000.00

**Table B-14 – Base - 1 Metal Monitor - 1 in 6 days Frequency - 1 Staff**

Sampling Monitoring							Annual Fee
<b>Sampler Cost Estimate and Non-Labor</b>		<b>Cost</b>	<b>Anticipated lifetime of equipment</b>			<b>Sampler Annual Fee</b>	
Omni sampler		\$8,290.00	8 years			\$1,036.25	
Annual maintenance & battery		\$252.00				\$252.00	
<b>Vehicle Usage</b>		<b>Miles</b>	<b>Mileage Rate</b>	<b>Number of Occurrences in a Year</b>		<b>Vehicle Annual Fee</b>	
Standard Mileage		60	\$ 0.58	63		\$2,192.40	
						<i>Non-Labor Subtotal for Monitoring and Sampling</i>	
							\$3,480.65
<b>Sampling and Monitoring Labor</b>		<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time		2	\$86.85	1	AQIS I	\$173.70	60
Semi annual calibration		2	\$91.81	1	AQIS II	\$183.62	2
Annual Audit		2	\$97.53	1	Senior AQIS	\$195.06	1
						<i>Labor Subtotal</i>	
						\$10,984.30	
							<b>Sampling and Monitoring Total</b>
							\$14,464.95
<b>Multi-Metal Analysis</b>		<b>Cost Per Sample</b>				<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
ICPMS supplies, reagents, and other supplies		\$ 10.17				60	\$ 610.23
Annual preventative maintenance contracts		\$ 10.75				60	\$ 645.18
Instrument		\$ 7.15				60	\$ 429.21
						<i>Non-Labor Subtotal of Multi-Metals</i>	
						\$ 1,684.62	
<b>Labor</b>		<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>
Extraction and Preparation		0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	60
Instrument Set Up & Analysis		0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	60
Data Analysis & Review		0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	60
Data Analysis & Review		0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	60
Data Analysis & Review		0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	60
						<i>Labor Subtotal</i>	
						\$ 4,355.90	
<b>Multi Metals Analysis Totals</b>							\$ 6,040.52
						<b>Annual Total</b>	
						\$20,505.47	
						<b>Monthly Total</b>	
						\$1,708.79	
						<b>Appendix 1 Total</b>	
						\$2,000.00	

**Table B-15 – Additional - 1 Metal Monitor - 1 in 6 days Frequency - 2 Staff**

<b>Sampling Monitoring</b>							<b>Annual Fee</b>
<i>Sampler Cost Estimate and Non-Labor</i>	<b>Cost</b>	<b>Anticipated lifetime of equipment</b>				<b>Sampler Annual Fee</b>	
Omni sampler	\$8,290.00	8 years				\$1,036.25	
Annual maintenance & battery	\$252.00					\$252.00	
<i>Vehicle Usage</i>	<b>Miles</b>	<b>Mileage Rate</b>			<b>Number of Occurrences in a Year</b>	<b>Vehicle Annual Fee</b>	
Standard Mileage (sampling, calibration, and audit included in the base)	60	\$ 0.58			0	\$0.00	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						\$1,288.25	
<i>Sampling and Monitoring Labor</i>	<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	0.5	\$86.85	2	AQIS I	\$86.85	60	\$5,211.00
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2	\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1	\$195.06
<i>Labor Subtotal</i>						\$5,773.30	
<b>Sampling and Monitoring Total</b>						\$7,061.55	
<b>Multi-Metal Analysis</b>							
<i>Materials</i>	<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
ICPMS supplies, reagents, and other supplies	\$ 10.17					60	\$ 610.23
Annual preventative maintenance contracts	\$ 10.75					60	\$ 645.18
Instrument	\$ 7.15					60	\$ 429.21
<i>Non-Labor Subtotal of Multi-Metals</i>						\$ 1,684.62	
<b>Labor</b>	<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	60	\$ 1,191.60
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	60	\$ 2,157.54
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	60	\$ 770.55
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	60	\$ 184.50
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	60	\$ 51.71
<i>Labor Subtotal</i>						\$ 4,355.90	
<b>Multi-Metals Analysis Total</b>						\$ 6,040.52	
<b>Annual Total</b>						\$13,102.07	
<b>Monthly Total</b>						\$1,091.84	
<b>Appendix 1 Total</b>						\$1,500.00	



**Table B-16 – Additional - 1 Metal Monitor - 1 in 6 days Frequency - 1 Staff**

Sampling Monitoring							Annual Fee	
<i>Sampler Cost Estimate and Non-Labor</i>		<b>Cost</b>	<b>Anticipated lifetime of equipment</b>				<b>Sampler Annual Fee</b>	
Omni sampler	\$8,290.00		8 years				\$1,036.25	
Annual maintenance & battery	\$252.00						\$252.00	
<i>Vehicle Usage</i>		<b>Miles</b>	<b>Mileage Rate</b>			<b>Number of Occurrences in a Year</b>	<b>Vehicle Annual Fee</b>	
Standard Mileage (sampling, calibration, and audit included in the base)	60		\$ 0.58			0	\$0.00	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>							\$1,288.25	
<i>Sampling and Monitoring Labor</i>		<b>Hours</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time	0.5	\$86.85	1	AQIS I	\$43.43	60		\$2,605.50
Semi annual calibration	2	\$91.81	1	AQIS II	\$183.62	2		\$367.24
Annual Audit	2	\$97.53	1	Senior AQIS	\$195.06	1		\$195.06
<i>Labor Subtotal</i>							\$3,167.80	
<b>Sampling and Monitoring Total</b>							\$4,456.05	
<b>Multi-Metal Analysis</b>								
<i>Materials</i>		<b>Cost Per Sample</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
ICPMS supplies, reagents, and other supplies	\$ 10.17					60		\$ 610.23
Annual preventative maintenance contracts	\$ 10.75					60		\$ 645.18
Instrument	\$ 7.15					60		\$ 429.21
<i>Non-Labor Subtotal of Multi-Metals</i>							\$ 1,684.62	
<b>Labor</b>		<b>Hours Per Sample</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Extraction and Preparation	0.25	\$ 79.44	1	Laboratory Tech	\$ 19.86	60		\$ 1,191.60
Instrument Set Up & Analysis	0.35	\$ 102.74	1	AQ Chemist	\$ 35.96	60		\$ 2,157.54
Data Analysis & Review	0.125	\$ 102.74	1	AQ Chemist	\$ 12.84	60		\$ 770.55
Data Analysis & Review	0.025	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	60		\$ 184.50
Data Analysis & Review	0.0125	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	60		\$ 51.71
<i>Labor Subtotal</i>							\$ 4,355.90	
<b>Multi Metals Analysis Totals</b>							\$ 6,040.52	
<b>Annual Total</b>							\$10,496.57	
<b>Monthly Total</b>							\$874.71	
<b>Appendix 1 Total</b>							\$1,000.00	

**Table B-17 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 3 days  
Frequency - 2 Staff**

Sampling Monitoring								Annual Fee	
<b>Sampler Cost Estimate and Non-Labor</b>		<b>Cost</b>	<b>Anticipated life time of equipment</b>					<b>Sampler Annual Fee</b>	
PQ 100 sampler		\$8,290.00	4 years					\$2,072.50	
Annual maintenance & battery		\$252.00						\$252.00	
Omni sampler		\$5,720.00	4 years					\$1,430.00	
Annual maintenance & battery		\$420.00						\$420.00	
<b>Vehicle Usage</b>		<b>Miles</b>		<b>Mileage Rate</b>			<b>Number of Occurrences in a Year</b>	<b>Vehicle Annual Fee</b>	
Standard Mileage		60		\$ 0.58			243	\$8,456.40	
<i>Non-Labor Subtotal for Monitoring and Sampling</i>								\$12,630.90	
<b>Sampling and Monitoring Labor</b>		<b>Base Hours</b>	<b>Additional Hour</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number Of Occurrences in a Year</b>	<b>Operation Fee</b>
Hexavalent Chromium/Multi-metal sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time		2	0.5	\$86.85	2	AQIS I	\$434.25	120	\$52,110.00
Hexavalent Chromium pick-up, sample collection, and drive time		2	0.5	\$86.85	2	AQIS I	\$434.25	120	\$52,110.00
Semi annual calibration		2	2	\$91.81	1	AQIS II	\$367.24	2	\$734.48
Annual Audit		2	2	\$97.53	1	Senior AQIS	\$390.12	1	\$390.12
<i>Labor Subtotal</i>								\$105,344.60	
<b>Sampling and Monitoring Total</b>								\$117,975.50	
<b>Multi-Metal Analysis</b>									
<b>Materials</b>		<b>Cost Per Sample</b>	<b>Number of Samples</b>				<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
ICPMS supplies, reagents, and other supplies		\$ 10.17	1				\$ 10.17	120	\$ 1,220.46
Annual preventative maintenance contracts		\$ 10.75	1				\$ 10.75	120	\$ 1,290.36
Instrument		\$ 7.15	1				\$ 7.15	120	\$ 858.42
<i>Non-Labor Subtotal of Multi-Metals</i>								\$ 3,369.24	
<b>Labor</b>		<b>Hours Per Sample</b>	<b>Number of Samples</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Extraction and Preparation		0.25	1	\$ 79.44	1	Laboratory Tech	\$ 19.86	120	\$ 2,383.20
Instrument Set Up & Analysis		0.35	1	\$ 102.74	1	AQ Chemist	\$ 35.96	120	\$ 4,315.08
Data Analysis & Review		0.125	1	\$ 102.74	1	AQ Chemist	\$ 12.84	120	\$ 1,541.10
Data Analysis & Review		0.025	1	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	120	\$ 369.00
Data Analysis & Review		0.0125	1	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	120	\$ 103.43
<i>Labor Subtotal</i>								\$ 8,711.81	
<b>Multi Metal Analysis Total</b>								\$ 12,081.05	
<b>Hexavalent Chromium Analysis</b>									
<b>Materials</b>		<b>Cost Per Sample</b>	<b>Number of Samples</b>					<b>Number of Occurrences in a Year</b>	<b>Material Annual Fee</b>
Filter & Petri Dish		\$ 9.60	1					120	\$ 1,152.00
Reagents Consumables		\$ 10.10	1					120	\$ 1,212.00
Instrument & Service Plan		\$ 10.68	1					120	\$ 1,281.60
<i>Non-Labor Subtotal of Hexavalent Chromium</i>								\$ 3,645.60	
<b>Labor</b>		<b>Hours Per Sample</b>	<b>Number of Samples</b>	<b>Rate</b>	<b>Number of Staff</b>	<b>Position</b>	<b>Subtotal</b>	<b>Number of Occurrences in a Year</b>	<b>Labor Annual Fee</b>
Prep light inspection		0.0125	1	\$ 68.95	1	Senior Office Assistant	\$ 0.86	120	\$ 103.43
Filter impregnation, solution, and cassette		0.0625	1	\$ 102.74	1	AQ Chemist	\$ 6.42	120	\$ 770.55
Labeling		0.1625	1	\$ 68.95	1	Senior Office Assistant	\$ 11.20	120	\$ 1,344.53
Sample Extraction		0.3	1	\$ 102.74	1	AQ Chemist	\$ 30.82	120	\$ 3,698.64
Sample Analysis		0.6	1	\$ 102.74	1	AQ Chemist	\$ 61.64	120	\$ 7,397.28
QA/QC-Data Prep & Analyst Review		0.15	1	\$ 102.74	1	AQ Chemist	\$ 15.41	120	\$ 1,849.32
QA/QC-Peer Review		0.1	1	\$ 102.74	1	AQ Chemist	\$ 10.27	120	\$ 1,232.88
QA/QC-Senior Review & Report Prep		0.15	1	\$ 108.93	1	AQ Chemist	\$ 16.34	120	\$ 1,960.74
QA/QC-Final Review		0.1	1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	120	\$ 1,476.00
QA/QC-Final Review		0.01	1	\$ 137.45	1	Lab Manager	\$ 1.37	120	\$ 164.94
QA/QC-Data Reporting		0.05	1	\$ 68.95	1	Senior Office Assistant	\$ 3.45	120	\$ 413.70
<i>Labor Subtotal</i>								\$ 20,412.00	
<b>Hexavalent Chromium Analysis Total</b>								\$ 24,057.60	
<b>Annual Total</b>								\$ 154,114.15	
<b>Monthly Total</b>								\$ 12,842.85	
<b>Appendix 1 Total</b>								\$ 13,000.00	

**Table B-18 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 3 days  
Frequency - 1 Staff**

Sampling Monitoring								Annual Fee	
Sampler Cost Estimate and Non-Labor		Cost	Anticipated life time of equipment				Sampler Annual Fee		
PQ 100 sampler		\$8,290.00			4 years		\$2,072.50		
Annual maintenance & battery		\$252.00					\$252.00		
Omni sampler		\$5,720.00			4 years		\$1,430.00		
Annual maintenance & battery		\$420.00					\$420.00		
Vehicle Usage		Miles		Mileage Rate		Number of Occurrences in a Year	Vehicle Annual Fee		
Standard Mileage		60		\$ 0.58		243	\$8,456.40		
<i>Non-Labor Subtotal for Monitoring and Sampling</i>							\$12,630.90		
Sampling and Monitoring Labor		Base Hours	Additional Hour	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Hexavalent Chromium/Multi-metal sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time		2	0.5	\$86.85	1	AQIS I	\$217.13	120	\$26,055.00
Hexavalent Chromium pick-up, sample collection, and drive time		2	0.5	\$86.85	1	AQIS I	\$217.13	120	\$26,055.00
Semi annual calibration		2	2	\$91.81	1	AQIS II	\$367.24	2	\$734.48
Annual Audit		2	2	\$97.53	1	Senior AQIS	\$390.12	1	\$390.12
<i>Labor Subtotal</i>							\$53,234.60		
<b>Sampling and Monitoring Total</b>							\$65,865.50		
Multi-Metal Analysis									
Materials		Cost Per Sample	Number of Samples			Subtotal	Number of Occurrences in a Year	Material Annual Fee	
ICPMS supplies, reagents, and other supplies		\$ 10.17	1			\$ 10.17	120	\$ 1,220.46	
Annual preventative maintenance contracts		\$ 10.75	1			\$ 10.75	120	\$ 1,290.36	
Instrument		\$ 7.15	1			\$ 7.15	120	\$ 858.42	
<i>Non-Labor Subtotal of Multi-Metals</i>							\$	3,369.24	
Labor		Hours Per Sample	Number of Samples	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Extraction and Preparation		0.25	1	\$ 79.44	1	Laboratory Tech	\$ 19.86	120	\$ 2,383.20
Instrument Set Up & Analysis		0.35	1	\$ 102.74	1	AQ Chemist	\$ 35.96	120	\$ 4,315.08
Data Analysis & Review		0.125	1	\$ 102.74	1	AQ Chemist	\$ 12.84	120	\$ 1,541.10
Data Analysis & Review		0.025	1	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	120	\$ 369.00
Data Analysis & Review		0.0125	1	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	120	\$ 103.43
<i>Labor Subtotal</i>							\$	8,711.81	
<b>Multi Metal Analysis Total</b>							\$	12,081.05	
Hexavalent Chromium Analysis									
Materials		Cost Per Sample	Number of Samples				Number of Occurrences in a Year	Material Annual Fee	
Filter & Petri Dish		\$ 9.60	1				120	\$ 1,152.00	
Reagents Consumables		\$ 10.10	1				120	\$ 1,212.00	
Instrument & Service Plan		\$ 10.68	1				120	\$ 1,281.60	
<i>Non-Labor Subtotal of Hexavalent Chromium Analysis</i>							\$	3,645.60	
Labor		Hours Per Sample	Number of Samples	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Prep light inspection		0.0125	1	\$ 68.95	1	Senior Office Assistant	\$ 0.86	120	\$ 103.43
Filter impregnation, solution, and cassette		0.0625	1	\$ 102.74	1	AQ Chemist	\$ 6.42	120	\$ 770.55
Labeling		0.1625	1	\$ 68.95	1	Senior Office Assistant	\$ 11.20	120	\$ 1,344.53
Sample Extraction		0.3	1	\$ 102.74	1	AQ Chemist	\$ 30.82	120	\$ 3,698.64
Sample Analysis		0.6	1	\$ 102.74	1	AQ Chemist	\$ 61.64	120	\$ 7,397.28
QA/QC-Data Prep & Analyst Review		0.15	1	\$ 102.74	1	AQ Chemist	\$ 15.41	120	\$ 1,849.32
QA/QC-Peer Review		0.1	1	\$ 102.74	1	AQ Chemist	\$ 10.27	120	\$ 1,232.88
QA/QC-Senior Review & Report Prep		0.15	1	\$ 108.93	1	AQ Chemist	\$ 16.34	120	\$ 1,960.74
QA/QC-Final Review		0.1	1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	120	\$ 1,476.00
QA/QC-Final Review		0.01	1	\$ 137.45	1	Lab Manager	\$ 1.37	120	\$ 164.94
QA/QC-Data Reporting		0.05	1	\$ 68.95	1	Senior Office Assistant	\$ 3.45	120	\$ 413.70
<i>Labor Subtotal</i>							\$	20,412.00	
<b>Hexavalent Chromium Analysis Total</b>							\$	24,057.60	
<b>Annual Total</b>							\$	102,004.15	
<b>Monthly Total</b>							\$	8,500.35	
<b>Appendix 1 Total</b>							\$	8,500.00	

**Table B-19 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 6 days  
Frequency - 2 Staff**

Sampling Monitoring							Annual Fee		
Sampler Cost Estimate and Non-Labor		Cost	Anticipated lifetime of equipment			Sampler Annual Fee			
PQ 100 sampler	\$8,290.00	8 years				\$1,036.25			
Annual maintenance & battery	\$252.00					\$252.00			
Omni sampler	\$5,720.00	8 years				\$715.00			
Annual maintenance & battery	\$420.00					\$420.00			
Vehicle Usage		Miles	Mileage Rate	Number of Occurrences in a Year		Vehicle Annual Fee			
Standard Mileage	60	\$ 0.58			123	\$4,280.40			
<i>Non-Labor Subtotal for Monitoring and Sampling</i>						\$6,703.65			
Sampling and Monitoring Labor		Base Hours	Additional Hour	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Hexavalent Chromium/Multi-metal sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time		2	0.5	\$86.85	2	AQIS I	\$434.25	60	\$26,055.00
Hexavalent Chromium pick-up, sample collection, and drive time		2	0.5	\$86.85	2	AQIS I	\$434.25	60	\$26,055.00
Semi annual calibration		2	2	\$91.81	1	AQIS II	\$367.24	2	\$734.48
Annual Audit		2	2	\$97.53	1	Senior AQIS	\$390.12	1	\$390.12
<i>Labor Subtotal</i>								\$53,234.60	
<b>Sampling and Monitoring Total</b>								\$59,938.25	
Multi-Metal Analysis		Cost Per Sample	Number of Samples	Subtotal		Number of Occurrences in a Year	Material Annual Fee		
ICPMS supplies, reagents, and other supplies		\$ 10.17	1	\$ 10.17	60	\$ 610.23			
Annual preventative maintenance contracts		\$ 10.75	1	\$ 10.75	60	\$ 645.18			
Instrument		\$ 7.15	1	\$ 7.15	60	\$ 429.21			
<i>Non-Labor Subtotal of Multi-Metals</i>							\$ 1,684.62		
Labor		Hours Per Sample	Number of Samples	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Extraction and Preparation		0.25	1	\$ 79.44	1	Laboratory Tech	\$ 19.86	60	\$ 1,191.60
Instrument Set Up & Analysis		0.35	1	\$ 102.74	1	AQ Chemist	\$ 35.96	60	\$ 2,157.54
Data Analysis & Review		0.125	1	\$ 102.74	1	AQ Chemist	\$ 12.84	60	\$ 770.55
Data Analysis & Review		0.025	1	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	60	\$ 184.50
Data Analysis & Review		0.0125	1	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	60	\$ 51.71
<i>Labor Subtotal</i>								\$ 4,355.90	
<b>Multi Metal Analysis Total</b>								\$ 6,040.52	
Hexavalent Chromium Analysis		Cost Per Sample	Number of Samples	Subtotal		Number of Occurrences in a Year	Material Annual Fee		
Filter & Petri Dish		\$ 9.60	1			60	\$ 576.00		
Reagents Consumables		\$ 10.10	1			60	\$ 606.00		
Instrument & Service Plan		\$ 10.68	1			60	\$ 640.80		
<i>Non-Labor Subtotal of Hexavalent Chromium</i>							\$ 1,822.80		
Labor		Hours Per Sample	Number of Samples	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Prep light inspection		0.0125	1	\$ 68.95	1	Senior Office Assistant	\$ 0.86	60	\$ 51.71
Filter impregnation, solution, and cassette		0.0625	1	\$ 102.74	1	AQ Chemist	\$ 6.42	60	\$ 385.28
Labeling		0.1625	1	\$ 68.95	1	Senior Office Assistant	\$ 11.20	60	\$ 672.26
Sample Extraction		0.3	1	\$ 102.74	1	AQ Chemist	\$ 30.82	60	\$ 1,849.32
Sample Analysis		0.6	1	\$ 102.74	1	AQ Chemist	\$ 61.64	60	\$ 3,698.64
QA/QC-Data Prep & Analyst Review		0.15	1	\$ 102.74	1	AQ Chemist	\$ 15.41	60	\$ 924.66
QA/QC-Peer Review		0.1	1	\$ 102.74	1	AQ Chemist	\$ 10.27	60	\$ 616.44
QA/QC-Senior Review & Report Prep		0.15	1	\$ 108.93	1	AQ Chemist	\$ 16.34	60	\$ 980.37
QA/QC-Final Review		0.1	1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	60	\$ 738.00
QA/QC-Final Review		0.01	1	\$ 137.45	1	Lab Manager	\$ 1.37	60	\$ 82.47
QA/QC-Data Reporting		0.05	1	\$ 68.95	1	Senior Office Assistant	\$ 3.45	60	\$ 206.85
<i>Labor Subtotal</i>								\$ 10,206.00	
<b>Hexavalent Chromium Analysis Total</b>								\$ 12,028.80	
<b>Annual Total</b>							\$ 78,007.57		
<b>Monthly Total</b>							\$ 6,500.63		
<b>Appendix 1 Total</b>							\$ 6,500.00		

**Table B-20 – Base - 1 Hexavalent Chromium Monitor & 1 Metal Monitor - 1 in 6 days  
Frequency - 1 Staff**

Sampling Monitoring								Annual Fee	
Sampler Cost Estimate and Non-Labor		Cost	Anticipated lifetime of equipment				Sampler Annual Fee		
PQ 100 sampler		\$8,290.00	8 years				\$1,036.25		
Annual maintenance & battery		\$252.00					\$252.00		
Omni sampler		\$5,720.00	8 years				\$715.00		
Annual maintenance & battery		\$420.00					\$420.00		
Vehicle Usage		Miles		Mileage Rate		Number of Occurrences in a Year	Vehicle Annual Fee		
Standard Mileage		60		\$ 0.58		123	\$4,280.40		
							<i>Non-Labor Subtotal for Monitoring and Sampling</i>	\$6,703.65	
Sampling and Monitoring Labor		Base Hours	Additional Hour	Rate	Number of Staff	Position	Subtotal	Number Of Occurrences in a Year	Operation Fee
Hexavalent Chromium/Multi-metal sample setup and collection, preventive maintenance, cleaning, flow checks, chain of custody, pickup and drive time		2	0.5	\$86.85	1	AQIS I	\$217.13	60	\$13,027.50
Hexavalent Chromium pick-up, sample collection, and drive time		2	0.5	\$86.85	1	AQIS I	\$217.13	60	\$13,027.50
Semi annual calibration		2	2	\$91.81	1	AQIS II	\$367.24	2	\$734.48
Annual Audit		2	2	\$97.53	1	Senior AQIS	\$390.12	1	\$390.12
							<i>Labor Subtotal</i>	\$27,179.60	
								<b>Sampling and Monitoring Total</b>	\$33,883.25
Multi-Metal Analysis									
Materials		Cost Per Sample	Number of Samples				Subtotal	Number of Occurrences in a Year	Material Annual Fee
ICPMS supplies, reagents, and other supplies		\$ 10.17	1				\$ 10.17	60	\$ 610.23
Annual preventative maintenance contracts		\$ 10.75	1				\$ 10.75	60	\$ 645.18
Instrument		\$ 7.15	1				\$ 7.15	60	\$ 429.21
							<i>Non-Labor Subtotal of Multi-Metals</i>		\$ 1,684.62
Labor		Hours Per Sample	Number of Samples	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Extraction and Preparation		0.25	1	\$ 79.44	1	Laboratory Tech	\$ 19.86	60	\$ 1,191.60
Instrument Set Up & Analysis		0.35	1	\$ 102.74	1	AQ Chemist	\$ 35.96	60	\$ 2,157.54
Data Analysis & Review		0.125	1	\$ 102.74	1	AQ Chemist	\$ 12.84	60	\$ 770.55
Data Analysis & Review		0.025	1	\$ 123.00	1	Senior AQ Chemist	\$ 3.08	60	\$ 184.50
Data Analysis & Review		0.0125	1	\$ 68.95	1	Principal AQ Chemist	\$ 0.86	60	\$ 51.71
							<i>Labor Subtotal</i>		\$ 4,355.90
								<b>Multi Metal Analysis Total</b>	\$ 6,040.52
Hexavalent Chromium Analysis									
Materials		Cost Per Sample	Number of Samples					Number of Occurrences in a Year	Material Annual Fee
Filter & Petri Dish		\$ 9.60	1					60	\$ 576.00
Reagents Consumables		\$ 10.10	1					60	\$ 606.00
Instrument & Service Plan		\$ 10.68	1					60	\$ 640.80
							<i>Non-Labor Subtotal of Hexavalent Chromium</i>		\$ 1,822.80
Labor		Hours Per Sample	Number of Samples	Rate	Number of Staff	Position	Subtotal	Number of Occurrences in a Year	Labor Annual Fee
Prep light inspection		0.0125	1	\$ 68.95	1	Senior Office Assistant	\$ 0.86	60	\$ 51.71
Filter impregnation, solution, and cassette		0.0625	1	\$ 102.74	1	AQ Chemist	\$ 6.42	60	\$ 385.28
Labeling		0.1625	1	\$ 68.95	1	Senior Office Assistant	\$ 11.20	60	\$ 672.26
Sample Extraction		0.3	1	\$ 102.74	1	AQ Chemist	\$ 30.82	60	\$ 1,849.32
Sample Analysis		0.6	1	\$ 102.74	1	AQ Chemist	\$ 61.64	60	\$ 3,698.64
QA/QC-Data Prep & Analyst Review		0.15	1	\$ 102.74	1	AQ Chemist	\$ 15.41	60	\$ 924.66
QA/QC-Peer Review		0.1	1	\$ 102.74	1	AQ Chemist	\$ 10.27	60	\$ 616.44
QA/QC-Senior Review & Report Prep		0.15	1	\$ 108.93	1	AQ Chemist	\$ 16.34	60	\$ 980.37
QA/QC-Final Review		0.1	1	\$ 123.00	1	Principal AQ Chemist	\$ 12.30	60	\$ 738.00
QA/QC-Final Review		0.01	1	\$ 137.45	1	Lab Manager	\$ 1.37	60	\$ 82.47
QA/QC-Data Reporting		0.05	1	\$ 68.95	1	Senior Office Assistant	\$ 3.45	60	\$ 206.85
							<i>Labor Subtotal</i>		\$ 10,206.00
								<b>Hexavalent Chromium Analysis Total</b>	\$ 12,028.80
								<b>Annual Total</b>	\$ 51,952.57
								<b>Monthly Totals</b>	\$ 4,329.38
								<b>Appendix 1 Totals</b>	\$ 4,500.00

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 RULE 1480 – AMBIENT MONITORING AND SAMPLING  
OF METAL TOXIC AIR CONTAMINANTS**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption for the project identified above.

South Coast AQMD staff is proposing Rule 1480 which establishes a process to require a facility to conduct ambient monitoring and sampling of metal toxic air contaminants if the facility meets specific criteria. The process includes an initial notice, request for information, notice of findings, and notice to designate the facility if criteria specified in the proposed rule are met. A facility that is designated will be required to submit a Monitoring and Sampling Plan and conduct ambient monitoring and sampling. The proposed rule includes an alternative monitoring and sampling provision where the facility can elect to have the South Coast AQMD conduct ambient monitoring and sampling for a fee. The proposed rule also has monitoring, reporting, and recordkeeping provisions, and provisions to reduce and cease monitoring and sampling provided certain criteria are met.

The proposed project has been reviewed 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. Because Proposed Rule 1480 would only require very minor physical changes to occur at affected facilities as a result of complying with the proposed requirements to install monitoring equipment and conduct monitoring and sampling, and these activities would not be expected to adversely affect any environmental topic area, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is categorically exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. In addition, because the proposed project is designed to further protect or enhance the environment by identifying areas with elevated concentrations of metal TACs, Proposed Rule 1480 is categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption. If the proposed project is approved, this 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 Luke Eisenhardt (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Luke Eisenhardt can also be reached at (909) 396-2324. Mr. Min Sue is also available at (909) 396-3241 to answer any questions regarding the proposed rule.

**Date:** November 6, 2019

**Signature:** 

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources



**NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT  
(CEQA)**

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<b>To:</b> County Clerks Counties of Los Angeles, Orange, Riverside and San Bernardino	<b>From:</b> South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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**Project Title:** Proposed Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants

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**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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).

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**Description of Nature, Purpose, and Beneficiaries of Project:** South Coast AQMD staff is proposing Rule 1480 which establishes a process to require a facility to conduct ambient monitoring and sampling of metal toxic air contaminants if the facility meets specific criteria. The process includes an initial notice, request for information, notice of findings, and notice to designate the facility if criteria specified in the proposed rule are met. A facility that is designated will be required to submit a Monitoring and Sampling Plan and conduct ambient monitoring and sampling. The proposed rule includes an alternative monitoring and sampling provision where the facility can elect to have the South Coast AQMD conduct ambient monitoring and sampling for a fee. The proposed rule also has monitoring, reporting, and recordkeeping provisions, and provisions to reduce and cease monitoring and sampling provided certain criteria are met.

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<b>Public Agency Approving Project:</b> South Coast Air Quality Management District	<b>Agency Carrying Out Project:</b> South Coast Air Quality Management District
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**Exempt Status:**

CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption  
CEQA Guidelines Section 15306 – Information Collection  
CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

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**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD staff as Lead Agency, has reviewed Proposed Rule (PR) 1480 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. Because Proposed Rule 1480 would only require very minor physical changes to occur at affected facilities as a result of complying with the proposed requirements to install monitoring equipment and conduct monitoring and sampling, and these activities would not be expected to adversely affect any environmental topic area, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is categorically exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. In addition, because the proposed project is designed to further protect or enhance the environment by identifying areas with elevated concentrations of metal TACs, Proposed Rule 1480 is categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

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**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

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**Date Received for Filing:** \_\_\_\_\_ **Signature:** \_\_\_\_\_ *(Signed Upon Board Approval)*  
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ATTACHMENT I

# South Coast Air Quality Management District



## Rule 1480 Monitoring and Sampling Plan Guidance

December 2019



## **Preface**

South Coast AQMD Rule 1480 requires the owner or operator of a facility designated as a Metal Toxic Air Contaminant (Metal TAC) Monitoring Facility to conduct Monitoring and Sampling. The owner or operator of a Metal TAC Monitoring Facility is required to submit a Monitoring and Sampling Plan to the South Coast AQMD for review and approval. The Monitoring and Sampling Plan should describe in detail how Monitoring and Sampling will be performed and should describe detailed procedures needed to ensure that samples are collected, retrieved, handled, analyzed, and reported in a manner that satisfies the Rule 1480 requirements and meets the Quality Assurance requirements described in this Guidance.

Due to the highly technical nature of ambient air quality monitoring and sampling, South Coast AQMD staff recommends that a Metal TAC Monitoring Facility use third party contractors specializing in the field to submit the Monitoring and Sampling Plan and conduct the Monitoring and Sampling.

## Table of Contents

1.	Introduction.....	1
2.	Facility Information .....	1
2.1	Facility Name .....	1
2.2	Facility Address.....	1
2.3	List of Equipment.....	2
2.4	Map(s) of Facility.....	2
2.5	Project Manager .....	2
2.6	Project Organization.....	3
3.	Monitoring and Sampling .....	3
3.1	Siting of Samplers .....	4
3.2	Sampling Schedule.....	5
3.3	Atypical Sampling Days.....	5
3.4	Missed Samples and Make-Up Sample Procedures.....	6
3.5	Use of Surrogates of a Metal of Concern.....	7
3.6	Sample Analysis Test Methods .....	7
3.7	Sample Storage and Sample Retention .....	8
3.8	Standard Operating Procedure and Chain of Custody .....	8
4.	Wind Monitoring .....	10
4.1	Required Wind Monitoring Information .....	10
4.2	Siting of the Wind Sensor .....	11
4.3	Accuracy of the Wind Sensor.....	11
4.4	Data Recording Devices.....	11
5.	Project Data Quality.....	12
6.	Data Review and Validation.....	15
7.	Data Management .....	15
8.	Sample Documentation.....	16
8.1	Field Logbooks.....	16
8.2	Sample Chain of Custody Forms .....	16
9.	Quality Control .....	17

9.1 Quality Control Samples ..... 17  
9.2 Collocated Samples ..... 18  
9.3 Quality Control for Wind Monitoring ..... 18  
10. Auditing ..... 19

**List of Tables**

Table 1 - Principal Metals of Concern and Associated Test Methods and Sampling Media ..... 8  
Table 2 - Typical Sampling Media Holding Times ..... 9  
Table 3 - Accuracy Guidelines for Wind Systems..... 11  
Table 4 - Measurement Quality Objectives for Hexavalent Chromium Sampling..... 14  
Table 5 - Measurement Quality Objectives for Non-Hexavalent Chromium Metal TAC Sampling  
..... 15  
Table 6 - Field Equipment QC Schedule ..... 17  
Table 7 - QC Sample Schedule ..... 18  
Table 8 - Collocated Sample Schedule ..... 18  
Table 9 - QC Requirements for Meteorological Sensors..... 18

**List of Figures**

Figure 1 - U.S. EPA’s Sampling Schedule for 2020..... 6

## 1. Introduction

Per South Coast AQMD Rule 1480, facilities designated as Metal TAC Monitoring Facilities are required to conduct ambient air monitoring and sampling pursuant to subdivision (d). According to Rule 1480(d)(7), Metal TAC Monitoring Facilities are defined as facilities that have:

- Equipment or processes with Metal TAC emissions;
- Metal TAC emissions that are capable of being released into the ambient air;
- Been designated as a Potentially High Risk Level Facility under Rule 1402; and
- Metal TAC emissions which have been demonstrated to exceed a cancer risk of 100 in a million or a non-cancer chronic hazard index greater than 5.0 at a sensitive receptor location, using air dispersion modeling and the Risk Assessment Procedures referenced in Rule 1401.

No later than 30 days after a facility is designated as a Metal TAC Monitoring Facility, an owner or operator shall submit a draft Monitoring and Sampling Plan to the Executive Officer [Rule 1480(d)(9)(A) and (g)(1)(A)]. Once the Executive Officer approves the Monitoring and Sampling Plan, an approval letter will be provided to the owner or operator of a Metal TAC Monitoring facility, which will also set a start date for Monitoring and Sampling. The owner or operator of a Metal TAC Monitoring Facility should keep the approval letter with the approved Monitoring and Sampling Plan.

An owner or operator of a Metal TAC Monitoring Facility submitting a Basic Monitoring and Sampling Plan whereby a third party contractor conducts Monitoring and Sampling is required to submit **all** of the information listed in this Guidance document. An owner or operator of a Metal TAC Monitoring Facility submitting an Alternative Monitoring and Sampling Plan whereby the South Coast AQMD conducts Monitoring and Sampling is only required to submit information listed in Sections 2.1 through 2.4 and Section 4.1.

## 2. Facility Information

### 2.1 *Facility Name*

Provide the facility name and any aliases (DBA), include facility address and centralized telephone number. Also include the name or abbreviation if any that will be used throughout the Monitoring and Sampling Plan.

### 2.2 *Facility Address*

Provide company address and address where Monitoring and Sampling will take place if different than the company's main address.

### **2.3 List of Equipment**

Provide a list of all equipment and processes that use or emit the Metals of Concern. For each piece of equipment or process, include the operating schedules, operating conditions, source test reports and/or emissions screening test reports.

If requested by the Executive Officer, include any other process or equipment information.

### **2.4 Map(s) of Facility**

Provide map(s) of the facility that identifies the location of the following:

1. All equipment and processes listed in Section 2.3 above
2. Air pollution control devices and stacks
3. Buildings
4. Building openings, including but not limited to doors, windows, roof openings, vents, hoods that vent to the atmosphere
  - a. Note the openings that are used for ingress or egress and its purpose (e.g. the movement of people, vehicles, equipment, etc.)
  - b. If the building opening is generally closed, identify the closure mechanism (e.g. a roll-up door, plastic strip curtains, etc.)
  - c. Identify any mechanical device(s) that facilitate the movement of air out of the building for each piece of equipment (e.g. a fan or blower)
5. Storage of any materials that contain Metals of Concern
6. Points of vehicle egress and ingress
7. Property boundary of the facility
8. Areas within property boundary that are publicly accessible
9. Nearest sensitive receptors in all directions within a quarter mile of the facility
10. Monitor locations
11. Wind monitor locations, if applicable

### **2.5 Project Manager**

Provide the name and complete contact information for the person at the facility who will take responsibility for all Monitoring and Sampling activities and reporting requirements. One or more back-up person(s) should also be identified.

## **2.6 Project Organization**

The Monitoring and Sampling Plan shall include an organizational chart or table identifying each person involved in the Monitoring and Sampling and their role. Include any third party contractors and laboratories conducting sample analysis.

It would be prudent to assign someone the role of the Quality Assurance (QA) Officer to oversee the implementation of the Monitoring and Sampling Plan including whether specified quality control (QC) procedures are being followed as described in this document. Ideally, this individual would not be involved in the data collection/analysis/interpretation/reporting process except in a review or oversight capacity.

According to Rule 1480(e)(1)(I), the Monitoring and Sampling Plan should include the company name(s), location, and contact information for the persons who will be conducting:

- Sample collection and sample retrieval
- Sample analysis
- Sample storage
- Maintenance of Monitoring and Sampling equipment
- Set-up of Monitoring and Sampling equipment

## **3. Monitoring and Sampling**

Rule 1480(f) establishes the monitoring and sampling requirements for the Metal TAC Monitoring Facility which include the following activities (Please refer to Rule 1480 for the specific Monitoring and Sampling requirements):

- Conduct Monitoring and Sampling at a minimum of one site that is based on the maximum expected ground level concentration of the Metals of Concern. The designation letter would include information on the initial number, type, and approximate location of the Metal TAC monitor(s) and wind monitors required to conduct Monitoring and Sampling.
- Collect one valid sample at each sampler from midnight to midnight or on a timeframe approved by the Executive Officer, provided that the total sampling time at each site is no less than 23 hours and no greater than 25 hours, on a schedule of 1 in 3 days, and 1 in 6 days if a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan is approved.
- Conduct sampling on a date specified in a written notice from the Executive Officer in lieu of a normally scheduled date that is an atypical sampling day due to fireworks, construction activity, or other atypical activities or events.

- Notify the Executive Officer within two hours of knowing a valid sample was not or will not be collected.
- Only one valid sample can be missed over a consecutive 30-day period for each monitor, unless the Valid Sample was not collected due to a mechanical failure, which includes a power outage.
- Record wind speed and direction, if applicable.

### **3.1 Siting of Samplers**

At least one monitor location must be representative of the Maximum Expected Ground Level Concentration of Metals of Concern, taking into account logistical constraints. Depending upon a facility's size, layout, and/or equipment and process characteristics, more than one monitor may be required to accurately characterize the facility's emissions.

An owner or operator of a Metal TAC Monitoring may choose to site additional monitors beyond the minimum required by Rule 1480. For example, a monitor location in the upwind direction would be useful when the owner or operator elects to provide evidence to the Executive Officer that the exceedance of three consecutive Valid Samples that are each four times the Benchmark Concentration, is not attributed to the facility.

Monitor locations must be included in the facility map(s) referenced in Section 2.4 of this Guidance or as a separate map.

When siting samplers for Monitoring and Sampling, please refer to the following basic guidelines:

**Sampler Heights** - The most desirable height for monitors/inlet probes for non-criteria pollutants is near the breathing zone. But practical factors such as safety and security may require that the monitor/ inlet probe be elevated. For non-criteria particulate pollutant monitors, the following monitor/inlet probe heights are recommended:

- For elevated sources: 2 to 15 meters
- For ground level sources: 2 to 7 meters

**Spacing from Obstructions** – Samplers located on a roofs or other structures are recommended to have a minimum of 2 meters separation from walls, parapets, penthouses, etc.

If at all possible the sampler/inlet probe must be located away from obstacles and buildings such that the distance between the obstacles and the sampler/inlet probe is at least twice the height that the obstacle protrudes above the sampler/ inlet probe. Airflow must be unrestricted in an arc of at least 270° around the sampler/inlet probe, and the predominant direction for the season of greatest pollutant concentration potential must be included in the 270° arc. If the inlet probe is located on the side of a building, 180° clearance is required.

**Note: Installing samplers on elevated work platforms or scaffolds may assist in meeting these siting guidelines.**

### ***3.2 Sampling Schedule***

Monitoring and Sampling must be conducted at least once every three days for a Basic or Alternative Monitoring and Sampling Plan pursuant to Rule 1480(f)(3)(A), and at least once every six days for a Reduced Basic or Reduced Alternative Monitoring and Sampling Plan pursuant to Rule 1480(f)(3)(B), (h)(1), and (h)(4).

Samples are to be collected on a schedule following the U.S. EPA National Sampling Schedule. A copy of the current year's schedule shall be included in the Monitoring and Sampling Plan. This schedule can be found at the U.S. EPA Ambient Monitoring Technology Information Center (AMTIC) website at the following link: <https://www3.epa.gov/ttn/amtic/calendar.html>. For future years, the updated U.S. EPA National Sampling Schedule should be used for the corresponding year.

A copy of the 2020 sampling schedule is included as Figure 1.

The EPA schedule is a one in three day schedule; the highlighted dates on the 2020 calendar are the expected sampling days. Typically samples are collected from midnight to midnight but alternate sample collection times may be approved by the Executive Officer.

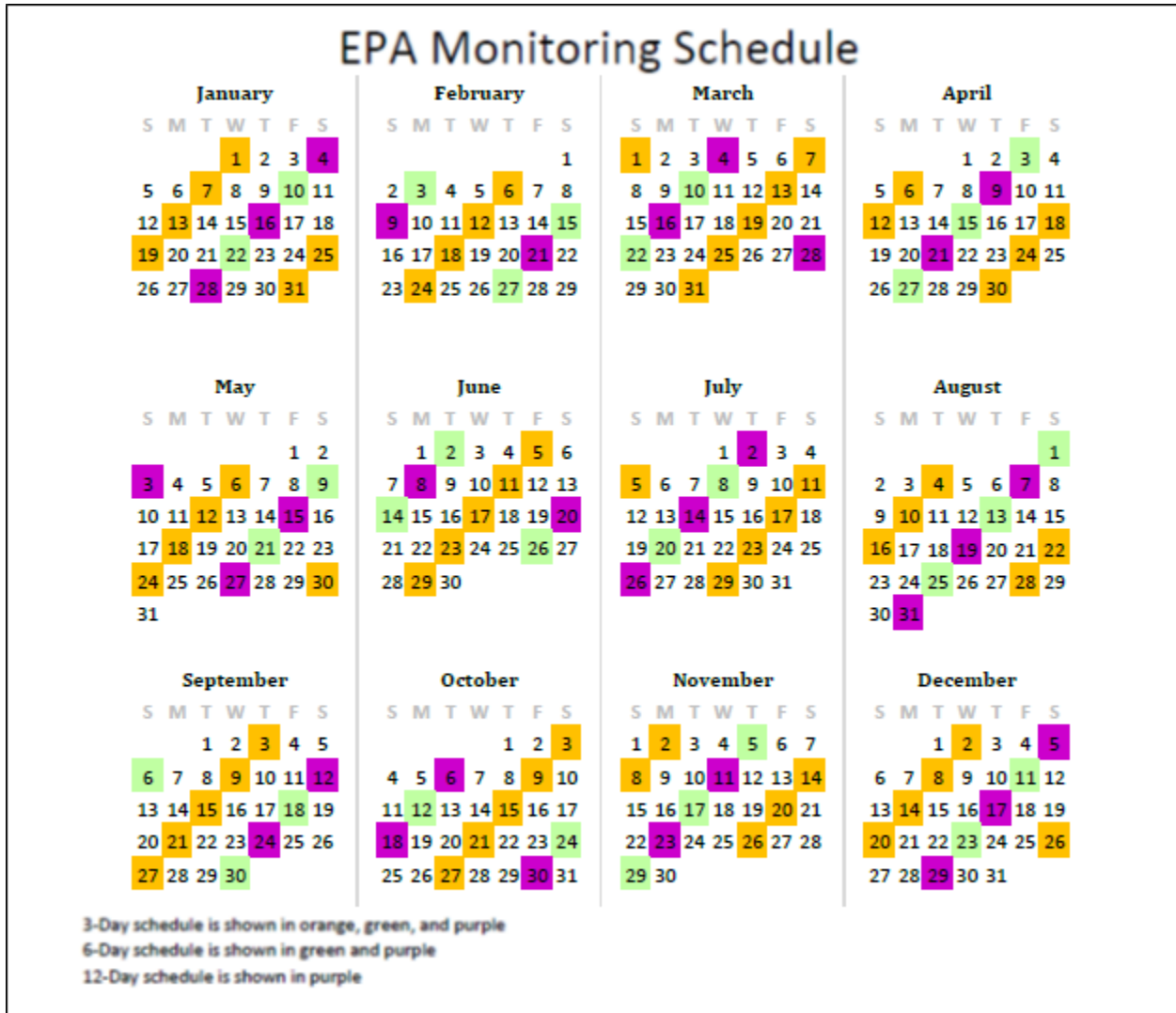
**Note: Sampler clocks shall be maintained on Pacific Standard Time (PST) year round and shall not be changed to Daylight Savings Time (DST). Additionally, the clocks for all monitoring equipment shall be maintained within  $\pm 5$  minutes of each other at all times.**

### ***3.3 Atypical Sampling Days***

According to Rule 1480(f)(3)(C), atypical sampling days are days when fireworks or other known activities will likely contribute to higher results at a facility's monitor during a regularly scheduled sampling day. Since South Coast AQMD is aware that there are other sources which would contribute to high results on these days, the Executive Officer would provide written notice to the owner or operator of a Metal TAC Monitoring Facility of when Monitoring and Sampling should occur in lieu of the atypical sampling day. Examples of atypical sampling days would be January 1 and July 4.



Figure 1 - U.S. EPA’s Sampling Schedule for 2020



3.4 Missed Samples and Make-Up Sample Procedures

According to Rule 1480(i)(4), in the event of a missed sample, an owner or operator of a Metal TAC Monitoring Facility must call 1-800-CUT-SMOG within two hours of knowing that a valid sample was not or will not be collected from any approved monitor and provide the following information:

- Facility Name
- Identification of Monitor
- Date of occurrence
- Reason why sample was not collected, or why the collected sample did not meet definition of a valid sample

- Repair date or anticipated repair date, if the cause was due to mechanical breakdown of equipment

Per Rule 1480(i)(5), within seven days following the notification to the Executive Officer that a Valid Sample was not or will not be collected, the owner or operator of a Metal TAC Monitoring Facility must electronically submit copies of documentation of any required repairs or replacement due to mechanical failure, unless the mechanical failure was a power outage. The Executive Officer may extend this seven day deadline as needed based on the repair date.

Samples and sample results may be invalidated for a number of reasons. In order to increase the likelihood of attaining a high completeness goal, make-up samples may be collected when a sample or sample result is invalidated. A replacement sample (make-up sample pursuant to (e)(1)(H)(iv)) should be collected as close to the original sampling date as possible, and preferably before the next scheduled sampling date.

### ***3.5 Use of Surrogates of a Metal of Concern***

An owner or operator of a Metal TAC Monitoring Facility that would like to propose the use of a surrogate when Monitoring and Sampling for a Metal of Concern should include the following information:

- The Metal of Concern and the corresponding surrogate
- Explanation of why the use of a surrogate is appropriate. This can include information such as methods which have been approved by U.S. EPA or other agencies and procedures which will be used to demonstrate the appropriate use of the surrogate (e.g. collocating monitors to collect both the Metal of Concern and the surrogate for a period of time).

### ***3.6 Sample Analysis Test Methods***

Although Rule 1480(f)(5) does not specify test methods, an owner or operator of a Metal TAC Monitoring Facility must monitor and analyze valid samples collected in accordance with U.S. EPA methods or the appropriate methods approved by the South Coast AQMD. At the time of writing, these are the approved methods which can be used to conduct Monitoring and Sampling for Rule 1480:

- ASTM Method D7614- Standard Test Method for Determination of Total Suspended Particulate (TSP) Hexavalent Chromium in Ambient Air Analyzed by Ion Chromatography (IC) and Spectrophotometric Measurements for Hexavalent Chromium
- U.S. Environmental Protection Agency Method SOP 5-03: "Standard Operating Procedure for the Determination of Hexavalent Chromium In Ambient Air analyzed By Ion Chromatography (IC)"

- US EPA Method IO 3.1 - Selection, Preparation and Extraction of Filter Material and IO 3.5 – Determination of Metals in Ambient Particulate Matter Using Inductively Coupled Plasma/ Mass Spectrometry (ICP/MS). These methods are for non-hexavalent chromium metals

Table 1 summarizes the Metals of Concern and the associated test methods and sampling media.

**Table 1 - Principal Metals of Concern and Associated Test Methods and Sampling Media**

METALS OF CONCERN	Test Method	Sampling media
Hexavalent Chromium (TSP)	ASTM D7614 EPA Method SOP 5-03 NATTS TAD Revision 2	acid washed sodium bicarbonate impregnated cellulose filter
Non-hexavalent Chromium Metals TSP/PM10 *	EPA IO 3.1 and IO 3.5 NATTS TAD Revision 2 and 3	quartz, Teflon, glass or cellulose filter

*\* The Monitoring and Sampling Plan must specify whether a non-hexavalent chromium Metal of Concern is sampled using the methods associated with TSP or PM10 particles. The method must be approved by the Executive Officer.*

The Monitoring and Sampling Plan must specify the Metal of Concern, test method, and sampling media which will be used to conduct Monitoring and Sampling.

### **3.7 Sample Storage and Sample Retention**

Rule 1480(f)(6) requires that all collected Valid Samples or the solution rendered from the acid extraction of a filter sample be retained and properly stored for a period of six months unless the entire filter media is digested and consumed.

The Monitoring and Sampling Plan should specify the location where the samples or sample solutions will be stored and the procedures for the proper storage including how the Chain of Custody is maintained.

### **3.8 Standard Operating Procedure and Chain of Custody**

**The Monitoring and Sampling Plan must include a Standard Operating Procedure (SOP) for sample handling and custody and a sample of the Chain of Custody form that will be used.**

Persons performing sampling and laboratories performing sample analysis shall follow the approved sampling handling SOP and are required to utilize Chain of Custody documentation as a method of identifying each sample and documenting who has had possession of samples at any given time (i.e., who handled it) throughout its life cycle. A critical aspect of the Chain of Custody

system is the use of unique sample identification numbers which can be assigned at distribution of sample media or at sample collection.

A proper Chain of Custody system tracks the location and destination of each sample through all of the following stages:

- Sample media preparation
- Sample media transfer to operator
- Sampled media removal and new sample media installation on sampler
- Sampled media return to laboratory
- Sample recovery and analysis
- Sample archive (if some sample remains after analysis)

When preparing a sampler for a collection run, the operator chooses a filter and enters the Sample ID# on the Chain of Custody form with the appropriate supporting information. When the filter is loaded into the sampler, the operator will document the date, time, station, sampler ID number, and name of person loading the sampler, confirming filter number on the Chain of Custody form with that of the filter. The operator collects the actual time-integrated sample on the prepared media, then recovers the exposed sample from the sampler and prepares it for transport by returning the filter to its designated container and placing the container in a clean plastic bag. The plastic bag should be transported in a clean insulated container with clean frozen ice to keep samples cool during transport. The use of blue ice packs is recommended as it minimizes the possibility of melted ice water compromising the samples making them invalid.

If samples are not analyzed immediately after collection the sample media should be stored in a freezer until analysis. Table 2 summarizes hold times.

**Table 2 - Typical Sampling Media Holding Times**

Media	Hold Time	From	To	Reference
Filters used for metals sampling	180 day	Sample end date/time	Analysis	NATTS TAD Revision 3
Filters used for Hexavalent Chromium sampling	21 day Freezer hold time	Sample end date/time	Analysis	NATTS TAD Revision 2

After securing the sample for transport the site operator checks or completes relevant portions of the Chain of Custody form, including date, time and name of personnel removing the sample from the sampler.

When the filter is returned to the laboratory, the date, time, and personnel returning the filter are documented. When the filter arrives at the designated location in the laboratory, the date, time, and person receiving the filter are documented.

**Note: Sample filters must not be handled with bare hands. Always wear clean lint free synthetic gloves (Latex, Nitrile, etc.).**

## **4. Wind Monitoring**

**Note: Wind direction is defined as the direction from which the wind is blowing from, measured in degrees from true north.**

### ***4.1 Required Wind Monitoring Information***

According to Rule 1480(f)(8), facilities must collect wind speed and direction data, if it is required by the approved Monitoring and Sampling Plan. A Basic or Alternative Monitoring and Sampling Plan should include one of the following:

- If using a third party contractor other than the South Coast AQMD to collect wind speed and direction data, include a list of all equipment to be used and the location of the wind monitor should be included in the map provided in Section 2.4 or in a separate map of the facility. For each piece of equipment, include manufacturer, model, serial numbers, operating procedures and maintenance schedule, height of wind sensors above ground and above any building or structure it may be mounted on, and the distance from any obstacles of equal or greater height in all directions.
- If wind speed and direction data will not be collected, include an explanation of why such data collection is not necessary. For example, based on local topography there is an existing meteorological station which is representative of the project conditions and data meeting the requirements of Rule 1480(f)(8) available; the Metal TAC Monitoring Facility elects to only site one monitor based on the maximum modeled ground level concentration and does not wish to use wind speed or direction data as evidence that exceedances of four times the Benchmark Concentration are not attributed to the facility as allowed in Rule 1480(h)(2) and (h)(5); or any other reasons.
- If using South Coast AQMD to collect wind speed and direction data, the Alternative or Reduced Alternative Monitoring and Sampling Plan should state that the owner or operator of a Metal TAC Facility elects to have the South Coast AQMD collect wind speed and direction data and agrees to pay the fees in Appendix 1 or Rule 301. South Coast AQMD staff will provide the necessary information on wind monitoring at the time of preparation of the Alternative Monitoring and Sampling Plan.

The following sections provide the minimum recommendations for collecting wind speed and direction data to meet the requirements of Rule 1480(f)(8).

**4.2 Siting of the Wind Sensor**

In order for the wind system to record data that is representative of the general area, the system must be properly sited with minimal obstructions to the wind flow from obstacles such as buildings, hills, or trees.

The recommended sensor height for measuring surface winds is 10 meters (33 feet) above ground level over open, level terrain. This usually requires the installation of a tower or a mast. When mounted on a building or structure, wind system must be mounted at least 1.5 times the height of the building above the rooftop. Since these siting guidelines are sometimes not practical, especially in urban areas, siting that deviates from these guidelines must be clearly and thoroughly explained in the Monitoring and Sampling Plan.

**4.3 Accuracy of the Wind Sensor**

It is recommended that the wind system starting threshold be rated as no higher than 0.5 meters per second (m/s). If there is some suspicion that the site would have a significant number of hours of wind speeds under 0.5 m/s, sensors with a lower threshold, such as 0.22 m/s, should be used. Wind systems shall be accurate to within 0.2 m/s ± 5 percent of the observed speed. Total wind direction system errors shall not exceed 5 degrees. This includes an instrument accuracy of ±3 degrees for linearity and ±2 degrees for alignment to a known direction. Table 3 summarizes these accuracy guidelines.

**Table 3 - Accuracy Guidelines for Wind Systems**

Sensor Type	Sensor Height	Range	Accuracy	Resolution	Starting threshold	Procedural References
Wind Speed	10 Meters	0.5 – 50 m/s	0.2 m/s ± 5% of observed wind speed	0.1 m/s	0.5 m/s	EPA, 2000 EPA, 1995
Wind Direction	10 Meters	0-360 degrees (or 0 to 540°)	± 5 degrees	1 degree	0.5 m/s	EPA, 2000 EPA, 1995

**4.4 Data Recording Devices**

Electronic data loggers are the preferred method of recording and archiving wind speed and direction data. Electronic data loggers allow data to be transmitted to a central computer and easily submitted to South Coast AQMD in electronic format. All data records must be kept for a period of at least three years after the requirements for data collection has ended. Data recovery from a well-maintained meteorological system should be at least 90% complete on an annual basis, with no large data gaps (i.e., gaps greater than two weeks).

For Rule 1480, the wind speed and direction data averaging periods shall be at least every 15 minutes.

Since wind direction has a numerical discontinuity between 360 and 001 degrees, scalar averaging of the wind direction is usually calculated using the unit vector method (EPA 2000). Data logger clocks must be maintained within five minutes Pacific Standard Time (PST) on a 24-hour clock. Wind system clocks shall remain on PST year round and should not be changed to Daylight Savings Time.

## 5. Project Data Quality

### *Data Quality Indicators*

To maintain confidence in the Monitoring and Sampling results, a quality assurance system must be established that will ensure acceptable data quality. To do this, the following Data Quality Indicators (DQIs) must be considered and addressed when designing the monitoring program and developing the Monitoring and Sampling Plan:

**Representativeness:** Representativeness is the expression of the degree to which data accurately and precisely represent a characteristic of an environmental condition or a population and relates to where, how, and when samples are collected. Assuring the collection of a representative air quality sample depends on the following factors:

- Locating representative sampling sites and selecting a network size that is consistent with the monitoring objectives.
- Identifying and documenting the constraints on the sampling sites that may be imposed by local topography, emission sources, meteorology, land access and any other physical constraints.
- Selecting a sampling schedules and frequencies that are consistent with the monitoring objectives.

**Completeness:** Completeness is an important data quality indicator, the level of completeness of an air monitoring program can be considered a qualitative measure of the reliability of the air monitoring equipment and laboratory analytical equipment, and a measure of the efficiency of the monitoring program as a whole. Completeness is typically expressed as percent of valid usable data actually obtained compared to the amount that was expected. 100% completeness level is ideal, but due to a variety of circumstances all samples scheduled to be collected may not be collected. Or, the data from collected samples cannot be used due to various reasons discovered after sample collection, for example; failed sampler flow checks or calibrations, sample handling errors or analytical errors. Under Rule 1480 facilities are allowed to miss only one sample per month therefore the completeness goal is 90%.

**Precision:** Precision is defined as the degree of mutual agreement between or among independent measurements of a similar property. Precision is typically reported as Coefficient of Variation (CV).

Field precision is assessed using collocated samples, field duplicates, or field splits. Collocated samples are samples collected simultaneously using two independent collections systems at same location. Laboratory precision is assessed using laboratory duplicates, matrix spike duplicates, or laboratory control sample duplicates.

**Bias:** Bias is defined as the difference of a measurement from a true or accepted value and can be negative or positive. As much as possible, bias should be minimized as biased data may result in incorrect conclusions and therefore incorrect decisions. Bias may originate in several places within the sample collection and analysis processes.

- Sources of **sample collection bias** include, but are not limited to, incorrectly calibrated flows or out-of-calibration sampling instruments, elevated and unaccounted for background on collection media, poorly maintained (dirty) sampling inlets and flow paths, and poor sample handling techniques resulting in contamination or loss of analyte.
- Sources of **analysis bias** include, but are not limited to, poor hygiene or technique in sample preparation, incorrectly calibrated or out of tolerance equipment used for standard materials preparation and analysis, and infrequent or inappropriate instrument maintenance leading to enhanced or degraded analyte responses.

**Assessing Sampler Bias.** The direction of the flow rate bias in metals sampling is conversely proportional to the bias introduced in the reported concentrations. In other words; sampler flow rates which are biased low result in overestimation of air concentrations, whereas sampler flow rates which are biased high result in underestimation of air concentrations.

The indicated flow rate for the low volume metals sampling must be within  $\pm 4\%$  of the flow transfer standard and within  $\pm 5\%$  of the sampler design flow rate. Failure to meet these criteria must result in corrective action such as recalibration of the sampling unit. Samplers which cannot meet these flow accuracy specifications should not be utilized for metals sample collection.

**Note: Following a failed calibration or flow check, sample data collected since the last acceptable calibration or flow check must be evaluated and such data may be subject to invalidation. To minimize risk of invalidation of data, monthly (or shorter) flow checks are highly recommended.**

**Assessing Analytic Bias.** Rule 1480 analytic bias is determined by review of instrument and filter blank, field blanks, spike, and other analytic quality control data as well as analysis of performance test samples.



**Sensitivity:** Usually expressed as method detection limit (MDL). The MDL should be related to any decisions that will be made as a result of the data collection effort.

Table 4 and Table 5 list the required parameters for data measurement quality objectives (MQOs) that must be met when sampling for hexavalent chromium and non-hexavalent chromium metal TACs.

**Table 4 - Measurement Quality Objectives for Hexavalent Chromium Sampling**

MQO Parameter	Requirement	Acceptance Criteria
Precision	Collocated samples. Collected 10% of total samples	<15% CV
Bias	Performance Evaluation samples	±25%
Completeness	Valid samples collected compared to samples planned	>85%
Sensitivity	MDL should be determined annually, or after any major instrument changes	MDL should be at level to detect Hexavalent Chromium at ambient levels
Sample Flow Rate Accuracy	Sampler indicated flow rate compared to measured sample flow rate.	±4%

*Reference: South Coast AQMD NATTS QAPP*

**Table 5 - Measurement Quality Objectives for Non-Hexavalent Chromium Metal TAC Sampling**

MQO Parameter	Requirement	Acceptance Criteria
Precision	Collocated samples. Collected 10% of total samples	<15% CV
Bias	Performance Evaluation samples	± 25% for each analyte/sample
Completeness	Valid samples collected compared to samples planned	>85%
Sensitivity	MDL should be determined annually, or after any major instrument changes	MDLs should be at levels to detect analytes of interest at ambient levels
Sample Flow Rate Accuracy	Sampler indicated flow rate compared to measured sample flow rate.	±4%

*Reference: South Coast AQMD NATTS QAPP*

## 6. Data Review and Validation

All analytical and meteorological data are to be compiled and reviewed by Project Manager before submission to South Coast AQMD. For efficient data review it is recommended data be compiled in a tabular format and archived and transmitted electronically.

Decisions to invalidate data or qualify data are made during this review and should be noted in monthly report, including reason for invalidation and corrective action taken, if any.

Rule 1480(i)(4) states that if a valid sample is missed or invalidated the facility must notify the Executive Officer by telephone within two hours of knowing a valid sample was not or will not be collected and that a follow up report must be submitted within seven days to the Executive Officer pursuant to (i)(5); therefore this review should be subsequent and in addition to the initial telephone notification.

As needed or at least annually, assessments of precision, completeness, bias, and sensitivity will be performed to verify quality objectives are met. If these data quality indicators do not meet the project goals, then corrective action should be taken.

## 7. Data Management

The Monitoring and Sampling Plan must provide a list of the steps that will be taken to ensure that data are transferred accurately from collection to analysis to reporting. The plan should discuss the measures that will be taken to review the data collection processes, including field notes or field

data sheets; to obtain and review complete laboratory reports; and to review the data entry system, including its use in reports. A checklist or table is acceptable.

## **8. Sample Documentation**

### **8.1 Field Logbooks**

Separate Logbooks should be established for each sampler and wind system to document where, when, how, and from whom any vital project information was obtained. All entries should be legible, written in black ink, and signed by the individual making the entries. Use factual, objective language, entries should be complete and accurate enough to permit reconstruction of field activities. Logbooks should have consecutively numbered pages and pages should never be removed, mistakes should be lined through and dated and initialed.

At a minimum, the following information should be recorded in the Logbook during the collection of each sample:

- Sample location and description
- Site or sampling area sketch showing sample location and measured distances
- Sampler name(s)
- Date and time of sample collection
- Sampler start and end time
- Identification of sampling equipment used
- Sampler calibration dates and results
- Flow check results
- Field observations and details related to analysis or integrity of samples (e.g., weather conditions, noticeable odors, colors, etc.)
- Sample identification numbers and any explanatory codes, and chain-of-custody form numbers
- Shipping arrangements (overnight air bill number)
- Name(s) of recipient laboratory

### **8.2 Sample Chain of Custody Forms**

An example of the Chain of Custody form that will be used must be included in the Monitoring and Sampling Plan. Chain of Custody form(s) must be completed and sent with samples for each laboratory and each shipment.

In this context, Chain of Custody is chronological documentation that records the sequence of custody, control, transfer, analysis, and disposition of the sample or their extracts.

The Chain of Custody forms must identify the contents of each shipment and persons must maintain the custodial integrity of the samples or their extracts. Samples and their extracts must be kept in someone’s physical possession or in a secured area that is restricted to authorized personnel.

## 9. Quality Control

Table 6 summarizes the schedule for quality control of field equipment.

**Table 6 - Field Equipment QC Schedule**

Metals Measurements			
Activity	Frequency	Acceptable Criteria	Corrective Action
Clean Sampler	Monthly	Visual Inspection	Repair/Replace/Repeat
Check Flow	Monthly	As-Is Check within ±4% of set point	Repair/Replace as needed
Calibrate Flow	Semi-Annual	±5% of true	Repair/Replace as needed
Hexavalent Chromium Measurements			
Activity	Frequency	Acceptable Criteria	Corrective Action
Clean Sampler	Monthly	Visual Inspection	Repair/Replace/Repeat
Check Flow	Monthly	As-Is Check within ±4% of set point	Repair/Replace as needed
Calibrate Flow	Semi-Annual	±5% of true	Repair/Replace as needed

### 9.1 Quality Control Samples

To ensure the integrity of Valid Samples collected, quality control samples must be collected. Table 7 in an example of a QC schedule that should be included in the Monitoring and Sampling Plan.

Discrete samples require field blanks at scheduled frequencies. This is necessary for determining bias (if any) for all the process post media preparation through laboratory drop off. Field blanks are handled without air sampling through the sampling media.

Field blanks are transported to the monitoring site, placed on the sampler, and then retrieved without sampling. If acceptance criteria are exceeded, the sampler and sample transportation methods should be investigated.

**Table 7 - QC Sample Schedule**

Description	Frequency	Acceptance Criteria
Field Blank	Monthly	TBD by Lab

**9.2 Collocated Samples**

Collocated samples are collected by placing a sampler in the same location as the primary sampler. If the primary sampler does not operate correctly or collected data that was invalid, valid collocated data can be substituted for the particular samples missed by the primary sampler. If the Coefficient of Variation (CV) values exceed the criteria listed in Table 8 below, then sample and analysis techniques are investigated to determine the cause of high variability

**Table 8 - Collocated Sample Schedule**

Description	Frequency	Criteria
Hexavalent Chromium	Monthly	<15% CV
Metals	Monthly	<15% CV

*Reference SCAQMD NATTS QAP*

**9.3 Quality Control for Wind Monitoring**

To ensure reliability of meteorological measurements regular scheduled QC checks must be performed. Table 9 below describes the QC procedures and frequency for meteorological measurements, as well as associated acceptance criteria and corrective action which are based upon the *Technical Assistance Document for the National Air Toxics Trends Stations Program, Revision 2* (U.S. EPA, 2009) and the *On-Site Meteorological Program Guidance for Regulatory Modeling Applications* (U.S. EPA, 1987).

**Table 9 - QC Requirements for Meteorological Sensors**

Wind Speed and Direction Sensors		
Activity	Frequency	Acceptance Criteria
Note any maintenance activities in Met system Log Book	As needed	Notes are complete and legible
Visually check wind sensors are operable and verify direction coincides with data logger or display	Monthly	Take corrective action as needed. (realign wind system or replace-repair sensors)

## **10. Auditing**

The South Coast AQMD reserves the authority to perform auditing activities at Rule 1480 facilities. Auditing activities may include collocated sampling, spilt analysis, or other activities to validate sampling results. Auditing may also include sampler operational and wind sensor validation checks.

ATTACHMENT J

# **Proposed Rule 1480**

## **Ambient Monitoring and Sampling of Metal Toxic Air Contaminants**

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**Governing Board Meeting**

December 6, 2019

# Background

- PR 1480 is a monitoring and sampling rule for metal Toxic Air Contaminants (TACs)
- Transfers the responsibility to conduct monitoring and sampling if the facility meets specific criteria
- Community representatives requested monitoring and sampling during rulemaking for Rule 1469 (chrome plating and anodizing)





# Need for PR 1480

- Ambient monitoring has identified several facilities with elevated levels of metal TACs
- Some facilities had estimated cancer health risks over 1,500 in a million – 15 times the Significant Risk Level
- Implementation of Rule 1402 risk reductions can take several years
- Ambient monitoring is needed to ensure metal TAC emissions are minimized until permanent pollution controls are installed under Rule 1402



**PR 1480  
Focuses  
on Metal  
TACs  
Because...**





**Fugitive Metal  
Particulate Can be  
Re-entrained in  
Ambient Air**



**Potent Carcinogen  
and Other Serious  
Non-Cancer  
Health Effects**



**Can Impact  
Residences and  
Other Sensitive  
Land Uses**



# General Approach to PR 1480



South Coast  
AQMD conducts  
ambient  
monitoring and  
sampling



If elevated  
levels, South  
Coast AQMD  
investigates  
to identify  
the facility or  
source

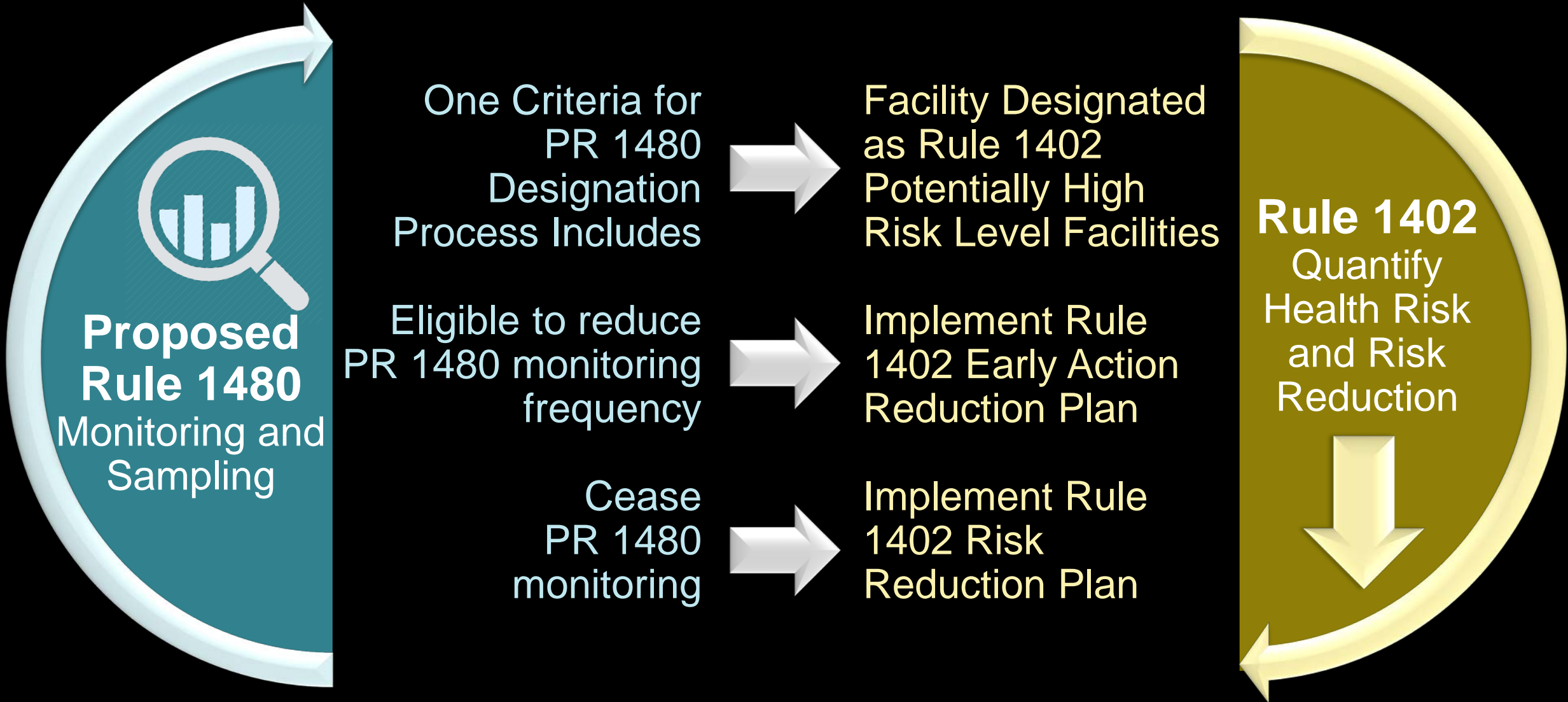


If designation criteria  
is met, facility must:  
  
Conduct monitoring  
and sampling;  
OR  
Pay fee and South  
Coast AQMD  
conducts monitoring



If facility cannot  
be designated  
under PR 1480,  
South Coast  
AQMD may  
continue  
monitoring and  
sampling

# PR 1480 Complements Rule 1402



*Since 2016, 3 facilities have been designated as Rule 1402 Potentially High Risk Level Facilities*

# Key Elements of Designation Process

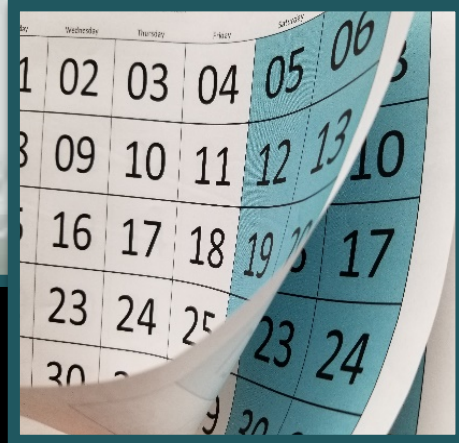


# Cost Sensitive Approach



**Reduced  
Minimum  
Number of  
Monitors  
to One**

**\$80,000/year**



**Includes  
Provision to  
Reduce  
Sampling  
Frequency**

**\$42,000/year**



**Direct  
Pathway to  
Discontinue  
Monitoring**



**Small  
Facility  
Exemption  
from  
Monitoring**



# Recommended Actions

- Determine that Proposed Rule 1480 is exempt from the California Environmental Quality Act
- Adopt Rule 1480





BOARD MEETING DATE: December 6, 2019

AGENDA NO. 28

**PROPOSAL:** Determine That the Contingency Measure Plan for the 1997 8-Hour Ozone Standard Is Within the Scope of the March 2017 Final Program Environmental Impact Report for the 2016 AQMP Such That Neither a New Environmental Document nor a Subsequent Environmental Document Is Required Under CEQA, and Approve Contingency Measure Plan for the 1997 8-Hour Ozone Standard

**SYNOPSIS:** The South Coast Air Basin (SCAB) is classified as an Extreme nonattainment area for the 1997 8-hour ozone national ambient air quality standard (NAAQS), with an attainment date of June 15, 2024. The attainment strategy in the 2016 AQMP includes both defined measures as well as “further deployment of cleaner technologies” measures, as allowed under the federal Clean Air Act (CAA) section 182(e)(5). Under CAA requirements, development and adoption of contingency measures are required no later than three years before the attainment date. The Contingency Measure Plan represents a joint strategy by South Coast AQMD and CARB to address the contingency measure requirements of CAA section 182(e)(5) for the 1997 8-hour ozone NAAQS for the SCAB.

**COMMITTEE:** Mobile Source, October 18 and November 15, 2019, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution:

1. Determining that the Contingency Measure Plan for the 1997 8-hour ozone standard is within the scope of the March 2017 Final Program Environmental Impact Report for the 2016 AQMP such that neither a new environmental document nor a subsequent environmental document is required under the California Environmental Quality Act; and
2. Approving the Contingency Measure Plan for the 1997 8-Hour Ozone Standard; and

3. Directing the Executive Officer to submit the approved Contingency Measure Plan to CARB for approval and subsequent submittal to the U.S. EPA for inclusion into the State Implementation Plan.

Wayne Natri  
Executive Officer

PF:SR:ZP:KC:KTG

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### **Background**

In 1979, the U.S. EPA established primary and secondary national ambient air quality standards (NAAQS or standards) for ozone at 0.12 parts per million (ppm) averaged over a 1-hour period. In 1997, the U.S. EPA revised the primary and secondary standards for ozone to 0.08 ppm, averaged over an 8-hour period (1997 8-hour ozone standards). The South Coast Air Basin (Basin) is currently classified as an Extreme nonattainment area for the 1997 8-hour ozone NAAQS of 0.08 ppm, with an attainment date of June 15, 2024 (emission reductions must occur in 2023). The South Coast AQMD's 2007 Air Quality Management Plan (AQMP) was the first detailed plan for the Basin to achieve this standard by the required deadline. As part of this attainment strategy, the 2007 AQMP relied on a provision in the Clean Air Act (CAA), section 182(e)(5), that allows areas classified as Extreme nonattainment to include emission reductions from measures that anticipate future advanced technologies. In the 2016 AQMP, the attainment strategy was updated to achieve the 1997 standard in 2023. This new attainment demonstration still relies on emission reductions from future advanced technologies, with a total of 108 tons per day (tpd) of NO<sub>x</sub> from this category. When the CAA section 182(e)(5) provision is relied upon to demonstrate attainment, the area must also submit contingency measures to U.S. EPA three years before reductions are needed to attain the standard.

### **Proposal**

The South Coast AQMD, in collaboration with CARB, has prepared the Contingency Measure Plan to address the contingency measure requirements for the 1997 8-hour ozone NAAQS for the Basin. The draft Contingency Measure Plan represents a joint strategy by South Coast AQMD and CARB for achieving the 108 tpd of NO<sub>x</sub> reductions allocated to section 182(e)(5) measures needed to attain the 1997 8-hour ozone standard in 2023. The draft Contingency Measure Plan includes: 1) newly identified emission reduction strategies; 2) additional incentive funding to further accelerate the transition to the cleanest available technologies; and 3) federal measures and/or significant level of funding to achieve the required reductions from sources under federal responsibility. Each of the three components in the Contingency Measure Plan is highlighted below:

*Identified Emission Reductions Strategies*

Since the adoption of the 2016 AQMP, CARB and South Coast AQMD have identified additional emission reductions, beyond the 2016 AQMP emission reductions commitment, that can be credited toward the section 182(e)(5) reduction commitments in 2023. These reductions are based on: a) adopted regulations; b) new regulations or programs to be adopted by 2020; c) clean mobile source technologies or strategies being implemented which were not reflected in the 2023 emissions inventory; and d) a series of innovative new measures by CARB to achieve further reductions. The Identified Emission Reductions Strategies are summarized in Table 1.

Table 1: Identified Emission Reduction Strategies

Measures Description	Agency	NOx Reductions (tpd)
<b>RECLAIM BARCT Rules</b>	South Coast AQMD	2
<b>Ports MOU</b>	South Coast AQMD	3.2-5.2
<b>Airport MOUs</b>	South Coast AQMD	0.5
<b>Metrolink Locomotives</b>	South Coast AQMD	3
<b>Funding Incentives (Expected Future Funding)</b>	South Coast AQMD	1.5
<b>Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation</b>	CARB	1.7
<b>ATCM for Portable Engines, and the Statewide Portable Equipment Registration Program</b>	CARB	0.25
<b>HD Inspection and Maintenance (I/M) Program</b>	CARB	4.2
<b>Innovative New Measures</b>	CARB	3.0
	<b>South Coast AQMD Subtotal</b>	<b>10.2-12.2 tpd</b>
	<b>CARB Subtotal</b>	<b>9.15 tpd</b>
	<b>Total Reductions Towards 182(e)(5) Commitment*</b>	<b>24-26 tpd</b>

\* Estimated reductions include 4.2 tpd of reductions associated with updated Ocean Going Vessels (OGV) emissions inventory and CARB’s SIP Strategy for OGV.

CARB’s proposed innovative new measures include: Tier 5 off-road diesel engine standard; state green contracting; reduction in single-occupancy vehicle travel growth; a locomotive emission reduction measure; vehicle miles traveled (VMT) and land conservation, regional VMT reductions, and co-benefits of climate change scoping plan building electrification. Detailed descriptions of all measures listed in Table 1 are provided in Attachment B.

*Additional Incentive Funding*

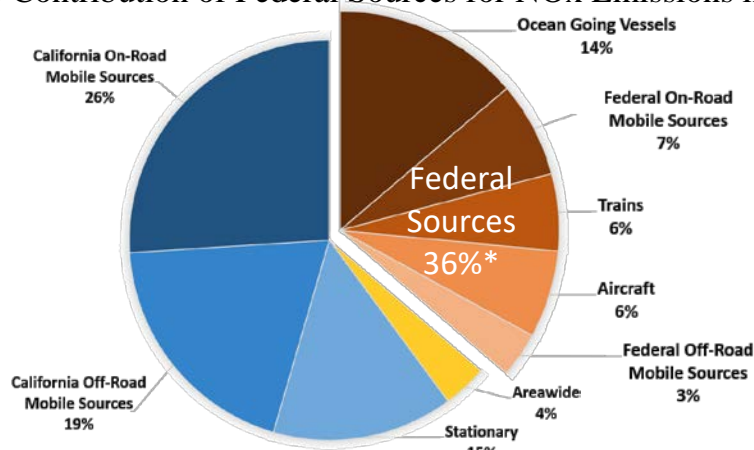
Over 80% of the Basin’s NOx is from mobile sources; therefore, reducing mobile source emissions is key to attaining the standard. The role of incentive funding has been

critical to provide the appropriate market signals to advance the development of zero or near-zero technologies into full commercialization and accelerate turnover to cleaner engines. Based on the analysis in the 2016 AQMP, over \$1 billion of additional incentive funding is required per year over 14 years to achieve the needed reductions to meet the ozone standards in the Basin in 2023 and 2031 (2031 is the attainment date for 2008 8-hour ozone standard). Since the adoption of the 2016 AQMP, South Coast AQMD has been aggressively pursuing new sources of funding. These efforts have led to an approximate doubling of incentive funding - now roughly between \$200-300 million per year. However, this level of funding has not been adequate to meet the 2016 AQMP funding goals and achieve the necessary reductions. Moving forward, the South Coast AQMD will seek additional funding sources including: (1) Voting District Authorization for Clean Air Legislation, SB 732 (Allen), (2) Greenhouse Gas Reduction Funds (GGRF), and (3) Statewide Bond Funding. SB 732 (Allen) seeks authorization from the Legislature to create a voting district in the South Coast region to allow local funding measures to be placed on the ballot. The Voting District Authorization bill could result in the South Coast region receiving a sustainable source of funding in the amount of about \$1.4 billion per year assuming a one-half cent increase in sales tax. Based on staff’s preliminary analysis, an additional 15 tons per day of NOx reductions could be achieved in 2023 with the \$1.4 billion of funding.

*Federal Measures and Federal Responsibility*

As California and the South Coast AQMD continue to pursue the cleanest technologies and adopt and implement the most stringent regulations and programs in the nation, federal action is critical for meeting this standard. While total NOx emissions have decreased in South Coast by nearly 70 percent from 1997, NOx emissions from federal sources outside of California’s control have only decreased by 15 percent since 1997, and they are projected to increase in the future if federal action is not taken. Emissions from aircraft, locomotives, ocean going vessels, out-of-state trucks, and certain off-road equipment – which are all sources under federal authority – account for 36% of NOx emissions in 2023, as shown in Figure 1. California relies on U.S. EPA to lower emissions from sources that the federal government alone has the authority to regulate, or regulates in cooperation with international organizations.

Figure 1: Contribution of Federal Sources for NOx Emissions in 2023



\* Category includes international sources that are under the responsibility of the federal government

Absent federal action, attainment of the 1997 8-hour standard is not possible by 2023. Therefore, to achieve the balance of the section 182(e)(5) commitment, additional reductions are needed from sources under federal jurisdiction through federal regulatory action and/or federal incentive funding. Potential emissions reductions that can be achieved from federal action are summarized in Table 2 below.

Table 2: Potential Federal Measures

Measures	Description	2023 NO <sub>x</sub> Reductions (tpd)
<b>Low-NO<sub>x</sub> Heavy-Duty Vehicles</b>	Heavy-duty vehicles (above 14,000 lbs. GVWR) in compliance with low-NO <sub>x</sub> standard in 2023	Up to 35
<b>Low-NO<sub>x</sub> Ocean-Going Vessels</b>	Ocean-going vessels coming to California powered by Tier 3 engines in 2023	Up to 28
<b>Low-NO<sub>x</sub> Locomotives</b>	Locomotives coming to California powered by Tier 4 engines in 2023	Up to 11
<b>Low-NO<sub>x</sub> Aircraft</b>	Aircraft NO <sub>x</sub> reductions assumption of 20% if emissions are held at 2012 levels.	Up to 4
<b>Total Reductions</b>		<b>Up to 78</b>

The Contingency Measure Plan includes proposed control measures that are needed to attain the 1997 8-hour standard. To attain the standard, the State, South Coast AQMD, and the federal government must work together with all stakeholders to drastically lower emissions to achieve the needed reductions. Table 3 summarizes the anticipated emissions reductions for the Contingency Measure Plan to address the section 182(e)(5) commitment in 2023.

Table 3: Contingency Measure Plan Strategies

CMP Strategy	2023 Reductions (tpd)
<b>Identified Emissions Reduction Strategies</b>	24-26
<b>Additional Incentive Funding</b>	15
<b>Federal Measures and/or Funding</b>	67-69
<b>Total</b>	<b>108</b>

### Public Process

Development of the Draft Contingency Measure Plan was conducted through a public process. South Coast AQMD staff held a Public Workshop on October 18, 2019 to solicit information, comments, and suggestions from the public, affected businesses, and stakeholders, with a comment period ending October 29, 2019. The Draft Contingency Measure Plan was also presented to the AQMP Advisory Group on October 9, 2019 and November 21, 2019 as well as the Mobile Source Committee on October 18, 2019 and November 15, 2019. The Contingency Measure Plan will be consider for approval by the Board at the December 6, 2019 meeting. Following approval by the Board, the

Contingency Measure Plan will then be submitted for approval by the CARB Board, which will then submit it to U.S. EPA for inclusion into the SIP.

### **California Environmental Quality Act Analysis**

South Coast AQMD, as Lead Agency, has reviewed the project pursuant to the California Environmental Quality Act (CEQA) and has determined that the proposed Contingency Measure Plan is considered a later activity within the scope of the project covered by the March 2017 Final Program Environmental Impact Report (PEIR) for the 2016 AQMP because no substantial changes or revisions to the project are necessary and no new significant environmental effects and no substantial increase in the severity of previously identified significant effects will occur as result of this later activity. As such, in accordance with CEQA Guidelines Section 15168(e)(2), the March 2017 Final PEIR for the 2016 AQMP adequately describes and analyzes the environmental effects of the project for the purposes of CEQA. Thus, no new environmental document is required pursuant to CEQA Guidelines Section 15168(c) and no subsequent CEQA document is required pursuant to CEQA Guidelines Section 15162.

Mitigation measures were included in the March 2017 Final PEIR and were made a condition of approval of the 2016 AQMP. A Mitigation, Monitoring, and Reporting Plan, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, was required and adopted for the 2016 AQMP. No new or modified mitigation measures will be made as a condition of the approval of this later activity. However, the mitigation measures that were made a condition of approval of the 2016 AQMP as analyzed in the March 2017 Final PEIR and the corresponding Mitigation, Monitoring, and Reporting Plan that was adopted at that time will remain in effect. In addition, Findings pursuant to CEQA Guidelines Section 15091 and a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 which were required and adopted for the 2016 AQMP, will remain in effect.

### **Socioeconomic Analysis**

A socioeconomic assessment is not required under Health & Safety Code section 40440.8(a) because that section applies to rules. In addition, the impacts from the Contingency Measure Plan fall within the scope of the Socioeconomic Report for the 2016 AQMP.

### **Attachments**

- A. Resolution
- B. Draft Final Contingency Measure Plan for the 1997 80 ppb 8-Hour Ozone Standard in the South Coast Air Basin
- C. Board Meeting Presentation

**ATTACHMENT A**

**RESOLUTION 19-\_\_\_\_\_**

**A Resolution of the South Coast Air Quality Management District (South Coast AQMD) Governing Board determining that the Contingency Measure Plan for the 1997 8-Hour Ozone Standard for the South Coast Air Basin is within the scope of the March 2017 Final Program Environmental Impact Report for the 2016 Air Quality Management Plan such that neither a new environmental document nor a subsequent environmental document is required under the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board approving the Contingency Measure Plan for the 1997 8-Hour Ozone Standard for the South Coast Air Basin and directing the Executive Officer to submit the approved Contingency Measure Plan to the California Air Resources Board (CARB) for its approval and subsequent submittal to the U.S. Environmental Protection Agency (U.S. EPA) for inclusion into the State Implementation Plan (SIP).**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the Contingency Measure Plan 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 South Coast AQMD Governing Board has reviewed the project pursuant to CEQA; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines, in light of substantial evidence on the whole record, that the Contingency Measure Plan for the 1997 8-Hour Ozone Standard for the South Coast Air Basin is considered to be a later activity within the scope of the previously approved project covered by the March 2017 Final Program Environmental Impact Report (PEIR) for the 2016 Air Quality Management Plan (AQMP) because no substantial changes or revisions are necessary and no new significant environmental effects and no substantial increase in the severity of previously identified significant effects will occur as result of this later activity such that no new environmental document would be required pursuant to CEQA Guidelines Section 15168(c) and no subsequent CEQA document would be required pursuant to CEQA Guidelines Section 15162; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the March 2017 Final PEIR for the 2016 AQMP adequately describes and analyzes the environmental effects of the project for the purposes of CEQA pursuant to CEQA Guidelines Section 15168(e)(2); and

**WHEREAS**, mitigation measures that were made a condition of approval of the March 2017 Final PEIR for the 2016 AQMP and the corresponding Mitigation Monitoring, and Reporting Plan that was adopted at that time shall remain in effect and no new or modified mitigation measures are required because no new significant adverse environmental impacts were identified and existing significant adverse environmental impacts would not be made substantially worse by the later activity; and

**WHEREAS**, Findings and a Statement of Overriding Considerations that were made a condition of approval of the project covered by the March 2017 Final PEIR for the 2016 AQMP pursuant to Public Resources Code Section 21081.6 shall remain in effect since the later activity will not result in new significant adverse environmental impacts and existing significant adverse environmental impacts would not be made substantially worse; and

**WHEREAS**, the 1997 8-hour ozone National Ambient Air Quality Standard (NAAQS) became effective on June 15, 2004. The South Coast Air Basin is designated as an Extreme nonattainment area for this standard with an attainment date of June 15, 2024; and

**WHEREAS**, the U.S. EPA revoked the 1997 8-hour ozone standard (80 ppb) effective 2015, but the South Coast Air Basin has continuing anti-backsliding obligations until this standard is attained including the obligation to have an approved attainment demonstration and ultimately to attain the standard or implement contingency measures and the section 185 fees on major sources; and

**WHEREAS**, the 2016 AQMP was approved by the South Coast AQMD Governing Board in March 2017, and subsequently submitted to the CARB and the U.S. EPA for inclusion into the SIP; and

**WHEREAS**, the 2016 AQMP included an updated attainment demonstration for the 1997 8-hour ozone standard for the South Coast Air Basin; and

**WHEREAS**, the attainment strategy in the 2016 AQMP includes both defined measures as well as 108 tons per day of NO<sub>x</sub> reductions allocated to “further deployment of cleaner technologies” measures for the 1997 8-hour ozone standard for the South Coast Air Basin, as allowed under the federal Clean Air Act (CAA) section 182(e)(5); and



**WHEREAS**, the submission to the Administrator of the U.S. EPA of contingency measures for emission reductions identified under CAA section 182(e)(5) are required no later than 3 years before the emission reductions for attainment are needed; and

**WHEREAS**, the South Coast AQMD has prepared the Contingency Measure Plan in partnership with CARB through a public process to address the contingency measures requirements of CAA section 182(e)(5) for the 1997 8-hour ozone standard; and

**WHEREAS**, the Contingency Measure Plan includes three components: (1) Identified Emissions Reduction Strategies; (2) Additional Incentive Funding; and (3) Federal Measures and/or Funding that are necessary and appropriate in light of the sources of air pollution in the South Coast Air Basin and the available controls within the legal authorities of California and the federal government; and

**WHEREAS**, that the South Coast AQMD Governing Board commits to achieve 14.4 to 16.4 tons per day (tpd) of NO<sub>x</sub> emission reductions, from the 2023 baseline emissions inventory in the 2016 AQMP, as specified in the Contingency Measure Plan; and

**WHEREAS**, the Contingency Measure Plan includes CARB commitment to achieve 4.2 tpd of NO<sub>x</sub> emissions reductions from Heavy-Duty Inspection and Maintenance Program and 3 tpd of NO<sub>x</sub> emissions reductions from Innovative New Measures, from the 2023 baseline emissions inventory in the 2016 AQMP contingent upon CARB's Board approval; and

**WHEREAS**, the South Coast AQMD Governing Board commits to achieve an additional 15 tpd of NO<sub>x</sub> emissions reductions from the 2023 baseline emissions inventory in the 2016 AQMP, as specified in the Contingency Measure Plan, subject to availability of new sources of funding; and

**WHEREAS**, an additional 67.5 to 69.5 tpd of NO<sub>x</sub> emissions reductions are necessary from the sources under federal authority and responsibility through incentive funding and/or regulatory actions for attainment of the 1997 8-hour ozone standard by 2023; and

**WHEREAS**, the South Coast AQMD staff conducted a Public Workshop regarding the Contingency Measure Plan on October 18, 2019; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that no socioeconomic assessment is required under Health & Safety Code section 40440.8(a) because that section applies to rules, and no additional socioeconomic impact will result from the update; and

**WHEREAS**, the public hearing has been properly noticed by providing a 30-day notice in the newspapers in accordance with U.S. EPA CFR Part 40 Section 51.102(d); and

**WHEREAS**, the South Coast AQMD Governing Board has held a public hearing to consider approval of the Contingency Measure Plan in accordance with all provisions of law; and

**WHEREAS**, the South Coast AQMD specifies the manager of the Contingency Measure Plan as the custodian of the documents or other materials which constitute the record of proceedings upon which the approval is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California.

**NOW, THEREFORE, BE IT RESOLVED**, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that the Contingency Measure Plan for the 1997 8-Hour Ozone Standard for the South Coast Air Basin is considered to be a later activity within the scope of the previously approved project covered by the March 2017 Final PEIR for the 2016 AQMP such that no new environmental document would be required pursuant to CEQA Guidelines Section 15168(c) and no subsequent CEQA document would be required pursuant to CEQA Guidelines Section 15162. This information was presented to the South Coast AQMD Governing Board, whose members reviewed, considered and approved the information therein prior to acting on the proposed project; and

**BE IT FURTHER RESOLVED**, that the mitigation measures that were made a condition of approval of the project covered by the March 2017 Final PEIR for the 2016 AQMP and the corresponding Mitigation, Monitoring, and Reporting Plan, Findings, and Statement of Overriding Considerations for the March 2017 Final PEIR will remain in effect; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby approve, pursuant to the authority granted by law, the Contingency Measure Plan for the 1997 8-Hour Ozone Standard for the South Coast Air Basin, Attachment B to the Board Letter, and incorporated herein by reference; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Executive Officer is hereby directed to forward a copy of this Resolution and the Contingency Measure Plan to CARB for approval and subsequent submittal to the U.S. EPA for approval as part of the California SIP. In addition, the South Coast AQMD Executive Officer is directed to forward any other information requested by the U.S. EPA in support of the SIP submittal; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board directs the Executive Officer to work with CARB and the U.S. EPA and take appropriate action to resolve any completeness or approvability issues that may arise regarding the SIP submission; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board authorizes the Executive Officer to include in the SIP submittal or supplement(s) to the SIP any technical updates, corrections, clarifications, or additional information that may be necessary to secure U.S. EPA approval.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARDS

Attachment B

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

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**Draft Final Contingency Measure Plan**

**Planning for Attainment of the 1997 80 ppb 8-Hour Ozone Standard in the South Coast Air Basin**

**December 2019**

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## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>1. BACKGROUND AND ACHIEVING ATTAINMENT OF THE 80 PPB STANDARD .....</b>	<b>7</b>
<b>a. Progress toward Attainment of the 1997 8-Hour Ozone Standard .....</b>	<b>7</b>
<b>b. History of Air Quality Planning in the South Coast AQMD .....</b>	<b>10</b>
<b>c. Emission Benefits from Existing Programs .....</b>	<b>21</b>
<b>d. Clean Air Act Section 182(e)(5) Contingency Measure Requirements.....</b>	<b>34</b>
<b>e. 182(e)(5) Commitments in the 2016 AQMP .....</b>	<b>35</b>
<b>2. CONTINGENCY MEASURE PLAN .....</b>	<b>39</b>
<b>3 IDENTIFIED MEASURES THAT CAN ACHIEVE REDUCTIONS BY 2023.....</b>	<b>40</b>
<b>a. South Coast AQMD Measures Providing NO<sub>x</sub> Reductions Not Included in the 2016 AQMP .....</b>	<b>40</b>
<b>b. CARB Regulations Providing NO<sub>x</sub> Reductions Not Included in the 2016 AQMP.....</b>	<b>48</b>
<b>c. CARB Innovative New Measures .....</b>	<b>49</b>
<b>4. ADDITIONAL INCENTIVE FUNDING THROUGH SOUTH COAST AQMD'S STATE LEGISLATIVE EFFORTS .....</b>	<b>53</b>
<b>5. FEDERAL MEASURES AND FEDERAL RESPONSIBILITY .....</b>	<b>56</b>
<b>a. California Lacks Direct Authority Over Significant Sources of Emissions .....</b>	<b>56</b>
<b>b. NO<sub>x</sub> Emissions from Sources Under Federal Responsibility are an Increasing Portion of the Inventory .....</b>	<b>57</b>
<b>c. Defined Measures to Reduce NO<sub>x</sub> from Federal and International Sources .....</b>	<b>59</b>
<b>6. CALIFORNIA ENVIRONMENTAL QUALITY ACT .....</b>	<b>66</b>
<b>7. SOCIOECONOMIC ANALYSIS .....</b>	<b>67</b>
<b>8. PUBLIC PROCESS .....</b>	<b>68</b>
<b>9. RESPONSE TO COMMENTS.....</b>	<b>69</b>

## EXECUTIVE SUMMARY

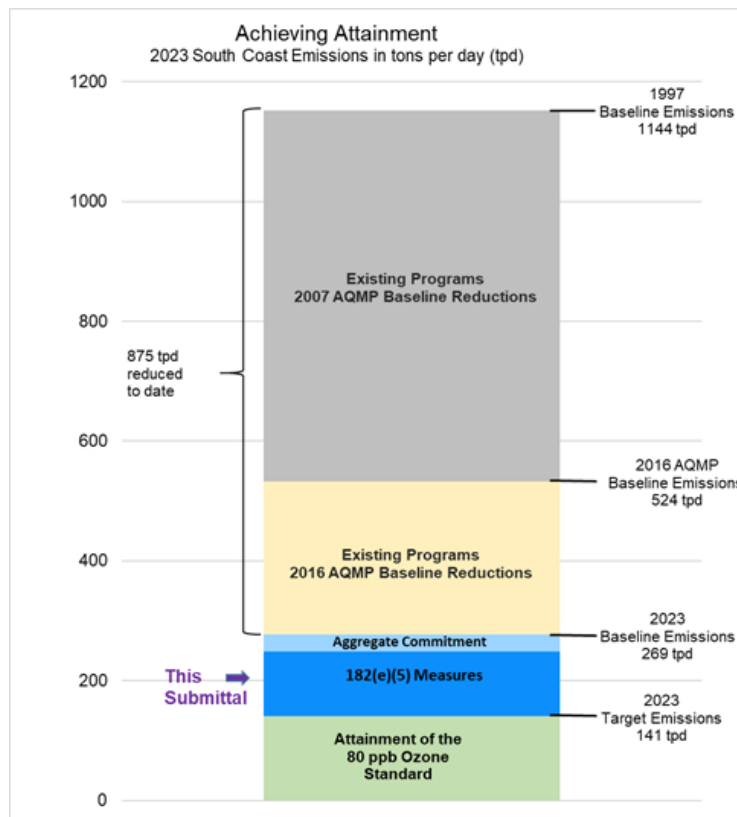
The South Coast Air Basin (Basin) has faced poor air quality dating back over eight decades. The first recognized episodes of photochemical smog (ozone) occurred in Los Angeles in the summer of 1943 with visibility reduced to only three blocks. With a booming industry and growing economy, the region continued to experience significant levels of air pollution. Increasing awareness of the impacts of air pollution on human health and the environment led to the development of air pollution control laws in California and at the federal level, culminating in the federal Clean Air Act (Act or CAA). As a result of California and federal requirements, aggressive air pollution control programs have been put in place that have drastically improved the air quality in the Basin despite significant increases in population and vehicles. Since the 1950s, the maximum levels of ozone have decreased by 75% while the population and the number of vehicles have increased by three and four fold, respectively. Incidents of Stage I smog alerts, which used to occur 100-120 times a year, have been eliminated. Ozone levels sufficient to trigger Stage II smog alerts levels have not occurred since the 1980s. Also, the National Ambient Air Quality Standards (NAAQS) for Carbon Monoxide (CO), Nitrogen Dioxide (NO<sub>2</sub>) and Particulate Matter less than 10 microns (PM<sub>10</sub>) have all been achieved in the Basin.

Because of these air quality challenges, the greater Los Angeles region has been at the forefront of air pollution science and research, low- and zero-emissions technology development, and innovative air quality regulations and programs. Significant advancements have been achieved in both stationary and mobile source control technologies for reducing emissions. Despite these efforts and the corresponding substantial improvements in air quality that we have achieved, the health of our residents continues to be seriously affected by the poor air quality. The region's unique topography and meteorology coupled with emissions from millions of vehicles and engines, including those associated with the thriving goods movement industry, continue to produce the worst ozone pollution in the nation. Further, new scientific information on the health impacts of air pollution has led to progressively more stringent ozone standards which present a significant challenge for the region to attain.

In 1997, U.S. EPA set a new health protective 8-hour ozone standard (standard) at 80 parts per billion (ppb), replacing the previous 1-hour ozone standard. U.S. EPA designated the Basin as Extreme nonattainment for this standard. In 2007, the South Coast AQMD's 2007 Air Quality Management Plan (AQMP) outlined a detailed path for the area to attain this standard by the CAA deadline of June 2024 (emission reductions must occur in 2023). As part of this attainment strategy, the 2007 AQMP relied on a provision in the Act, section 182(e)(5), that allows areas classified as Extreme nonattainment to include emissions reductions from measures that anticipate reductions from future advanced technologies. When this provision is relied upon to demonstrate attainment, the area must make an enforceable commitment to submit contingency measures to U.S. EPA three years before the reductions are needed to attain the standard. In this submittal, the State must demonstrate that the assumed reductions from future technology were

already achieved, or if not, the State must submit contingency measures capable of achieving the remaining emission reductions. This Contingency Measure Plan is intended to meet that requirement.

While ozone forms in the atmosphere from a photochemical reaction of NO<sub>x</sub> and VOCs, NO<sub>x</sub> is the key pollutant that must be controlled to reach attainment in our region. NO<sub>x</sub> is typically formed as a byproduct of combustion processes – such as those in power plants, boilers, and engines. As we have implemented increasingly more stringent requirements on stationary sources to control NO<sub>x</sub> emissions, emissions from mobile sources – such as trucks, locomotives, ships and planes – have grown to dominate NO<sub>x</sub> emissions. Today, over 80% of the NO<sub>x</sub> emissions in our region are from mobile sources. Figure ES-1 illustrates the great progress that California Air Resource Board (CARB) and South Coast AQMD have made in reducing NO<sub>x</sub> emissions since the standard was set in 1997. Since that time, NO<sub>x</sub> emissions have been reduced by 76% through CARB and South Coast AQMD’s regulations and programs.



**Figure ES-1: NO<sub>x</sub> Emission Reductions, Commitments and Requirements in the South Coast Air Basin**

In the 2016 AQMP, the South Coast AQMD updated its attainment demonstration to achieve the 1997 standard in 2023. While this new attainment demonstration still relies on the section 182(e)(5)'s future technology provision, the reductions needed from this provision are dramatically reduced – from 241 tons per day (tpd) NO<sub>x</sub> in the 2007 AQMP, to 108 tpd of NO<sub>x</sub>



in the 2016 AQMP. The 2007 AQMP's reliance on section 182(e)(5) was necessary at that time as new technologies were in their earliest stages of development, and some technologies were not yet foreseen. However, in the 2016 AQMP, the types of advanced technologies needed to achieve attainment were identified and were either already commercially available or were to be available by 2023. The main challenge was to rapidly turn over vehicle and engine fleets to these new technologies. An additional obstacle for California exists since many of the older vehicles and engines that need to be replaced are subject to federal, not state regulatory authority and therefore require federal action to provide these reductions. In Figure ES-1, the 108 tpd NO<sub>x</sub> emissions reductions that are remaining for section 182(e)(5) provisions and which are addressed in this draft Contingency Measure Plan are represented by the darker blue section.

This draft Contingency Measure Plan represents a joint strategy by South Coast AQMD and CARB for achieving the 108 tpd of NO<sub>x</sub> reductions allocated to section 182(e)(5) measures needed to attain the 1997 8-hour ozone standard. Achieving the standard by 2023 represents a tremendous challenge for the South Coast region - especially given the meteorological factors in the region conducive to poor air quality - and will require significant deployment of near-zero and zero-emission technologies and substantial levels of incentive funding to accelerate turnover to these cleaner technologies. While California and South Coast AQMD continue to implement their ongoing efforts, federal actions and measures are absolutely critical for meeting this standard. Without significant reductions from federal sources, we will be unable to attain the 1997 ozone standard in 2023.

The Contingency Measure Plan includes: 1) newly identified emission reduction strategies; 2) additional incentive funding to transition to the cleanest available technologies; and 3) significant federal action and/or funding to achieve the required reductions from sources under federal responsibility.

### *South Coast AQMD and CARB have Identified New Strategies*

To develop this plan, CARB and the South Coast AQMD have re-evaluated the sources of emissions in the Basin and developed further strategies to reduce emissions. Those strategies are reflected in this document as newly identified strategies. There are two types of newly identified strategies: Identified Emission Reduction Strategies shown in Table ES-1, and Innovative New Measures listed in Table ES-2.

The Identified Emission Reductions Strategies represent a next round of regulations and programs that both agencies are working toward in implementing the 2016 AQMP. These are efforts that have been adopted or are soon-to-be-adopted since adoption of the 2016 AQMP, but for which emission reductions were not included in the 2016 AQMP. The Innovative New Measures represent the next step of pushing the envelope to achieve more reductions at the State level. CARB continues to seek out new and innovative opportunities for emission reductions.

**Table ES-1: Identified Emission Reduction Strategies**

Measures Description	Agency	NOx Reductions (tpd)
RECLAIM BARCT Rules	South Coast AQMD	2
Ports MOU	South Coast AQMD	3.2 – 5.2
Airports MOU	South Coast AQMD	0.5
Metrolink Locomotives	South Coast AQMD	3
Funding Incentives (Expected Future Funding)	South Coast AQMD	1.5
Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation	CARB	1.7
ATCM for Portable Engines, and the Statewide Portable Equipment Registration Program	CARB	0.25
HD Inspection and Maintenance (I/M) Program	CARB	4.2
Innovative New Measures	CARB	3.0
	<b>South Coast AQMD Subtotal</b>	<b>10.2-12.2 tpd</b>
	<b>CARB Subtotal</b>	<b>9.15 tpd</b>
	<b>Total Reductions Towards 182(e)(5) Commitment*</b>	<b>24-26 tpd</b>

\* Estimated reductions including 4.2 tpd of reductions associated with updated OGV emissions inventory and CARB’s SIP Strategy for OGV.

**Table ES-2: CARB’s Innovative New Measures**

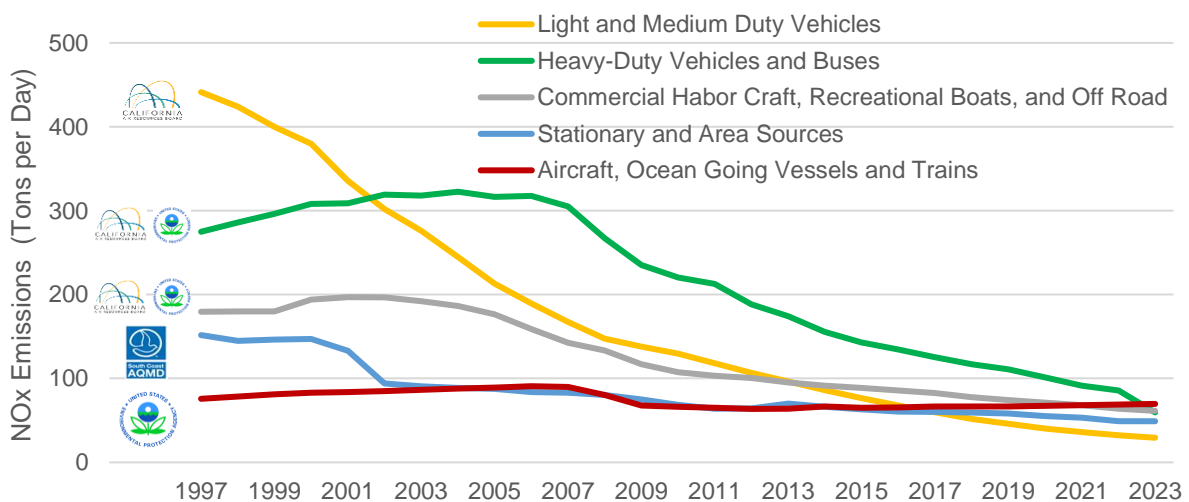
Measures	NOx Reductions (tpd)
Tier 5 Off-Road Diesel Engine Standard	3.0
State Green Contracting	
Reduction in Growth of Single-Occupancy Vehicle Travel	
Locomotive Emission Reduction Measure	
VMT and Land Conservation	
Regional VMT Reductions	
Co-benefits from Electrification of Buildings due to 2017 Climate Change Scoping Plan	

### *Additional Sources of Funding*

Since the inception of the Carl Moyer Program over 20 years ago, over \$2 billion of incentive funding has been spent in the South Coast region to accelerate the introduction of cleaner mobile and stationary source technologies. The role of incentive funding has been critical to provide the appropriate market signals to advance the development of these cleaner technologies into full commercialization. Based on the analysis in the 2016 AQMP, over \$1 billion of additional incentive funding is required per year over 14 years to achieve the needed reductions to meet the ozone standards in the Basin in 2023 and 2031. Since the adoption of the 2016 AQMP, South Coast AQMD has been aggressively pursuing new sources of funding. These efforts have led to an approximate doubling of incentive funding, now roughly between \$200-300 million per year. However, this has not been enough to meet the 2016 AQMP funding goals, and several years have been lost. Based on South Coast AQMD’s preliminary analysis, an additional 15 tpd of NOx reductions could be achieved in 2023 from continuing efforts to secure additional funding.

### *A Call for Action*

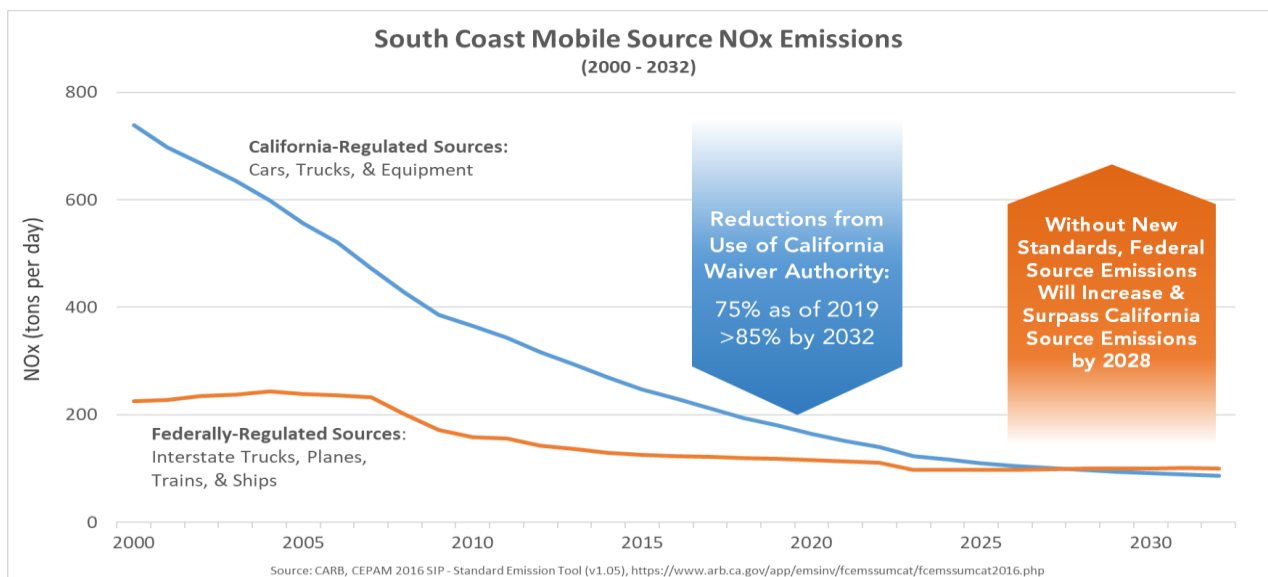
California and South Coast AQMD have pushed advances in clean technology, innovative regulations, and incentive programs to adopt the most comprehensive, aggressive, and successful strategy to reduce emissions from mobile sources in the nation. As a direct result of California’s programs, NOx emissions from those mobile sources under California’s authority have decreased by approximately 83 percent since 2000, as shown in Figure ES-2. California will be able to achieve a significant amount of the last portion of reductions needed to reach attainment in 2023. However, to achieve all of the reductions necessary to reach attainment, the State, South Coast AQMD and the federal government will need to work together with all stakeholders to drastically lower emissions to achieve the needed reductions.



**Figure ES-2: Progress in Reducing South Coast NOx Emissions by Agency**

California relies on U.S. EPA to lower emissions from sources that the federal government alone has the authority to regulate. Historically, NOx emissions from federally regulated sources were a relatively small portion of the total NOx inventory. For example, in 2000, emissions from interstate trucks, aircraft, trains, ocean-going vessels, and some off-road engines together made up approximately 20 percent of California’s total NOx inventory. While California adopted programs to lower NOx emissions from the mobile sources under California’s control, U.S. EPA has not kept pace in reducing NOx emissions from sources under federal control. As a result, those same federal sources are today responsible for 33 percent of NOx emissions in the South Coast in 2019, and that percentage is projected to continue to rise. Similarly, while total NOx emissions have decreased in South Coast by nearly 70 percent from 1997, NOx emissions from federal sources outside of California’s control have only decreased by 15 percent since 1997, and are projected to increase in the future without federal action.

As California and the South Coast AQMD continue to pursue the cleanest technologies and adopt the most stringent regulations and programs in the nation, federal action is critical for meeting this standard. As Figure ES-2 shows, aircraft, ocean going vessels, and trains’ total emissions have been almost flat and will be slightly increased in the future. Absent federal action, these emissions will continue to increase, as shown in Figure ES-3. To the extent that U.S. EPA fails to act on federal sources that are beyond California’s regulatory control, California would need to achieve reductions from these sources through voluntary incentive programs. The funding needed to achieve the necessary reductions dramatically exceeds current resources. Given that these sources are under federal authority and thus, federal responsibility, significant levels of federal incentive funding to reduce emissions from federal sources, and/or federal regulatory actions to achieve the remaining level of reductions is necessary for attainment in 2023.



**Figure ES-3: Federal Sources Overtake State Sources in the Future**

## 1. BACKGROUND AND ACHIEVING ATTAINMENT OF THE 80 PPB STANDARD

### a. Progress toward Attainment of the 1997 8-Hour Ozone Standard

In 1979, the U.S. EPA established primary and secondary national ambient air quality standards (NAAQS or standards) for ozone at 0.12 parts per million (ppm) averaged over a 1-hour period. The South Coast Air Basin was classified as an "extreme" nonattainment area<sup>1</sup> and, in 1990, was given an attainment deadline of November 15, 2010.

On July 18, 1997, the U.S. EPA revised the primary and secondary standards for ozone to 0.08 ppm, averaged over an 8-hour period ("1997 8-hour ozone standards"), and revoked the 1-hour ozone standard. U.S. EPA guidance on the revoked 1-hour ozone standard indicated that although the standard was revoked, certain planning requirements, known as anti-backsliding requirements, remained in effect. The Basin was classified as Severe 17 for the new 8-hour standard with an attainment date of June 2021. Due to challenges in attaining the 8-hour ozone standard, as permitted by the Clean Air Act, South Coast AQMD requested a voluntary re-designation of the Basin to "Extreme," with a new attainment date of June 15, 2024.

U.S. EPA revoked the 1997 8-hour ozone standard (0.08 ppm) in 2008, and promulgated the 2008 8-hour ozone NAAQS (0.075 ppm). Then in 2015, EPA revised the 8-hour standard to 0.070 ppm, effective December 2015. The South Coast Air Basin is classified as an Extreme nonattainment area for all three 8-hour ozone standards and has 20 years to attain each standard from the effective date of the final designation for each standard. Table 1-1 summarizes the attainment date and the attainment status for each of the federal ozone air quality standards for South Coast Air Basin.

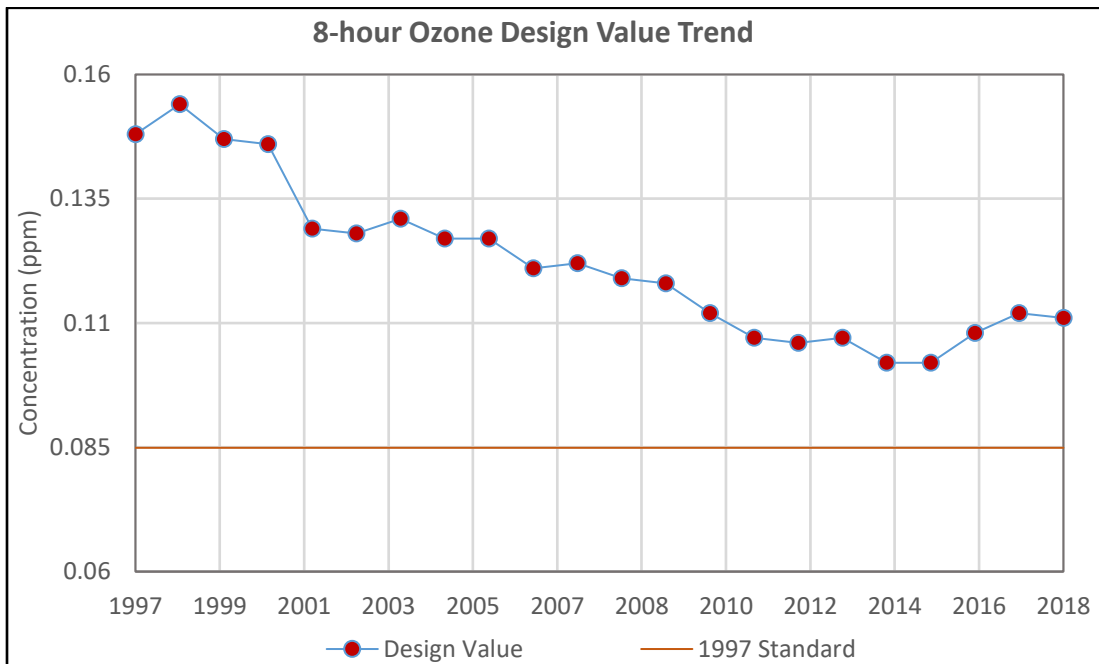
**Table 1-1**

Attainment Status of the Federal Ozone Air Quality Standards of the South Coast Air Basin

Criteria Pollutant	Averaging Time	Designation	Attainment Date
Ozone (O <sub>3</sub> )	(1979) 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023
	(1997) 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	(2008) 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	(2015) 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038

<sup>1</sup> U.S. EPA classifies ozone nonattainment areas in one of five different categories (marginal, moderate, serious, severe, and extreme) depending on how much the levels of ozone in the area exceed the standard. The "extreme" category is for the worst levels of ozone pollution.

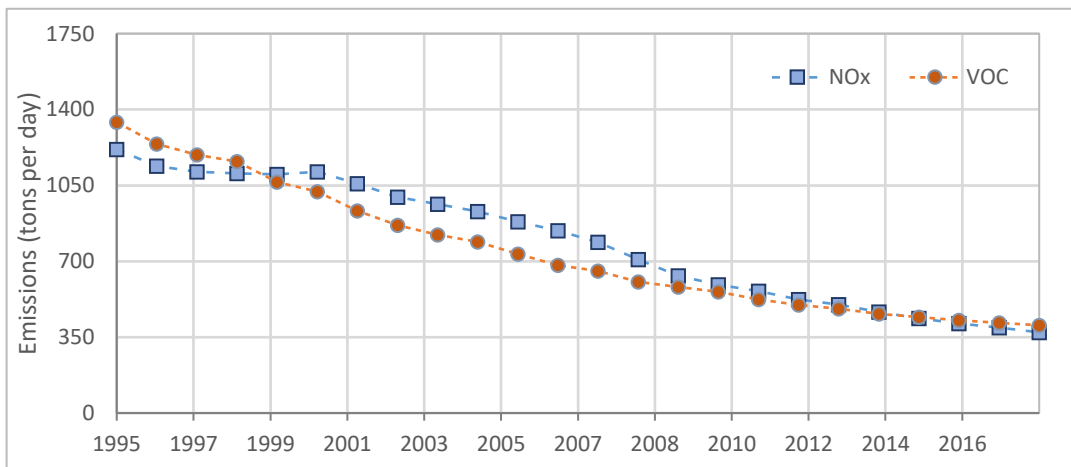
Air quality in the South Coast Air Basin has improved significantly over many decades. Figure 1-1 shows the trend of the 8-hour ozone design value in the Basin from 1997 to 2018.<sup>2</sup> Consistent with the individual NAAQS, design values are typically used to designate and classify nonattainment areas, as well as to assess progress towards meeting the NAAQS. The 8-hour ozone design value is a three-year average of the 98th percentile highest value (4th highest daily maximum of 8-hour-average concentrations). While the ozone concentration in the Basin shows a steadily decreasing trend, year-to-year fluctuations are noticeable. This is mostly due to meteorological conditions, such as temperature, precipitation, and humidity, which affect the chemistry, mixing and transport of ozone and its chemical precursors. Global scale atmospheric dynamics such as El Nino or La Nina affect the Basin level air quality as well, since the global scale circulation patterns bring anomalous weather patterns such as above-average precipitation, stagnant conditions, or stronger subsidence that can either improve air quality or enhance pollution. The unusually high ozone concentrations observed in the 2016 to 2018 period were likely attributable to meteorological abnormalities that triggered excessive photochemical production of ozone and prolonged stagnation of air pollution. South Coast AQMD is currently conducting a study to analyze meteorological factors and trends to explain the poor air quality observed in the recent years despite continuing and demonstrable reductions in emissions.



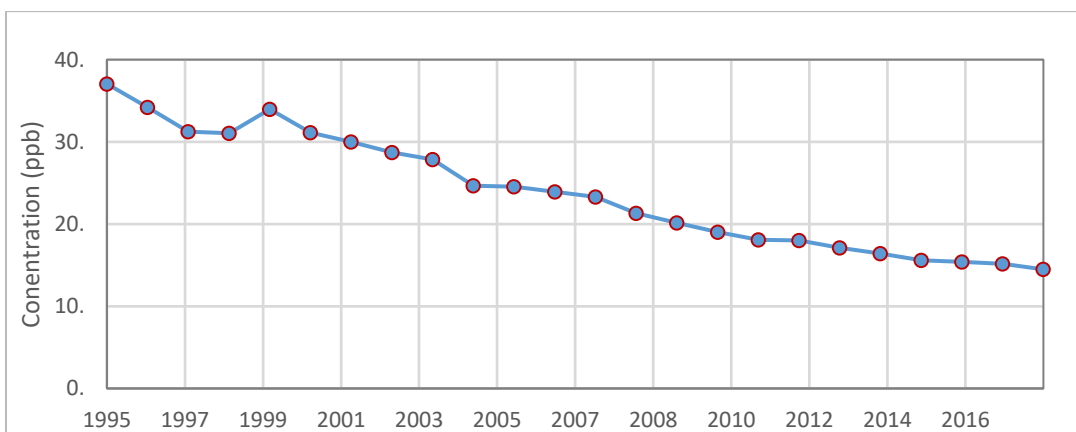
**Figure 1-1**  
The 8-hour ozone design value in the South Coast Air Basin

<sup>2</sup> A design value is a statistic that describes the air quality status of a given location relative to the level of the NAAQS.

The progress in reducing ambient ozone concentrations is due to the reduction of ozone precursor pollutants in the past several decades. Ozone is a secondary air pollutant; ozone is not emitted directly from human activities or natural sources, but is chemically produced in the atmosphere. Emissions of NO<sub>x</sub> and VOC react in the presence of ultraviolet light to form ozone. Figure 1-2 illustrates the Basin’s total emissions of NO<sub>x</sub> and VOC from anthropogenic sources. NO<sub>x</sub> and VOC emissions have decreased by 70% and 75%, respectively, from 1995 to 2018 and are expected to continue the trend in the future years due to continuing implementation of existing and upcoming regulations. Measured ambient nitrogen dioxide (NO<sub>2</sub>) concentrations provide further evidence regarding the decrease in NO<sub>x</sub> emissions. An analysis of monitoring data between 1995 and 2018 (Figure 1-3) indicates that ambient NO<sub>2</sub> levels have been reduced by over 60%, similar to the emission reductions indicated in Figure 1-2.



**Figure 1-2**  
Basin Total NO<sub>x</sub> and VOC emissions



**Figure 1-3**  
Annual average NO<sub>2</sub> concentrations in the South Coast Air Basin<sup>3</sup>

<sup>3</sup> Seventy-five percent data completeness criteria was applied.

## **b. History of Air Quality Planning in the South Coast AQMD**

The federal CAA requires areas that are not in attainment of the NAAQS to develop and implement emission reduction strategies that will bring the area into attainment by the required attainment dates. The Air Quality Management Plan (AQMP) is the regional blueprint for achieving air quality standards, and is designed to meet both federal and state CAA planning requirements. The AQMP is jointly developed by South Coast AQMD, CARB and Southern California Association of Governments (SCAG), and is submitted as part of the State Implementation Plan (SIP) to the U.S. EPA for evaluation and approval. The South Coast AQMD addressed attainment of the 1997 8-hour ozone standard of 80 ppb beginning in the 2007 AQMP, with updates provided subsequently in the 2012 and 2016 AQMPs.

### **i. Air Quality Management Plans**

#### ***2007 AQMP***

The CAA required that areas designated as nonattainment for the 1997 8-hour ozone standard submit a SIP to the U.S. EPA by June 15, 2007. The 2007 AQMP<sup>4</sup> was developed in adherence with this provision and was the first South Coast SIP to address this standard. The 2007 AQMP control strategy consisted of four components: 1) the South Coast AQMD's Stationary and Mobile Source Control Measures, 2) CARB's Proposed Revised Draft State Strategy, 3) South Coast AQMD Policy Options to Supplement CARB's Control Strategy, and 4) Regional Transportation Strategy and Transportation Control Measures provided by SCAG. The magnitude of the NO<sub>x</sub> emission reductions needed for attainment of the 1997 ozone NAAQS posed a significant challenge requiring an aggressive mobile source control strategy supplemented with focused and strategic stationary source control measures, and close collaboration with federal, state, and regional governments, businesses, and the public. Overall, the 2007 AQMP included 31 stationary and 30 mobile source measures. Based on the emission inventory and modeling analysis, the overall projected emission reductions needed to meet the 1997 8-hour ozone standard were 116 tpd of VOC and 383 tpd of NO<sub>x</sub> in 2023. A summary of the 2007 AQMP summer planning emission inventory and reductions is provided in Table 1-2.

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<sup>4</sup> <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/2007-air-quality-management-plan>



**Table 1-2**  
2007 AQMP Emission Reductions for 2023 Based on  
Summer Planning Inventory (tons per day)

Sources	VOC	NOx
<b>Year 2023 Baseline<sup>1</sup></b>	<b>536</b>	<b>506</b>
Baseline Adjustment <sup>2</sup>	(0.2)	9
Emission Reductions:		
South Coast AQMD's Short-Term and Mid-Term Stationary Source Control Measures	19	9
South Coast AQMD Additional Mobile Source Control Measures	16	43
CARB's Revised Draft Proposed State Strategy	54	141
Long-Term Measures <sup>3</sup>	27	190
<b>Total Emission Reductions (All Measures):</b>	<b>116</b>	<b>383</b>
<b>2023 Remaining Emissions</b>	<b>420</b>	<b>114</b>

<sup>1</sup> Emission assumptions from SCAG's 2004 Regional Transportation Plan are already reflected in the AQMP baseline.

<sup>2</sup> Reflects baseline inventory adjustments for CARB's adopted rules in 2006 for large spark-ignited engines (1.9 tpd NOx) and consumer products (4.8 tpd VOC), emissions for the purpose of set-aside tracking (5 tpd VOC increase) and emission benefits from Carl Moyer Program (6.2 tpd NOx) and NSR Program benefits (1.2 tpd NOx). Emission benefits from the Carl Moyer Program presented in this table reflect the additional reductions not included in the baseline. ( ) denotes emission increases. See Appendix III of 2007 AQMP.

<sup>3</sup> Includes long-term reductions from SCLTM-01A, SCLTM-01B, SCLTM-02 and SCLTM-03. Refer to Appendix IV-B-2 of 2007 AQMP.

The South Coast AQMD's short-term and mid-term control strategies for stationary and mobile sources were based on the following approaches: 1) facility modernization; 2) energy efficiency and conservation; 3) good management practices; 4) market incentives/compliance flexibility; 5) area source programs; 6) emission growth management; and 7) mobile source programs. The 2007 AQMP's long-term strategy built upon the long-term reductions associated with the implementation of short- and mid-term control measures or actions proposed by the South Coast AQMD, SCAG, and CARB. For achieving the remainder of the reductions needed for attainment, the long-term strategy primarily relied on long-term control measures based on new advanced technologies and control techniques or significant improvement of existing technologies which could not be specifically defined at the time. These long-term measures were pursuant to CAA section 182(e)(5), a provision that allows for reliance on emission reductions

from future technologies for extreme nonattainment areas. Because these future technologies have not yet been defined, these types of measures are often referred to as the “black box.” After implementation of the South Coast AQMD’s proposed measures and CARB’s State Strategy, reductions from long term measures were estimated to be 27 tpd of VOC and 190 tpd of NOx<sup>5</sup>, representing 43% of the overall combined VOC and NOx reductions needed for ozone attainment in 2023. Table 1-3 provides a list of some of the advanced technologies and innovative control approaches presented in the 2007 AQMP to achieve the long-term reductions needed for ozone attainment.

**Table 1-3**  
2007 AQMP Possible Approaches for Long-Term Control Measures

Emission Category	Strategies
<b>Light Duty Vehicles</b>	<ul style="list-style-type: none"> <li>▪ Extensive retirement of high-emitting vehicles and accelerated penetration of PZEVs and ZEVs</li> </ul>
<b>On-Road Heavy Duty Vehicles</b>	<ul style="list-style-type: none"> <li>▪ Expanded modernization and retrofit of heavy-duty trucks and buses</li> <li>▪ Expanded inspection and maintenance program</li> <li>▪ Advanced near-zero and zero-emitting cargo transportation technologies</li> </ul>
<b>Off-Road Vehicles</b>	<ul style="list-style-type: none"> <li>▪ Expanded modernization and retrofit of off-road equipment</li> </ul>
<b>Fuels</b>	<ul style="list-style-type: none"> <li>▪ More stringent gasoline and diesel specifications; Extensive use of diesel alternatives</li> </ul>
<b>Marine Vessels</b>	<ul style="list-style-type: none"> <li>▪ More stringent emission standards and programs for new and existing ocean-going vessels and harbor craft</li> </ul>
<b>Locomotives</b>	<ul style="list-style-type: none"> <li>▪ Advanced near-zero and zero emitting cargo transportation technologies</li> </ul>
<b>Pleasure Craft</b>	<ul style="list-style-type: none"> <li>▪ Accelerated replacement and retrofit of high-emitting engines</li> </ul>
<b>Aircraft</b>	<ul style="list-style-type: none"> <li>▪ More stringent emission standards for jet aircraft (engine standards, clean fuels, retrofit controls); Airport Bubble</li> </ul>
<b>Consumer Products</b>	<ul style="list-style-type: none"> <li>▪ Ultra Low-VOC formulations; Reactivity-based controls</li> </ul>
<b>Renewable Energy</b>	<ul style="list-style-type: none"> <li>▪ Accelerated use of renewable energy and development of hydrogen technology and infrastructure</li> </ul>
<b>AB32 Implementation</b>	<ul style="list-style-type: none"> <li>▪ Concurrent criteria pollutant reduction technologies</li> </ul>

<sup>5</sup> A total of 241 tpd of NOx emission reductions were approved by U.S. EPA under section 182(e)(5) provisions

### *2012 AQMP*

The 2012 AQMP was primarily developed to address the planning requirements of the 2006 24-hour PM<sub>2.5</sub> standard, while providing some updates to the South Coast AQMD's commitments towards meeting the 1997 8-hour ozone NAAQS. The 2012 AQMP included a number of stationary source control measures covering coatings and solvents, combustion sources, petroleum operations, fugitive VOC emissions, multiple component sources, incentive programs, and educational programs; on-road mobile source measures focusing on light-, medium-, and heavy-duty vehicles; and measures to achieve further emission reductions from off-road mobile sources and off-road industrial equipment. Overall, the 2012 AQMP included 21 stationary and 17 mobile source ozone reduction measures. Based on the emissions inventory and modeling analysis in the 2012 AQMP, the overall projected emission reductions needed to meet the 8-hour ozone standard were 239 tpd of NO<sub>x</sub> in 2023, compared to the total NO<sub>x</sub> reductions of 383 tpd identified in the 2007 AQMP. The lower overall emission reductions requirements in 2012 AQMP were primarily due to implementation of South Coast AQMD and CARB measures which resulted in lower ozone levels in the base year, as well as an updated emissions inventory and modeling analysis.

Since the 2012 AQMP was developed primarily to address 24-hour PM<sub>2.5</sub> and the federal PM nonattainment area provisions of CAA section 189 which do not allow for long-term measures, this plan did not provide any additional updates to the long-term measures of the 2007 AQMP that were provided in accordance with the federal ozone nonattainment area provisions of CAA section 182(e)(5). The 2012 AQMP did, however, indicate that since some of the major emission sources are already controlled by over 90%, attainment of the ozone standards would require broad deployment of zero- and near-zero emission technologies. The 2012 AQMP highlighted the significant amount of reductions needed to attain the federal ozone and PM standards and the urgent need to engage in interagency coordinated planning to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the timeframes allowed under the federal CAA.

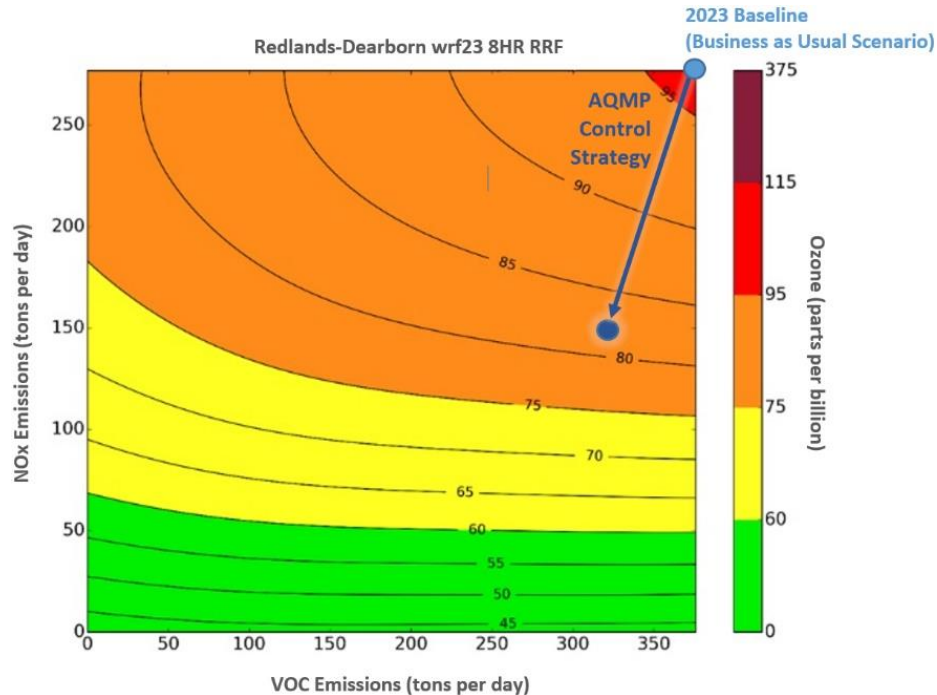
### *2016 AQMP*

The 2016 AQMP outlines the control strategies needed to attain the 2008 8-hour ozone standard (75 ppb) in 2031, the 2012 annual PM<sub>2.5</sub> standard (12 µg/m<sup>3</sup>) in 2025, and the 2006 24-hour PM<sub>2.5</sub> standard (35 µg/m<sup>3</sup>) in 2019, as well as providing an update on meeting the 1997 8-hour ozone standard (80 ppb) in 2023 and the 1979 1-hour ozone standard (120 ppb) in 2022. The 2016 AQMP's control strategy for attaining the 1997 and 2008 ozone standards in 2023 and 2031, respectively, included defined stationary and mobile source measures proposed by South Coast AQMD as well as CARB's state strategies including defined measures and section 182(e)(5) "Further Deployment of Cleaner Technologies" measures. South Coast AQMD's stationary source measures included 15 measures targeting stationary combustion sources,

petroleum operations and fugitive VOC emissions, coatings and solvents, multiple component sources, best available control measures, and co-benefits from energy and climate change programs. South Coast AQMD's 15 mobile source measures included South Coast AQMD's proposed facility-based mobile source measures (FBMSMs) and a number of incentive-based programs. The FBMSMs cover marine ports, commercial airports, railyards, warehouses and distribution centers, and new development and redevelopment, and are intended to reduce mobile source emissions associated with these types of facilities to help achieve the reductions attributed to CARB's Further Deployment measures. South Coast AQMD's proposed incentive measures cover both on-road vehicles and off-road equipment based on a variety of control technologies that are commercially available and/or technologically feasible to implement in the next several years. The focus of South Coast AQMD's mobile source measures includes accelerated retrofits or replacement of existing vehicles or equipment, acceleration of vehicle turnover through voluntary vehicle retirement programs, and greater use of cleaner fuels in the near-term. In addition, the South Coast AQMD has been implementing several incentive funding programs that have resulted in early emission reductions (e.g., the Carl Moyer Memorial Air Quality Standards Attainment Program, the Surplus Off-Road Opt-In for NO<sub>x</sub> (SOON) program, and Proposition 1B – Goods Movement Emissions Reduction Program). The continued implementation of these programs is expected to provide additional reductions toward attainment of the 1997 8-hour ozone standard in 2023.

The 2016 State SIP Strategy for the State Implementation Plan (State SIP Strategy) describes CARB's commitment to achieve the mobile source and consumer products reductions needed in the Basin. The State SIP Strategy identified the regulatory and programmatic approaches necessary to deploy cleaner technologies and fuels, and ensure sufficient penetration to meet air quality standards by deadlines established in the CAA. A majority of the reductions needed to meet the ozone standard in the Basin in 2023 will come from existing and proposed regulatory actions. This includes ongoing implementation of the existing control program, combined with proposed regulatory measures identified in the State SIP Strategy. New reductions were identified through two types of measures – defined measures that comprise an aggregate commitment for the State of five tons per day and measures to achieve further deployment of new technologies. The Further Deployment measures represent the remainder of the reductions needed, 108 tpd, and include incentive programs to further accelerate technology penetration in time to meet the standard, and further federal actions, including regulations, support for demonstration programs, and supporting policies to achieve reductions from sources under federal and international regulatory authority. Because these Further Deployment measures do not fit the definition of a defined SIP measure for U.S. EPA's approval purposes and because actions and resources from other agencies are required, these measures were envisioned to be approved under the provisions of section 182(e)(5).

Based on the modeling analysis conducted in the 2016 AQMP, NO<sub>x</sub> reductions were determined to be the most effective control path for achieving the 1997 8-hour ozone standard in 2023. Figure 1-4 shows the ozone isopleths for Redlands, depicting the effect of reducing VOC and NO<sub>x</sub> concentrations on ozone concentrations. As illustrated by the blue dot at the upper right corner, ozone levels would be above 95 ppb at the 2023 baseline emissions. As shown in Figure 1-4, to attain the 1997 8-hour ozone standard, reducing NO<sub>x</sub> emissions (moving downward in the plot) is the most effective control path.



**Figure 1-4**  
2016 AQMP NO<sub>x</sub> Reductions, Most Efficient Control Path for Ozone Attainment

The attainment of 1997 8-hour ozone standard was demonstrated using NO<sub>x</sub> and VOC emission reductions expected from the South Coast AQMD's control measures proposed in the 2016 AQMP and the CARB's control measures included in the 2016 State SIP strategy. According to the modeling in the 2016 AQMP, NO<sub>x</sub> emission reductions is the primary pathway to reach attainment, and NO<sub>x</sub> emissions will need to be reduced by an additional 45% in order to meet the standard by the 2023 attainment deadline. VOC emission reductions from limited VOC strategies and co-benefits from the NO<sub>x</sub> strategies can also assist in attainment. VOC emission reductions reflected in the attainment demonstration can be grouped into four categories; reductions from South Coast AQMD's VOC measures, co-benefits from South Coast AQMD's NO<sub>x</sub> measures, CARB's defined measures for NO<sub>x</sub> and VOC, and co-benefits from CARB's Further Deployment of Cleaner Technology (i.e., 182(e)(5) measures). Table 1-4 summarizes VOC reductions associated with these four categories. The VOC emission reductions associated with the 182(e)(5) measures are approximately 40-41 TPD.

**Table 1-4**  
VOC Emission Reductions Included in the 1997 Federal 8-hour Ozone Attainment Strategy

<b>2023</b>	<b>VOC Emissions (tons per day)</b>
<b>Baseline</b>	378.6
<b>1997 8-hour Ozone Standard Attainment Demonstration</b>	313.3 <sup>+</sup>
<b>Reductions from South Coast AQMD VOC measures</b>	3 <sup>++</sup>
<b>Co-benefits from South Coast AQMD NOx measures</b>	10.2 <sup>#</sup>
<b>Reductions from CARB Defined Measures</b>	8.7-9.7 <sup>*</sup>
<b>Reductions from CARB Further Deployment of Cleaner Technology</b>	40-41 <sup>*</sup>

+ Remaining emission excluding SIP set-aside account

++ 2016 AQMP Table 4-2, FUG-01 and CTS-01

# 2016 AQMP Appendix V, Attachment 3

\* 2016 State SIP strategy Table 4

While VOC emission reductions can assist in attainment, the 8-hour ozone attainment is more sensitive to NOx emission reductions than to VOC emission reductions. This is well illustrated in the ozone Empirical Kinetic Modeling Approach (EKMA) plot or so-called isopleths presented in the 2016 AQMP Appendix V Attachment 5. The ozone isopleths are developed based on numerous simulations of a comprehensive chemical transport model responding to various NOx and VOC emissions scenarios. The response of ozone to NOx and/or VOC reductions varies depending on the ratio of NOx to VOC and meteorological conditions, as the shape and contours of the isopleths change from location to location. Still, the isopleths provide a generalized platform to evaluate the efficacy of ozone strategy with respect to NOx and/or VOC reductions. The 2016 AQMP modeling analysis indicates that near the 80 ppb level, ozone is significantly more sensitive to NOx reductions than to VOC reductions.

During the implementation of NOx strategy, VOC co-benefits will inevitably occur. As an example, if an old gasoline vehicle is replaced with a new zero-emission vehicle, both VOC and NOx emissions are eliminated concurrently. The exact amount of concurrent VOC reductions will vary depending on vehicle categories impacted by a measure. Still, even if VOC emission reductions from the implementation of the section 182(e)(5) measures fall short of CARB's commitment of 40-41 tpd, NOx and concurrent VOC emission reductions from the commitment associated with implementation of the Contingency Measure Plan of South Coast AQMD and CARB are expected to ensure the attainment of the 1997 federal 8-hour ozone standard in the South Coast Air Basin. As a result, there is no need for submission of contingency measures for VOC reductions estimated for CARB's Further Deployment of Cleaner Technologies measures.

The magnitude of needed NO<sub>x</sub> emission reductions for attainment of the ozone NAAQS in 2023 represents a significant challenge for the whole region given the short remaining timeline. As most sources are already subject to the most stringent emissions controls in the world, attainment of the ozone standard will require broad deployment of zero and near-zero NO<sub>x</sub> emission technologies. Based on the emission inventory and modeling analysis, the carrying capacity - the maximum amount of emissions allowable in the region that would still meet the standard - is 141 tpd of NO<sub>x</sub> in 2023.<sup>6</sup> A summary of the 2016 AQMP summer planning NO<sub>x</sub> emission inventory and reductions is provided in Table 1-5.

**Table 1-5**  
2016 AQMP NO<sub>x</sub> Emission Reductions for 2023 Based on  
Summer Planning Inventory (tons per day)

Sources	NO <sub>x</sub>
<b>Year 2023 Baseline<sup>1</sup></b>	<b>269</b>
<b>Carrying Capacity</b>	<b>141</b>
<b>Total Emission Reductions (All Measures):</b>	<b>135</b>
<b>Defined Measures:</b>	27
South Coast AQMD's Stationary Source Control Measures	7
South Cost AQMD Additional Mobile Source Control Measures	16
CARB's Defined Measures	4
<b>Further Deployment of Cleaner Technologies</b>	108
<b>Set Aside Budget<sup>2</sup></b>	3
<b>2023 Remaining Emissions</b>	<b>137<sup>3</sup></b>

<sup>1</sup> Reflects CARB's 2018 Updates to the California State Implementation Plan (<https://ww3.arb.ca.gov/planning/sip/2018sipupdate/2018sipupdate.htm>).

<sup>2</sup> As SIP reserve for potential technology assessment and for general conformity purposes

<sup>3</sup> Reflects an additional 4.2 tpd of NO<sub>x</sub> emission reductions beyond the projected carrying capacity of 141 tpd to accommodate changes in ocean-going vessel (OGV) emission inventory and CARB's SIP strategy for OGV.

In 2023, mobile sources, which are under the state and federal jurisdiction, are responsible for 80% of NO<sub>x</sub> emissions while stationary sources, which are already subject to the most stringent requirements, account for the remaining 20% of NO<sub>x</sub> emissions. Therefore, the vast majority of NO<sub>x</sub> reductions needed for attainment have to come from mobile sources. As illustrated in Table 1-5, after implementation of the defined control measures by South Coast AQMD and CARB, an additional 108 tpd of NO<sub>x</sub> reductions are still needed to attain the 1997 ozone standard in 2023. These remaining reductions are expected to be achieved through Further Deployment of Cleaner Technologies measures for on-road heavy-duty vehicles, off-road equipment, and federal and

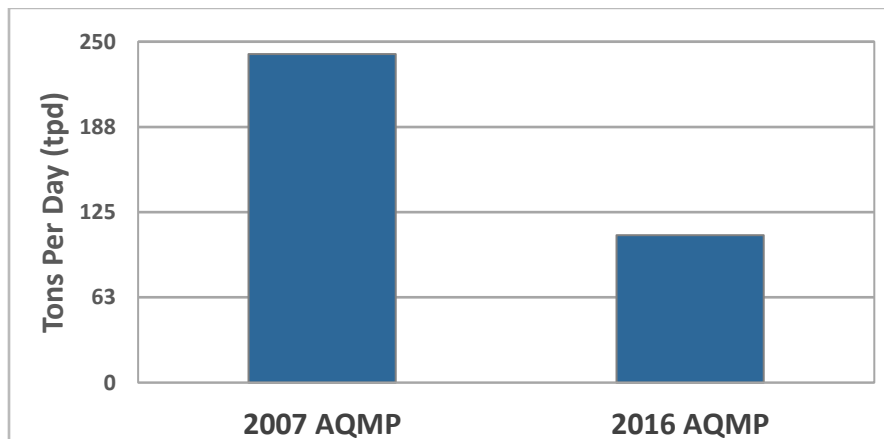
<sup>6</sup> The carrying capacity is higher than the one predicted in the 2007 AQMP due to several factors including lower ozone levels in the base year of the 2016 AQMP, updated emission and modeling systems as well as EPA's updated modeling guidance and methodology.



international sources. The “Further Deployment” measures include incentive programs, regulations to be developed as zero and near-zero emission vehicles and equipment are commercialized, South Coast AQMD’s FBMSMs, and the quantification of the emission reduction benefits from operational efficiency improvements and deployment of connected vehicles, autonomous vehicles, and intelligent transportation systems.

As indicated in the 2016 AQMP, significant amounts of incentive funding, in combination with regulatory actions, are needed to achieve the 1997 and 2008 ozone standards in the Basin. Based on the 2016 AQMP’s analysis, the amount of funding needed to achieve the NOx emission reductions associated with the “Further Deployment” measures proposed in the State Mobile Source Strategy and the 2016 AQMP is about \$1 billion per year beginning in 2017 over the next 14 years.

It is important to highlight the reduced reliance on control strategies approved under the provisions of CAA section 182(e)(5) for attainment of the 1997 8-hour ozone standard in the 2016 AQMP compared to the 2007 AQMP (Figure 1-5). In the 2007 AQMP, 241 tpd of NOx reductions were associated with measures approved by the U.S. EPA under section 182(e)(5). By the time the 2016 AQMP was adopted, the majority of the zero and near-zero technologies needed for attainment were already, or would soon be, commercially available. However, reliance on section 182(e)(5) in the 2016 AQMP was necessary, not because the technology was not yet identified, as was the case in the 2007 AQMP, but because of the difficulty in quickly turning the fleet over to this new technology given that many mobile source categories are under federal jurisdiction. Nevertheless, achieving the remaining 108 tpd of NOx by 2023 represents a very difficult challenge requiring new regulatory programs and a significant level of funding.



**Figure 1-5**  
2007 AQMP vs. 2016 AQMP Reduced Reliance on Section 182(e)(5) Measures



Attainment of the 1997 8-hour ozone standard will require aggressive mobile source control strategies and incentive programs, supplemented by focused and strategic stationary source control measures, and expedited action by federal, state, and regional governments, businesses, and the public. Significant challenges remain in meeting the federal ozone standard. Ozone reduction strategies and programs need to be accelerated to ensure that the air basin will meet the 8-hour ozone standard by 2024.

## **ii. Evolution of the Mobile Source Program**

Since the U.S. EPA set the 8-hour ozone standard in 1997, total NO<sub>x</sub> emissions in the South Coast have been reduced by nearly 70% in 2019, and are projected to be reduced by 76 percent in 2023. A significant portion of these reductions came from mobile source programs. California's strategies to procure reductions from mobile sources have matured over the past decades as technology and science have progressed.

California's first vehicle exhaust standards were set in 1963, and vapor recovery from vehicle fueling stations followed soon after. Efforts in the 1980's focused on reducing emissions from passenger vehicles, as that represented a substantial portion of the ozone precursor emissions in the State's nonattainment areas. Light-duty vehicle programs such as the Smog Check and on-board diagnostics programs ensured that the control technology remained functional. The first Low-Emission Vehicle (LEV) regulations were adopted in 1990, requiring automobile manufacturers to introduce progressively cleaner light- and medium-duty vehicles with more durable emission controls and extended warranties for those controls from the 1994 through 2003 model years. By adopting these regulations, CARB established the most stringent criteria pollutant exhaust regulations ever for light- and medium-duty vehicles. Subsequent generations of the LEV regulations continued to reduce criteria pollutant emissions from new light- and medium-duty vehicles. In 2012, CARB adopted the LEV III regulations as part of the Advanced Clean Cars rulemaking package. The LEV III regulations included increasingly stringent emission standards for criteria pollutants and greenhouse gases for new passenger vehicles through the 2025 model year.

In the 1990s, emissions from trucks and other heavy-duty vehicles were increasing. At the same time, air quality modeling showed that strategies to reduce ozone should be targeting reductions in NO<sub>x</sub> emissions. In an effort to address this, California focused on pollution control technology in heavy-duty vehicles by setting emission standards for new trucks and requiring cleaner burning diesel fuel. Small off-road equipment standards were also adopted. Cleaner generations of those new equipment standards were adopted over the next two decades. California also continued to regulate VOC emissions during the 1990s, adopting regulations to reduce VOCs from consumer products.

With California’s actions to establish stringent emissions standards for new light and heavy-duty vehicles, cleaner vehicles entering the fleet were replacing older, dirtier ones. California also created programs to ensure that pollution controls remained functional and that cars with excessive emissions were repaired or removed from the road. The Smog Check program required vehicle emissions to be tested regularly and the On-Board Diagnostic system required light-duty vehicles to monitor components that affect the performance of the vehicle emission controls.

To speed the transition to cleaner vehicles, the Carl Moyer incentive program was developed. This program focused on reducing NOx emissions by accelerating the turnover of older heavy-duty diesel vehicles and equipment to technologies that are cleaner than required by current regulations. Since its inception, the Carl Moyer Program has provided funding to incentivize the turnover of heavy-duty diesel engines and vehicles including on-road trucks, marine vessels, irrigation pumps, forklifts, and other off-road equipment. The table below highlights this program and the other significant California regulations and programs adopted in the 1980s and 1990s.

**Table 1-6**  
Major State Regulations Adopted Between 1980 and 1999

Major Regulations Adopted Between 1980 and 1999	Implementation	Source
Vehicle Inspection and Maintenance program (Smog Check)	1984	Light-Duty Vehicles
On-Board Diagnostic	1988	Light-Duty Vehicles
Heavy-Duty Diesel NOx Standards	1990/96/98	Heavy-Duty Vehicles
Reformulated Gasoline	1992	Gasoline
Clean Diesel Fuel	1992	Diesel
Low-Emission Vehicle	1994	Light-Duty Vehicles
On-Board Diagnostic II	1996	Light-Duty Vehicles
Zero-Emission Vehicle program	1998	Light-Duty Vehicles
Carl Moyer Program	1998	Vehicles

In the 2000’s and 2010’s, California’s efforts focused on specific fleets that tended to remain in service longer and contained higher emitting vehicles compared to newer vehicles. A prominent example of this is the 2010 Truck and Bus Regulation which requires that all trucks in California meet 2010 Heavy-Duty Engine Standards by 2023. This all-encompassing regulation was

preceded by regulations targeting drayage trucks and solid waste collection vehicles that sped the turnover of those fleets.

Given the need to turn over the on-road fleets to cleaner vehicles faster than natural turnover would dictate, new incentive programs were created, such as the light-duty Clean Vehicle Rebate Program and the Heavy-Duty Proposition 1B Freight Program. In addition, the Carl Moyer Program was expanded in 2004 to fund a wider range of equipment, while maintaining the mandate that the funded vehicles and equipment must go beyond current regulatory requirements.

**Table 1-7**  
Major State Regulations Adopted Since 2000

Major Regulations Adopted Since 2000	Implementation Begins	Source
School Zone Idling	2003	Heavy-Duty Vehicles
Heavy-Duty Diesel NOx Standards	2004/2007/2010	Heavy-Duty Vehicles
Commercial Vehicle Idling	2005	Heavy-Duty Vehicles
Public Agencies and Utilities Fleet	2006	Heavy-Duty Vehicles
Proposition 1B incentive program	2007	Heavy-Duty Vehicles
Solid Waste Collection Vehicles	2008	Heavy-Duty Vehicles
Clean Vehicle Rebate Project	2010	Light-Duty Vehicles
Drayage Truck Regulation	2010	Heavy-Duty Vehicles
Truck and Bus Regulation	2012	Heavy-Duty Vehicles
Enhanced Fleet Modernization Plus Up	2015	Light-Duty Vehicles
LEV III/ Alternative Clean Cars	2015	Light-Duty Vehicles

### c. Emission Benefits from Existing Programs

#### i. Stationary Sources

South Coast AQMD first addressed the attainment of the 8-hour ozone standard of 80 ppb in the 2007 AQMP, with updates provided subsequently in the 2012 and 2016 AQMPs. Over the past fifteen years, ozone levels in the South Coast Air Basin have steadily decreased largely due to the implementation of emission control measures by the South Coast AQMD and CARB. The 2007 AQMP included 2023 baseline emissions of 506 tpd NOx and 536 tpd VOC, based on the summer planning inventory. With the implementation of the 2007 AQMP and 2012 AQMP control measures and the State SIP Strategy, the 2023 baseline emissions decreased to 269 tpd NOx in the

2016 AQMP. In other words, the 2023 projected emissions have been cut by almost half by the rules and regulations implemented in the last decade. This section summarizes the progress made in obtaining emission reductions from control measures from the 2007, 2012, and 2016 AQMPs, and describes how these existing programs assist in attaining the 1997 8-hour ozone standard.

### *Summary of 2007 AQMP Implementation*

The 2007 AQMP was developed to address the CAA planning requirements for attaining the 1997 8-hour ozone standard and the 1997 annual PM<sub>2.5</sub> standard. The 8-hour ozone control strategy built upon the PM<sub>2.5</sub> strategy, augmented with additional NO<sub>x</sub> and VOC reductions to meet the standard by the deadline in 2024 (emission reductions to occur in 2023). The ozone portion of the 2007 AQMP was approved by U.S. EPA into the SIP on March 1, 2012.<sup>7</sup> The 2012 AQMP provided an update on the progress in implementing the 2007 AQMP. This progress can be measured by the number of control measures that have been adopted as rules and the resulting emission reductions. Between 2008 and 2011, twelve control measures or rules were adopted or amended by the South Coast AQMD. Table 1-8 lists the South Coast AQMD's 2007 AQMP commitments and the control measures or rules that were adopted through 2011. The emission reductions that were achieved in 2014 and will be achieved in 2023 through already adopted measures are based on the emissions inventories from the 2007 AQMP. As shown in Table 1-8, for the control measures adopted by the South Coast AQMD over this period, 22.5 tpd of VOC reductions and 7.6 tpd of NO<sub>x</sub> reductions had been achieved by 2014. The 2023 projected emissions reductions associated with implementation of these measures are 26.3 tpd of VOC emissions and 10.3 tpd of NO<sub>x</sub> emissions.

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<sup>7</sup> <https://www.federalregister.gov/documents/2012/03/01/2012-4673/approval-of-air-quality-implementation-plans-california-south-coast-attainment-plan-for-1997-8-hour>

**Table 1-8**  
2007 AQMP Measures' Emission Reductions  
for VOC and NO<sub>x</sub> (tons per day)

Control Measure #	Control Measure Title	Adoption Date	COMMITMENT (tpd)		ACHIEVED (tpd)	
			2014	2023	2014	2023
<b>VOC EMISSIONS</b>						
MOB-05	AB923 Light-Duty Vehicle High-Emitter Identification Program	On-going	0.8	0.7	--	--
MOB-06	AB923 Medium-Duty Vehicle High-Emitter Identification Program	On-going	0.5	0.6	--	--
FUG-04	Pipeline and Storage Tank Degassing - R1149	2008	NA	NA	0.04	0.04
BCM-03	Emission Reductions from Wood Burning Fireplaces and Wood Stoves	2008	NA	NA	0.44	0.70
MCS-01	Facility Modernization - R1110.2	2008+	2.0	9.2	0.3	0.3
CTS-01	Emission Reductions from Lubricants	2009	1.9	2.0	3.9	3.2
CTS-04	Emission Reductions from the Reduction of VOC Content of Consumer Products Not Regulated by the State Board -R1143	2009	NA	NA	9.7	10.1
MCS-04	Further Emission Reductions from Greenwaste Composting Operations - R1133.3	2011	NA	NA	0.88	0.88
MCS-07	Application of All Feasible Measures - R1113, R1177	2011	NA	NA	7.2	11.1
FLX-02	Petroleum Refinery Pilot Program	*	0.7	1.6	0	0
FUG-02	Emission Reductions from Gasoline Transfer and Dispensing Facilities	*	3.7	4.0	0	0

Draft Final Contingency Measure Plan

MCS-05	Emission Reductions from Livestock Waste	*	0.8	0.6	0	0
EGM-01	Emission Reductions from New or Redevelopment Projects	**	NA	0.5	NA	--
<b>TOTAL VOC REDUCTIONS</b>			<b>10.4</b>	<b>19.2</b>	<b>22.5</b>	<b>26.3</b>
<b>NO<sub>x</sub> EMISSIONS</b>						
MOB-05	AB923 Light-Duty Vehicle High-Emitter Identification Program	On-going	0.4	0.4	--	--
MOB-06	AB923 Medium-Duty Vehicle High-Emitter Identification Program	On-going	0.5	0.6	--	--
CMB-01	NO <sub>x</sub> Reduction from Non RECLAIM Ovens, Dryers and Furnaces -R1147	2008	3.5	4.1	3.5	4.1
BCM-03	Emission Reductions from Wood Burning Fireplaces and Wood Stoves R445	2008	NA	NA	0.06	0.10
OFFRD-01	SOON Program	2008	4-8	NA	1.8	NA
MCS-01	Facility Modernization - R1110.2, PR1146, PR1146.1	2008+	1.6	2.2	2.17	3.15
CMB-03	Further NO <sub>x</sub> Reductions from Space Heaters	2009	0.8	1.1	0.1	3.0
EGM-01	Emission Reductions from New or Redevelopment Projects	**	0	0.8	--	--
<b>TOTAL NO<sub>x</sub> REDUCTIONS</b>			<b>6.8</b>	<b>9.2</b>	<b>7.6</b>	<b>10.35</b>

\*SIP commitment for VOC reductions in the PM<sub>2.5</sub> Plan was met via excess reductions achieved from CTS-04 (R1143).

\*\*No SIP emission reduction commitment for the PM<sub>2.5</sub> Plan. Rulemaking is delayed due to potential co-benefits of SB375 reduction targets.

### *Summary of 2012 AQMP Implementation*

The 2012 AQMP was developed to set forth a comprehensive and integrated program that would bring the Basin into attainment of the federal 24-hour PM<sub>2.5</sub> air quality standard, and to provide an update to the Basin's commitments towards meeting the federal 8-hour ozone standards. The Plan included updated and new control measures and commitments for emissions reductions for the 8-hour ozone attainment strategy and helped reduce reliance on the section 182(e)(5) long-term measures. The 2012 AQMP received a limited approval and limited disapproval by U.S. EPA on April 14, 2016.<sup>8,9</sup> Table 1-9 lists the South Coast AQMD's 2012 AQMP commitments and the control measures or rules that were adopted through 2015. The emission reductions are quantified based on the emission inventories and milestone years from the 2012 AQMP. As shown in Table 1-9, for the control measures adopted by the South Coast AQMD over this period, 2.4 tpd of VOC reductions and 19.5 tpd of NO<sub>x</sub> reductions, will be achieved by 2023.

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<sup>8</sup> <https://www.federalregister.gov/documents/2016/04/14/2016-08039/partial-approval-and-partial-disapproval-of-air-quality-state-implementation-plans-california-south>

<sup>9</sup> The limited disapproval was based on the concerns that the 2010 RECLAIM program did not meet the Reasonably Available Control Measure, Reasonably Available Control Technology (RACM/RACT) requirement for certain sources of emissions, which was subsequently resolved in 2018. <https://www.federalregister.gov/documents/2018/02/12/2018-02677/air-quality-state-implementation-plans-approvals-and-promulgations-california-south-coast-moderate>

**Table 1-9**  
2012 AQMP Measures' Emission Reductions  
for NO<sub>x</sub> and VOC (tons per day)

Control Measure #	Control Measure Title	Adoption Date	COMMITMENT		ACHIEVED	
			2014	2023	2014	2023
<b>NO<sub>x</sub> EMISSIONS</b>						
OFFRD-01	Extension of the SOON Provision for Construction/Industrial Equipment	Ongoing	--	7.5	--	7.5
CMB-01	Further Reductions from RECLAIM [Regulation XX]	2015	2	3	0	12
CMB-02	NO <sub>x</sub> Reduction from Biogas Flares	Rulemaking Underway	--	TBD	--	TBD
CMB-03	Reductions from Commercial Space Heating	2016	--	0.18	--	TBD
<b>TOTAL NO<sub>x</sub> REDUCTIONS</b>			<b>2</b>	<b>10.7</b>	<b>0</b>	<b>19.5</b>
<b>VOC EMISSIONS</b>						
CTS-01	Further VOC Reductions from Architectural Coatings [R1113]	2016	--	2	--	1
CTS-02	Further Emission Reductions from Miscellaneous Coatings, Adhesives, Solvents and Lubricants	Rulemaking Underway	--	1	--	--
CTS-03	Further VOC Reduction from Mold Release Products [R1161]	Rulemaking Underway	--	0.8	--	--
FUG-01	VOC Reductions from Vacuum Trucks [R1188]	Rulemaking Underway	--	TBD	--	--
FUG-02	Emission Reduction from LPG Transfer and Dispensing [R1177]	Rulemaking Underway	--	1	--	--
FUG-03	Emission Reduction from Fugitive VOC Emissions	2016	--	1	--	--
MCS-01	Application of All Feasible Measure Assessment [R1114]	Ongoing	TBD	TBD	0.4	1.4
<b>TOTAL VOC REDUCTIONS</b>			<b>0</b>	<b>5.8</b>	<b>0.4</b>	<b>2.4</b>



### *Summary of 2016 AQMP Implementation*

The 2016 AQMP is an integrated Plan designed to primarily address the 8-hour ozone NAAQS established in 2008, the annual PM<sub>2.5</sub> NAAQS established in 2012, and the 24-hour PM<sub>2.5</sub> NAAQS established in 2006 (2006 24-hour PM<sub>2.5</sub>). Given the overlap in emissions and control strategies for other yet-to-be-attained NAAQS, the 2016 AQMP also provides an update on the control strategy for two other standards: the 1997 8-hour ozone NAAQS and the 1979 1-hour ozone NAAQS. Ozone measures include actions to reduce NO<sub>x</sub> and VOC emissions from both stationary (point and area) and mobile sources. The mobile source measures include actions to be taken by the South Coast AQMD, CARB and the U.S. EPA.

Since the adoption of the 2016 AQMP, several rules have been developed and adopted as part of the implementation of the Plan. As noted in Table 1-10, one control measure commitment, CTS-01, was fulfilled with the October 2017 amendment to Rule 1168 – Adhesive and Sealant Applications, resulting in a VOC reduction of 1.4 tpd by 2023, exceeding the commitment of 1.0 tpd in the 2016 AQMP. Rule 1118.1 – Non-Refinery Flares, seeks to fulfill the purpose of CMB-03 and was adopted by the Governing Board in January 2019. Recently approved amendments to Rules 1134, 1135 and the 1146 series have assisted in achieving the goals of control measure CMB-05 to transition RECLAIM facilities into command and control. There are also a number of 2016 AQMP control measures for which development is currently under way, including Rules 1109.1, 1117, the 1147 series, 1150.3, and 1179.1, and continuing implementation of ongoing mobile source programs such as Surplus Off-Road Opt-In for NO<sub>x</sub> (SOON), the extended exchange program, and incentive programs (e.g., Carl Moyer), for which reductions have not yet been completely quantified.

Three mobile source incentive measures with quantifiable NO<sub>x</sub> emission reductions were included in the 2016 AQMP. They are MOB-10 (Extension of the SOON Provision for Construction/Industrial Equipment), MOB-11 (Extended Exchange Program), and MOB-14 (Emission Reductions from Incentive Programs), each with 2, 2.9 and 11 tpd of committed NO<sub>x</sub> reductions, respectively, by 2023. MOB-14 recognizes the emission benefits from incentive funding programs such as the Carl Moyer Memorial Air Quality Standards Attainment Program and Proposition 1B such that the emission reductions from these programs can be accounted for in the SIP. To track the implementation of MOB-14, the emission reduction benefits for the incentive projects funded under Carl Moyer Program and Proposition 1B were quantified between 2013 and 2019 and were estimated to be 5.9 tpd in 2023. Given that the emission reductions from secured or reasonably anticipated funding for future Moyer projects are likely to continue to generate surplus emissions in 2023, it is anticipated that the aggregate commitments of 11 tpd under MOB-14 will be fulfilled.

**Table 1-10**  
2016 AQMP Measures' Emission Reductions To Date  
for VOC and NOx (tons per day)

Control Measure #	Control Measure Title	Adoption Date	COMMITMENT		ADOPTED TO BE ACHIEVED	
			2023	2031	2023	2031
<b>VOC EMISSIONS</b>						
CTS-01	Further Emission Reductions from Coatings, Solvents, Adhesives, and Sealants [R1168]	2017/2021	1.0	2.0	1.4	--
FUG-01	Improved Leak Detection and Repair	2019	2.0	2.0	--	--
CMB-01	Transition to Zero and Near-Zero Emission Technologies for Stationary Sources	2018	1.2	2.8	--	--
CMB-03	Emission Reductions from Non-Refinery Flares [R1118.1]	2018	0.4	0.4	0.014	--
ECC-02	Co-Benefits from Existing Residential and Commercial Building Energy Efficiency Measures	2018	0.07	0.3	--	--
ECC-03	Additional Enhancements in Reducing Existing Residential Building Energy Use	2018	0.2	0.3	--	--
BCM-10	Emission Reductions from Greenwaste Composting	2019	1.5	1.8	--	--
<b>TOTAL VOC REDUCTIONS</b>			<b>6.4</b>	<b>9.6</b>	<b>1.4</b>	<b>--</b>
<b>NOx EMISSIONS</b>						
CMB-01	Transition to Zero and Near-Zero Emission Technologies for Stationary Sources	2018	2.5	6.0	--	--
CMB-02	Emission Reductions from Replacement with Zero or Near-Zero NOx Appliances in Commercial and Residential Applications	2018	1.1	2.8	0.01	--
CMB-03	Emission Reductions from Non-Refinery Flares [R1118.1]	2018	1.4	1.5	0.2	--
CMB-04	Emission Reductions from Restaurant Burners and Residential Cooking	2018	0.8	1.6	--	--
CMB-05	Further NOx Reductions from RECLAIM Assessment [R1134, 1135, R1146 series]	2022	0.0	5.0	TBD*	--

ECC-02	Co-Benefits from Existing Residential and Commercial Building Energy Efficiency Measures	2018	0.3	1.1	0.3**	--
ECC-03	Additional Enhancements in Reducing Existing Residential Building Energy Use	2018	1.2	2.1	--	--
MOB-10	Extension of the SOON Provision for Construction/Industrial Equipment	Ongoing	1.9	1.9	TBD	TBD
MOB-11	Extended Exchange Program	Ongoing	2.9	1.0	TBD	TBD
MOB-14	Emission Reductions from Incentive Programs	Ongoing	11	7.8	5.9***	TBD
<b>TOTAL NOx REDUCTIONS</b>			<b>23.1</b>	<b>31.0</b>	<b>6.4</b>	<b>TBD</b>

*\*Emission reductions from Rules 1134, 1135 and 1146 series are used to account for the RECLAIM shave as amended in 2015. Part of these emission reductions resulting from non-RECLAIM facilities could be used to fulfill CMB-01 and CMB-02.*

*\*\* A linear extrapolation was used to estimate emission reductions from ECC-02 which are co-benefits from the adoption of State policies, such as SB350 and Title 24.*

*\*\*\* Estimated reductions through 2020.*

### **RECLAIM**

The Regional Clean Air Incentives Market (RECLAIM) program, under South Coast AQMD's Regulation XX, was adopted in October 1993 and is a market-based emissions trading program designed to reduce NOx and SOx emissions. RECLAIM was designed to provide equivalent emission reductions in the aggregate for the facilities in the program compared to what would occur under a command-and-control approach, with flexibility for each facility to find the most cost-effective strategy to meet their emission reduction targets. The California Health and Safety Code requires the South Coast AQMD to implement Best Available Retrofit Control Technology (BARCT) in the RECLAIM program, as well as for other stationary sources, and if BARCT advances, the South Coast AQMD is required to periodically re-assess the overall program caps (i.e. overall allocation), and reduce the RECLAIM Trading Credit (RTC) holdings to a level equivalent to command-and-control BARCT levels. In December 2015, the South Coast AQMD Governing Board adopted a reduction of 12 tpd of RTCs over a seven-year period, from 2016 to 2022. With an allocation of 26.5 tpd of RTCs in 2015, the remaining allocation would be 14.5 tpd in 2023. Further, on March 3, 2017, the South Coast AQMD Governing Board adopted a 2016 AQMP NOx RECLAIM measure (CMB-05) to achieve 5 tpd of NOx emission reductions commitment as soon as feasible, and no later than 2025, and to transition the RECLAIM Program to a command-and-control regulatory structure requiring BARCT level controls as soon as practicable.

As specified in the staff report of the 2015 December RECLAIM amendment, a reduction of 12 tpd of RTCs is calculated based on the actual emissions reported by the RECLAIM facilities in

2011/2012, with adjustments to account for uncertainties that arose in the BARCT analysis and for additional 2011 activity level adjustments. The 2011/2012 baseline emissions for the NO<sub>x</sub> RECLAIM universe were 20.7 tpd. With the implementation the 2015 RECLAIM amendment, the RTCs remaining in 2023 will be 14.5 tpd. Therefore, to account for the RECLAIM shave in the SIP, a reduction of 6.2 tpd of actual emissions (the difference between the actual emissions in 2011/2012 and the 2023 remaining potential emissions in the SIP emission inventory) was included in the baseline emissions for the 8-hour ozone attainment demonstration in the 2016 AQMP.

In order to accurately report on progress made toward achieving emission reduction commitments, reductions from RECLAIM BARCT rules are first allocated to account for the reduction specified under RECLAIM Rule 2002. Since the adoption of the 2016 AQMP, six rules (Rules 1110.2, 1134, 1135, 1146, 1146.1, and 1146.2) have been adopted or amended by the South Coast AQMD as part of the RECLAIM transition. The total emission reductions resulting from these six rules is 5.2 tpd. Furthermore, five additional rules (Rules 1117, 1147, 1147.1, 1147.2 and 1147.3) are currently under development and are scheduled for amendment / adoption in calendar year 2020. The emission reductions anticipated from these rule amendments /adoptions are estimated to be at least in the range of 0.5 tpd to 1 tpd, which will likely satisfy the baseline NO<sub>x</sub> emission reductions commitments specified under RECLAIM Rule 2002. As the RECLAIM program transitions into a regulatory approach, the actual emissions from the RECLAIM universe will be tracked for emission reconciliation with the commitments in the SIP inventory. Additional reductions beyond this commitment due to these and other rulemaking activities (e.g., 1109.1) are discussed later.

The 2016 AQMP included new and innovative means to continue to make progress toward attaining the ozone standard. These included incentive programs, efficiency improvements, recognizing co-benefits from other programs, regulatory measures, and other voluntary actions. A key element of the 2016 AQMP is to make available private and public funding to help further the development and deployment of the advanced cleaner technologies such as zero emission and near-zero emission technologies, and co-benefits from existing programs (e.g., climate and energy efficiency). On January 4, 2019, the South Coast AQMD Governing Board awarded 27 emission reduction incentive projects, totaling over \$47 million from several South Coast AQMD mitigation and penalty funds, to support the 2016 AQMP's goals. Of the 27 projects, 16 are selected to implement commercially available zero or near-zero control technology as well as to support infrastructure for implementation of cleaner fuels. These projects are anticipated to result in approximately 88 tons per year of NO<sub>x</sub> and 2 tons per year of PM<sub>2.5</sub> emissions reductions in the Basin, with the majority of the projects in environmental justice communities. Additionally, 11 stationary and mobile source technology demonstration projects were funded. Upon successful demonstration and deployment, these projects have the potential to provide additional long term NO<sub>x</sub> and VOC emission reductions. The awarded projects are consistent

with the commitments in various 2016 AQMP control measures including MOB-14, CMB-02, CMB-04, and ECC-03.

**Table 1-11**  
South Coast AQMD Emission Reduction Allocation

	Rule	Adoption Date	NOx Reduction (tpd)
Adopted Rules in 2018 - 2019	Rule 1134 – Stationary Gas Turbines	4/5/2019	2.8
	Rule 1135 – Electricity Generating Facilities	11/2/2018	1.8
	Rule 1146, Rule 1146.1, Rule 1146.2 – Non-Refinery Boilers and Heaters	12/7/2018	0.3
	Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines	11/1/2019	0.3
Rules to be Adopted in 2020	Rule 1117 – Emissions of Oxides of Nitrogen from Glass Melting Furnaces	n/a	0.5 to 1
	Rule 1147 – Series NOx Reductions from Miscellaneous Sources		
	Rule 1147.1 – NOx Reductions from Large Miscellaneous Combustion		
	Rule 1147.2 – NOx Reductions from Metal Processing Equipment		
	Rule 1147.3 - NOx Reductions for Equipment at Aggregate Facilities		

## ii. Mobile Sources

### *On-Going Mobile Source Regulations and Programs*

CARB is implementing numerous regulations aimed at reducing NOx from light-duty on-road vehicles such as cars, heavy-duty on-road vehicles such as diesel trucks, and off-road sources like cargo handling equipment and large construction equipment. Phased implementation of these regulations continues to lower emissions from mobile sources and off-road equipment through 2023 and beyond, as newer vehicles and equipment are introduced with cleaner technologies, and replace the older and dirtier vehicles and equipment. In addition to regulations targeting vehicles and other combustion sources, as mentioned above, CARB is requiring cleaner fuels that provide for additional emission reductions in vehicles and equipment. NOx emissions from light-duty vehicles in the Basin have been reduced significantly over the past several

decades and will continue to go down after 2023 due to the benefits of CARB's longstanding light-duty mobile source program. Between 1997 and 2023, NO<sub>x</sub> emission from light-duty sources have decreased by over 90 percent. Key light-duty programs include:

- Zero Emission Vehicle (ZEV) program that requires auto manufacturers to offer for sale specific numbers of the cleanest cars available;
- Reformulated Gasoline program that requires gasoline in California meet specifications for clean burning fuel;
- Smog Check Program that requires periodic inspections of the vehicle's emission controls, and repairs to controls that are not functioning properly;
- Low Emission Vehicle (LEV) and LEV II regulations that set engine standards for cars, sport utility vehicles, pick-up trucks and mini-vans;
- On-Board Diagnostics (OBD) and OBD II regulations requiring passenger cars, light-duty trucks, and medium-duty vehicles to be equipped with emission control diagnostic systems; and
- Advanced Clean Cars program that sets comprehensive standards for new vehicles in California through model year 2025.

NO<sub>x</sub> emissions from heavy-duty vehicles in the Basin have been reduced significantly and will continue to be reduced beyond 2023 due to the benefits of CARB's heavy-duty mobile source program. Between 1997 and 2023, NO<sub>x</sub> emissions from heavy-duty sources have decreased by 80 percent. Key heavy-duty programs for this source include:

- Stringent heavy-duty engine standards;
- CARB Clean and Cleaner Diesel programs that reduce emissions from all diesel vehicles and equipment;
- Regulations to limit idling in school buses and commercial vehicles;
- In-use regulations on specific fleets such as solid waste collection vehicles and drayage trucks; and
- Truck and Bus Regulation that requires all older trucks and buses to meet the 2010 engine emissions standards in 2023.

Off-road sources encompass equipment powered by an engine that does not operate on the road. Sources vary from ocean-going vessels to lawn and garden equipment and include locomotives, aircraft, tractors, harbor craft, off-road recreational vehicles, construction equipment, forklifts, and cargo handling equipment. NO<sub>x</sub> emissions from off-road sources in the Basin have been reduced significantly and will continue to go down through 2023 due to the benefits of CARB and U.S. EPA programs. Between 1997 and 2023, NO<sub>x</sub> emission from off-road sources have decreased by over 50 percent. Key off-road programs for these off-road sources include:

- Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation that requires operators of in-use fleets achieve tightening specific fleet emission standards;
- Small Off-Road Engines (SORE) program setting emissions standards for spark ignition engines rated at or below 19 kilowatts; and
- Regulations limiting emissions from specific off-road equipment such as cargo handling equipment and transportation refrigeration units.

To speed the delivery of the cleanest vehicles to the Basin, CARB and the South Coast AQMD have worked on identifying and distributing incentive funds needed to accelerate the cleanup of older vehicles. There are a number of incentive programs that have speeded the early turnover to clean vehicles and produced emission reductions beyond what could be achieved by new engine standards and natural turnover. Key incentive programs for mobile sources include:

- Clean Vehicle Rebate Project and Enhanced Fleet Modernization Program for light-duty vehicles;
- Carl Moyer Incentive Program and the Proposition 1B Incentive Program for on-road and off-road heavy-duty vehicles;
- Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project for on-road heavy-duty trucks and buses; and
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program for agricultural equipment.

### *State SIP Strategy Implementation*

Since adopting the State SIP Strategy, CARB has been implementing the measures that were defined in the Strategy according to the schedule set forth in the aggregate commitment. Several of these measures have been adopted by CARB and are detailed in the table below. Other measures are in the development stage, either undergoing public workshops or being developed by CARB staff.

**Table 1-12**  
2016 State SIP Strategy Aggregate Commitment Measures

Measure Title	Board date Adopting the Subsequent Rule
South Coast On-Road Heavy Duty Vehicle Incentive Measure	March 22, 2018
Heavy-Duty Diesel Vehicle Emission Control System Warranty Regulation Amendments	June 2018
Innovative Clean Transit Regulation	December 14, 2018
Zero-emission Airport Shuttle Regulation	June 1, 2019
Zero-Emission Powertrain Certification Regulation	June 1, 2019
Electric Vehicle Supply Equipment Standards	June 1, 2019
Ocean-Going Vessel At Berth And At Anchor Regulation	Scheduled December 2019

#### **d. Clean Air Act Section 182(e)(5) Contingency Measure Requirements**

Section 182(e)(5) of the Act allows Extreme ozone nonattainment areas to include emission reductions in their attainment strategy from the anticipated development of new control techniques or the improvement of existing control technologies. These advanced technology measures are generally undefined at the time the SIP is adopted and submitted to U.S. EPA. Areas with SIPs that rely on such provisions must submit a SIP revision three years prior to the attainment year to demonstrate that the area will achieve the reductions assigned to the new technology by the attainment date, or include contingency measures to be implemented if the anticipated technologies do not achieve the planned reductions.

These contingency measures must be adequate to produce emission reductions sufficient, in conjunction with other plan provisions, to demonstrate reasonable further progress and attainment by the applicable dates. If the area fails to achieve the emission reductions due to an inability to fully implement the advanced technology provisions, U.S. EPA shall require the State to implement the contingency measures to the extent necessary.

While most of the reductions needed for attainment will come from existing control programs, California relied on these advanced technology provisions to achieve the additional increment of reductions needed to demonstrate attainment of the standard. In its 2016 State SIP Strategy CARB outlined those measures proposed for approval under section 182(e)(5). The advanced technology measures required this future flexibility in the approval process because some of the measures relied on the expenditure of future funding to achieve the pace of clean technology deployment needed. While the vehicle fleet would naturally turn over to zero- and near zero-emission technologies, the pace at which natural turnover takes place is not sufficient to meet California's emission reduction needs. In addition, flexibility was needed because significant



actions by federal and international agencies are needed to reduce those emissions from sources subject to federal regulatory authority that California lacks the authority to regulate.

Whereas 66 percent of the emissions reductions needed for attainment will be achieved from baseline measures that were adopted prior to adoption of the 2016 AQMP, the remaining emissions reductions will be achieved through the two types of measures listed below.

1. Aggregate commitment for defined measures - Enforceable commitments to take specific regulatory and programmatic actions according to a specific schedule to achieve an aggregate amount of emissions reductions by specific years, often referred to as the “aggregate commitment.”
2. Section 182(e)(5) commitment for Future Deployment Measures - A commitment to achieve emissions reductions that were approved under the section 182(e)(5) provisions. These measures are the subject of this report.

#### **e. 182(e)(5) Commitments in the 2016 AQMP**

Based on the 2016 AQMP modeling analysis, an additional 45 percent NO<sub>x</sub> emission reductions is needed in 2023 to attain the 1997 8-hour ozone NAAQS. This percentage is based on meeting the “carrying capacity” of 141 tpd of NO<sub>x</sub> in 2023. To demonstrate attainment, the 2016 AQMP identified the total NO<sub>x</sub> reductions to come from: 1) defined measures by South Coast AQMD and CARB totaling 27 tpd (aggregate commitments); and 2) CARB’s “Further Deployment of Cleaner Technologies” under CAA Section 182(e)(5) totaling 108 tpd. This report addresses how the 108 tpd of NO<sub>x</sub> reductions can be achieved.

#### ***Define the Challenge – emission reductions are getting harder to achieve***

Existing CARB and South Coast AQMD control programs have substantially reduced precursor emissions of ozone and will continue to do so into the future through turnover of older vehicles, engines and equipment to cleaner vehicles, engines and equipment. Through regulations adopted and implemented to date, CARB and the air districts have controlled many of the sources that had previously contributed the largest amounts of emissions. Additionally, the 2016 State SIP Strategy included commitments for cleaner heavy-duty truck standards set at the State and federal level. Therefore, regulating the remaining sources subject to State and local authority achieves incrementally smaller amounts of emissions reductions. State and local agencies continue to look to the categories and sources with the largest shares of remaining emissions for further reductions, but it has become increasingly difficult to get the levels of reductions needed from sources within the state and local agencies’ authority to achieve further air quality progress.

Furthermore, the deadlines for attainment of the 80 ppb ozone and other federal standards are fast approaching, and development and full implementation of regulatory measures is not always

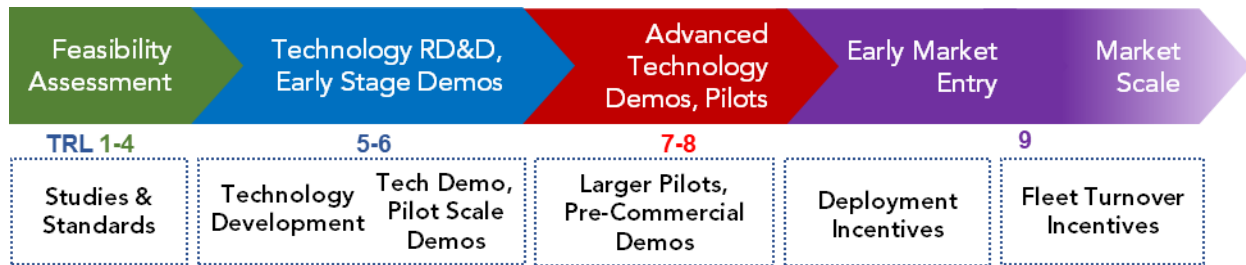
possible within the timeframes needed. As these deadlines approach and the amount of emissions reductions possible from new regulations decreases, reductions from voluntary incentive programs become more important in the overall strategy to achieve our attainment goals. In addition, while regulatory programs drive the introduction of cleaner technologies, fuels, and fueling infrastructure, the natural fleet turnover rate and the current pace of market development for the cleanest technologies will not be sufficient to meet California's needs. Clearly signaled, adequately funded, multiple-year incentives will be critical to drive the rapid transformation of the transportation sector to zero-emission technologies wherever feasible and near zero-emission technologies with the cleanest, lowest carbon fuels everywhere else.

In California, there are a variety of voluntary, publicly funded programs in place to encourage the development of, and incentivize the purchase of, cleaner vehicles and engines and these programs have been tremendously successful in reducing emissions. However, additional funding mechanisms, international partnering with shipping lines, research and demonstration projects, and other innovative strategies will be needed to accelerate deployment of these technologies and their related infrastructure to meet our short- and long-term goals. CARB's 2016 State SIP Strategy and related planning documents include a combination of proposed regulations and incentives designed to help shift California from a reliance on petroleum fueled vehicles and off-road equipment to zero- and near zero-emission vehicles and fuels.

#### *Expectation for Development and Deployment of New Technologies*

While advanced technologies require time to develop and commercialize, public investment through incentive programs can greatly accelerate this timeline. In addition to directly funding research, development, and deployment, significant public funding can also induce increased levels of private investment as manufacturers become more willing to increase production capacity and provide additional support, training, and infrastructure for clean technologies.

Just as there are a range of regulations, there are a range of incentives at the local, State, and federal levels that support technology advancement at the demonstration, pilot, and commercial deployment stages, or across all technology readiness levels (TRL). The figure below shows the evolution of mobile source technology in California. Public agencies provide key incentives at each level.



**Figure 1-6**

Evolution of Mobile Source Technology in California

As the above figure shows, California, through many state and local agencies, invests public funds throughout the stages of technology evolution. This approach is critical because it signals the importance that the local air districts and CARB place on the development and deployment of these advanced technologies, attracting innovators and green businesses to the state. CARB has programs in its incentive portfolio that span from pre-commercial demonstration, pilot, early commercial, and commercial phases of technology and market development.

The continued application of incentive funding throughout all stages accelerates the movement of the market toward market viability and financial stability. Especially for the heavy-duty sectors, increased incentive funding is needed well into the future to ensure that market successes are solidified and that we continue to make progress towards reaching California and South Coast AQMD’s air quality goals. However, the ultimate goal for each technology application is to reach a point of financial sustainability where incentives can be phased out for that specific technology.

*Without Federal Efforts, the Basin Cannot Attain the Standard*

Despite the many actions being taken by the South Coast AQMD and CARB, the contribution of emissions from interstate and international sources under federal authority, coupled with limitations on local and state regulatory authority, mean that achieving the magnitude of emission reductions necessary to meet federal standards will also require strong action at the federal level. CARB and the South Coast AQMD continue to work with federal and international agencies to advocate for more stringent emission standards for sources that are not under California and local regulatory purview, but federal action has not been sufficient to meet federally mandated air quality objectives.

Achieving the emission reductions necessary from these source categories will require prompt action at the federal and international level, coupled with State and local advocacy and action to facilitate these efforts. Without considerable emission reductions from sources under federal

control, the South Coast Air Basin will not be able to reach attainment in 2023 or the subsequent attainment dates for other air quality standards.

*Four Years until the Attainment Date*

Given that significant levels of NO<sub>x</sub> reductions are still needed for attainment of the 1997 8-hour ozone standard in only four years, an aggressive control strategy needs to be developed and additional actions to obtain emission reductions are required. Although the magnitude of the required reductions represents a daunting challenge, every feasible action must be considered and implemented to achieve as much reductions as possible to provide healthy air for the region.

## 2. CONTINGENCY MEASURE PLAN

The proposed Contingency Measure Plan (CMP) outlined in this report lays out an aggressive approach for achieving the 108 tpd of NO<sub>x</sub> reductions allocated to “Further Deployment of Cleaner Technologies” under section 182(e)(5) necessary to attain the 1997 8-hour ozone standard by 2023. The CMP is comprised of three specific strategies, as described below:

1. **Identified Emission Reduction Strategies** – Since the adoption of the 2016 AQMP, CARB and South Coast AQMD have identified additional emission reductions that can be credited toward the section 182(e)(5) reduction commitments in 2023. These reductions are based on: a) adopted regulations, b) new regulations or programs to be adopted by 2020, c) clean mobile source technologies being implemented which were not reflected in the 2023 emissions inventory, and d) a series of innovative new measures designed to achieve further reductions. Chapter 3 provides a brief description for each of these measures.
2. **Additional Incentive Funding** – Additional emission reductions are expected from both the existing and new sources of incentive funding by accelerating the turn-over of existing mobile sources to cleaner technologies. Chapter 4 discusses the potential future funding sources.
3. **Federal sources and federal measures** – Without further reductions from federal sources (i.e., OGV, aircraft, locomotives, out-of-state trucks), which account for 36% of NO<sub>x</sub> emissions, attainment of the 1997 8-hour standard is not possible by 2023. Therefore, to achieve the balance of the section 182(e)(5) commitment, additional reductions are needed from federal sources through federal regulatory programs and/or federal incentive funding. Chapter 5 provides a list of possible federal measures and actions for reducing emissions from sources under federal jurisdiction.

Table 2.1 presents the anticipated emissions reductions for the CMP for addressing the section 182(e)(5) commitment in 2023.

**Table 2-1**  
Contingency Measure Plan Strategies

CMP Strategy	2023 Reductions (tpd)
Identified Emissions Reduction Strategies	24-26
Additional Incentive Funding	15
Federal Measures and/or Funding	67-69
<b>Total</b>	<b>108</b>

### **3 IDENTIFIED MEASURES THAT CAN ACHIEVE REDUCTIONS BY 2023**

As previously described, section 182(e)(5) of the Clean Air Act allows for Extreme nonattainment areas' attainment demonstrations to be based in part on the anticipated development of new technologies or improvement of existing control technologies. These long-term control measures are often referred to as “black box” measures and go beyond the short-term control measures that are based on known and demonstrated technologies. The 2016 State SIP Strategy includes both defined regulatory/incentive measures as well as measures identified as “Further Deployment of Cleaner Technologies” measures that do not yet have fully-defined implementation strategies (i.e., proposed under section 182(e)(5)). This section describes the newly identified measures, beyond the emission reductions quantified in the 2016 AQMP and the State SIP Strategy, to be used as contingency measures for the reductions specified under section 182(e)(5)'s “Further Deployment of Cleaner Technologies” in the State SIP Strategy.

#### **a. South Coast AQMD Measures Providing NO<sub>x</sub> Reductions Not Included in the 2016 AQMP**

The 2016 AQMP was adopted in March 2017 and approved by CARB the same month. Among the 27 control measures targeting NO<sub>x</sub>, ten have quantifiable NO<sub>x</sub> emission reductions while the reductions from the remaining control measures were left to be determined (TBD) in the AQMP. The “TBD” measures require further technical and feasibility evaluations to determine their emission reduction potential and thus, the attainment demonstration is not dependent on these measures. Emissions reductions achieved and quantified by these measures can be applied towards section 182(e)(5)'s contingency requirements.

Table 3-1 provides a list of the South Coast AQMD's identified emissions reduction strategies with reduction benefits that were not specifically quantified in the 2016 AQMP. Since the adoption of the 2016 AQMP, South Coast AQMD has taken several actions to develop rules and programs to further reduce NO<sub>x</sub> emissions. On May 4, 2018, the South Coast AQMD Governing Board directed staff to pursue various approaches with some of the Basin's largest indirect sources: a voluntary Memorandum of Understanding (MOU) approach with marine ports and commercial airports and regulatory approaches for warehouses/distribution centers, railyards and new and re-development. The MOUs with the marine ports and commercial airports will implement the facility-based mobile source measures (FBMSMs) MOB-01 and MOB-04 in the 2016 AQMP, with now quantifiable emissions reductions. In addition, pursuant to directives listed in control measure CMB-05 of the 2016 AQMP and in recently adopted state statute (AB 617), RECLAIM facilities are subject to an expedited implementation schedule to install additional BARCT no later than December 31, 2023, which accelerated the implementation schedule of CMB-05, thereby providing additional emission reduction benefits in 2023. Additional NO<sub>x</sub> emission reductions anticipated from continued implementation of existing incentive programs with future funding will also generate reductions that are surplus to

the South Coast AQMD’s aggregate commitments as described in the 2016 AQMP. Also, reductions are anticipated from deployment of Metrolink’s Tier 4 locomotives, which were not included in the 2016 AQMP inventory. Finally, because of the updated OGV inventory and CARB’s SIP strategy for OGVs, there are surplus reductions from OGV’s that can be allocated toward the section 182(e)(5) reduction commitments. Details of each identified measure are provided in subsequent sections.

**Table 3-1**  
South Coast AQMD’s Identified Measures Providing Additional NO<sub>x</sub> Reductions  
toward CAA 182 (e)(5) Commitments

Measure/Program	Date of Adoption/ Implementation	Emissions Reductions (tpd in 2023)
RECLAIM Transition Rules	2020	2
Facility-Based Mobile Source Measure for Commercial Airports	December 2018	0.5
Facility-Based Mobile Source Measure for Marine Ports	Early 2020	3.2 – 5.2
Incentive Funding (Expected Future Funding)	2020-2023	1.5
Metrolink Tier 4 Locomotives Conversion	Full Implementation Before 2023	3.0
<b>Total Reductions Towards 182(e)(5) Commitment *</b>		14 - 16

*\* Preliminary estimates; also includes 4.2 tons per day of reductions associated with updated OGV emissions inventory and CARB’s SIP Strategy for OGV.*

### ***RECLAIM BARCT Rules***

As described in more detail under Section 1c, for SIP accounting purposes, reductions from adopted rules are first allocated to account for the reduction commitments specified under RECLAIM Rule 2002 that were part of the 2016 AQMP baseline emissions inventory. Only surplus emission reductions beyond the baseline can be credited towards the CAA section 182(e)(5) commitment. Table 3-2 lists the anticipated rules to be adopted in 2020 that go beyond the reductions specified under RECLAIM Rule 2002. These anticipated rules include Rule 1109.1 for refinery equipment, Rule 1150.3 for landfills, Rule 1179.1 for combustion equipment and publicly owned treatment work facilities, and Rule 1146.2 for large water heaters and small boilers and process heaters. It should be noted that for the anticipated rules, the final emission reduction amounts are still being determined and will be finalized during the rulemaking process. The approximately 2 tpd of additional emission reductions from these anticipated rules will be surplus for 2023 (the 2016 AQMP CMB-05 commitment of 5 tpd is for 2025 with no credit taken for 2023) and can be credited to the section 182(e)(5) commitments.



**Table 3-2**  
Allocation of Surplus Emission Reductions for RECLAIM Transition

	Rule	NOx Reduction in 2023 (tpd)
Rules to be Adopted in 2020	Rule 1109.1 – Refinery Equipment	2
	Rule 1150.3 – Emissions of Oxides of Nitrogen from Combustion Equipment at Landfills	
	Rule 1179.1 – NOx Emission Reduction from Combustion Equipment and Publicly Owned Treatment Work Facilities	
Rules beyond 2020	Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters	

*Facility-Based Mobile Source Measure (FBMSM) for Commercial Airports*

The 2016 AQMP includes South Coast AQMD’s proposed Facility-Based Mobile Source Measures (FBMSMs) to help reduce emissions from indirect sources. Indirect sources are facilities that have limited direct emissions, but attract significant mobile emissions, such as airports, ports, and warehouses. Control Measure MOB-04: Emission Reductions at Commercial Airports covers emissions from non-aircraft airport-related mobile sources, including ground support equipment, shuttle buses, trucks, and on-road and off-road vehicles. In May 2018, the South Coast AQMD Governing Board directed staff to pursue a voluntary Memorandum of Understanding (MOU) approach for the non-aircraft sources at five commercial airports in the Basin - Los Angeles International Airport, John Wayne Airport, Burbank Airport, Long Beach Airport, and Ontario Airport. Following the Board’s direction, South Coast AQMD established an Airport MOU working group for the development and implementation of the MOUs with the airports. The draft MOUs are developed based on the Air Quality Improvement Plans/Measures (AQIP/AQIM) that the airports have prepared, which include specific airport measures and initiatives for reducing emissions from non-aircraft sources. Under the MOUs, the airports will commit to implement specified AQIP/AQIM measures that are potentially eligible for SIP credit and provide annual reports to South Coast AQMD on the implementation of these measures. South Coast AQMD will be responsible for quantifying the emissions benefits for these potential SIP creditable measures and making up any emission reduction shortfall.

The FBMSM for commercial airports is expected to achieve 0.5 tpd of NOx emission reductions in 2023 based on the implementation of SIP creditable AQIP/AQIM measures, which primarily focus on ground support equipment but also include additional measures for shuttle buses and



vehicles/trucks. For ground support equipment, the airports are establishing airport-specific emissions performance targets (i.e., grams of NO<sub>x</sub>/HC per horsepower hour) in 2023 and 2031, which would require transitioning to cleaner or zero-emission equipment. For shuttle buses and vehicles, zero-emission or near-zero-emission vehicles are being proposed.

### *Facility-Based Mobile Source Measure for Marine Ports*

The 2016 AQMP also includes Control Measure MOB-01: Emission Reductions at Commercial Marine Ports. This measure covers emissions from port-related mobile sources, including drayage trucks and cargo handling equipment. In May 2018, the South Coast AQMD Governing Board directed staff to pursue a voluntary Memorandum of Understanding (MOU) approach for the Ports of Los Angeles and Long Beach. The MOU will include specific measures from the Ports' 2017 Clean Air Action Plan (CAAP) update, with the goal of obtaining SIP creditable emission reductions from those measures. Following the Board's direction, South Coast AQMD established a Technical Working Group (TWG) to develop methodologies and quantify emissions benefits associated with the implementation of CAAP measures. The TWG is comprised of representatives from South Coast AQMD, CARB, U.S. EPA, Ports of Los Angeles and Long Beach, Coalition for Clean Air, Sierra Club, Pacific Merchant Shipping Association, and California Trucking Association. In addition, a Ports MOU working group has been established to track the development and implementation of the MOU. Under the MOU, the Ports will commit to implement specified CAAP measures with South Coast AQMD committing to quantify the emission benefits and make up any emissions reduction shortfall.

In addition, the Ports of Los Angeles and Long Beach have been implementing a voluntary incentive-based Vessel Speed Reduction (VSR) Program and Green Flag Incentive Program, respectively, over the last several years. Under these programs, the Ports offer monetary incentives to shipping lines that reduce their transiting speeds to 12 knots within 20 nautical miles and 40 nautical miles of Point Fermin. The benefits of the Ports' VSR programs, included in the 2016 AQMP inventory, were based on the Ports implementation of the VSR programs in 2014. However, with continued improvements in the VSR Program, the Ports have reported higher compliance rates in 2017. Based on the 2017 VSR compliance rates reported by the Ports, the surplus NO<sub>x</sub> reductions are estimated to be 0.2 tpd in 2023.

The Ports MOU is estimated to achieve 3.2 to 5.2 tpd of NO<sub>x</sub> emission reductions in 2023 based on the implementation of proposed SIP creditable CAAP measures, primarily focusing on drayage trucks and potentially on cargo handling equipment. Under the proposed updates to Clean Truck Program, a rate will be charged to the beneficial cargo owners for heavy-duty trucks with loaded containers entering or exiting the Ports' terminals, with possible exemptions provided for zero and near-zero emission trucks. The revenues to be collected through the assessment of the rate will be used as incentives for fleets to replace their existing trucks with

zero and near-zero emission trucks. As for cargo handling equipment, the emission reductions are largely associated with electrifying terminal equipment, including on-going modernization projects at several terminals. The estimated reductions from cargo handling equipment are yet to be quantified.

*Additional Emission Reductions from Incentive Funding (existing funding sources)*

The 2016 AQMP highlighted the need for a significant level of incentive funding to achieve additional reductions in a timely manner. The 2016 AQMP provides an analysis of the incentive funding levels that will be needed to achieve the emission reductions associated with the State SIP Strategy “Further Deployment of Cleaner Technologies” measures if no other actions occur. The total amount of funding needed to achieve the 2023 NO<sub>x</sub> emission reductions identified in the State Mobile Source Strategy ranges from \$4.3 billion to as high as \$14 billion depending on the types of funding programs implemented and which mobile source sectors will be more cost effective to reduce emissions. California and the South Coast AQMD have a long history of successful implementation of incentive programs that help fund the accelerated deployment of cleaner engines and after-treatment technologies in on-road heavy-duty vehicles and off-road mobile equipment. Such accelerated deployment not only results in early emission reductions, but also provides a signal to technology providers, engine and automobile manufacturers, and academic researchers to develop and commercialize the cleanest combustion engines possible and further the efforts to commercialize zero-emission technologies into a wider market. Some of the major incentive sources include:

- Carl Moyer Memorial Air Quality Standards Attainment Program (SB1107 and AB 923)
- AB 118 – California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007
- Proposition 1B – Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006
- Low Carbon Transportation Funding (Greenhouse Gas Reduction Fund)
- AB 2766 – Motor Vehicle Fee Program
- South Coast AQMD Clean Fuels Program
- South Coast AQMD Rule 2202 – On-Road Motor Vehicle Mitigation Options
- AB 617 and AB 134

Since the adoption of the 2016 AQMP, the South Coast AQMD has implemented a range of incentive funds available to local fleets to accelerate implementation of lower emitting technologies, and provided outreach to support cleaner technologies. Table 3-3 lists the number of affected mobile source equipment and emission reductions in tons per year (tpy) for projects approved in 2018. This serves to demonstrate South Coast AQMD’s ability to implement

incentive programs in the region, and that incentive programs are an effective means to generate emission reductions.

**Table 3-3**  
Summary of South Coast AQMD's Board Approved  
Incentive Programs in 2018

Program	Funding Amount	No. of Equipment	NOx (tpy)	PM2.5 (tpy)
<b>Carl Moyer &amp; SOON</b>	\$35,559,645	558	415	7.8
<b>AB 134</b>	\$49,060,072			
<b>Near-Zero Trucks with CEC Grant, Ports, and AB</b>	\$14,000,000	140	63.2	–
<b>Near-Zero Emission School Buses</b>	\$35,638,000	206	27.1	1.5
<b>EFMP</b>	\$8,257,730	1,023	14.4	--
<b>Voucher Incentive (VIP)</b>	\$2,745,000	65	44.2	0.12
<b>TOTAL</b>	<b>\$ 145,260,447</b>	<b>1,992</b>	<b>563.9</b>	<b>9.42</b>

In the last few years, the South Coast AQMD and its State and regional partners implemented around \$100 to \$200 million per year in incentives funding. Since the 2016 AQMP, actions have been undertaken to secure a significant sustainable level of funding revenue. Table 3-4 provides a summary of reasonably expected future funding for the major incentive programs in the Basin that are estimated to be about \$800 million of funding over the next 3-4 years.

Based on the expected future funding of approximately \$800 million over the next 4 years, about 12 tpd of NOx reductions are expected to be achieved by 2023. After fulfilling South Coast AQMD's aggregate commitments for 2016 AQMP control measures MOB-10, MOB-11 and MOB-14, the remaining surplus reductions are estimated at approximately 1.5 tpd of NOx emissions in 2023 that can be used for the South Coast AQMD's section 182(e)(5) commitments.

**Table 3-4**  
Summary of Reasonably Expected Future Funding

Funding Source	Expected Funding
<b>Carl Moyer</b>	\$40-\$50 million per year
<b>AB 617-related Incentives</b>	\$80-\$90 million per year
<b>AB 2766</b>	\$22 million per year
<b>Mobile Source Air Pollution Reduction Review Committee</b>	\$17 million per year
<b>Volkswagen Settlement</b>	\$67 million (total)
<b>Prop 1B</b>	\$30 million (total)

Based on the expected future funding of approximately \$800 million over the next 4 years, about 12 tpd of NO<sub>x</sub> reductions are expected to be achieved by 2023. After fulfilling South Coast AQMD's aggregate commitments for 2016 AQMP control measures MOB-10, MOB-11 and MOB-14, the remaining surplus reductions are estimated at approximately 1.5 tpd of NO<sub>x</sub> emissions in 2023 that can be used for the South Coast AQMD's section 182(e)(5) commitments.

#### *Metrolink Tier 4 Locomotives Conversions*

The South Coast AQMD Governing Board has awarded Metrolink a total of \$101.85 million since February 2013 for the replacement of 37 older locomotives (Tier 0 & Tier 2) with Tier 4 locomotives and the new purchase of three Tier 4 locomotives. As of September 2019, 27 Tier 4 locomotives have been delivered to Metrolink with 23 units deployed in revenue service or undergoing shakedown testing. Metrolink anticipates all 40 Tier 4 locomotives will be deployed in service by the end of 2020. Upon full deployment, Metrolink will operate 40 train sets with Tier 4 locomotives. Metrolink will retain several Tier 2 locomotives as spare or standby units to fill in during scheduled and unscheduled maintenances for the Tier 4 locomotives. Based on the preventive maintenance schedule, Metrolink anticipates at least three Tier 4 units will be out of service at a time, with the normal operation cycle including 37 Tier 4s and 3 Tier 2s in service on a daily basis. The emission reductions from the Tier 4 conversions and the purchase of the new Tier 4 locomotives, which are surplus to the 2016 AQMP inventory, are estimated to be 3 tpd in 2023.

### *Updated OGV Inventory and SIP Strategy*

During the development of the 2016 AQMP, the emissions inventory was frequently updated to incorporate the latest available information and methodologies. The Draft 2016 AQMP was first released to the public for review and comment in June 2016, and a Revised Draft 2016 AQMP was subsequently released in October 2016. Both of these documents incorporated the best available emission inventory at the time of their development. In the last quarter of 2016, the emissions for OGV were updated with significant increases of NO<sub>x</sub> emissions in future years, primarily due to the delayed introduction of Tier 3 engines in California waters. However, there was not enough time to incorporate the emissions inventory update in the attainment demonstration for the various federal standards addressed in the 2016 AQMP. To ensure that attainment could still be achieved, the State SIP Strategy was revised with increased emission reductions commitments in the OGV category to accommodate the changes in OGV emission inventory that were not reflected in the 2016 AQMP SIP submittal.

In 2018, CARB adopted the 2018 Updates to the California State Implementation Plan (2018 SIP Update) in response to recent court decisions related to ozone reasonable further progress baseline inventory years and contingency measures. The 2018 SIP Update includes an updated emission inventory incorporating the changes in the OGV category. As a result, the 2023 baseline emissions for OGV has been increased from 23 tpd to 37 tpd in the South Coast Air Basin (within 100 nautical miles). After incorporating the OGV inventory updates into the attainment demonstration, it was discovered that the emission reductions commitment for the OGV category in the 2016 AQMP and State SIP Strategy was higher than needed, with an additional 4.2 tpd of NO<sub>x</sub> emission reductions beyond the projected carrying capacity of 141 tpd. Therefore, to reflect the most up-to-date emissions inventory and control strategy, a 4.2 tpd of NO<sub>x</sub> reductions is realized from the over-commitment in the 2016 AQMP and State SIP Strategy.

### *Residential and Commercial Sectors*

Despite existing stringent regulations for many sources, the attainment of the 1997 8-hour ozone standard will require extensive deployment of zero and near-zero NO<sub>x</sub> emission technologies in all sectors. For the residential and commercial sectors, there are opportunities to require and accelerate the replacement of existing equipment with cleaner zero- or near-zero emissions alternatives. Reducing, managing, and changing the way energy is used in the commercial and residential sectors can also provide additional emission reductions, reduce energy costs, and provide multiple environmental benefits. The 2016 AQMP includes control measures for the applications of zero or near-zero NO<sub>x</sub> emissions appliances in the residential and commercial sector (CMB-02), additional enhancement in reducing energy use in existing residential buildings (ECC-03), and co-benefits from existing residential and commercial building energy

efficiency mandates (ECC-02). These three control measures together anticipate 2.6 tpd of NO<sub>x</sub> reductions by 2023. South Coast AQMD will continue to evaluate opportunities for additional feasible NO<sub>x</sub> reductions in existing and new residential and commercial buildings, including potential rulemaking in the 2020-2022 timeframe. Any potential surplus reductions achieved beyond the South Coast AQMD's aggregate reduction commitments in 2023 can be applied toward the reductions claimed under section 182(e)(5) measures and attainment in 2023.

### **b. CARB Regulations Providing NO<sub>x</sub> Reductions Not Included in the 2016 AQMP**

In addition to those measures that were defined in the State SIP Strategy, CARB is implementing new measures that will achieve reductions toward California's section 182(e)(5) commitment. These measures are listed in the Table 3-5 with descriptions following.

**Table 3-5**  
CARB New Mobile Source Measures toward Section 182(e)(5) Commitment

Measure	Date of Adoption (Expected)	Achieved NO <sub>x</sub> Emissions Reductions in 2023 (tpd)
Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation	September 2018	1.7
ATCM for Portable Engines, and the Statewide Portable Equipment Registration Program Regulation	November 2017	0.25
HD Inspection and Maintenance (I/M) program	(Early 2020)	4.2
<b>Total Mobile Source Reductions Towards Section 182(e)(5) Commitment</b>		6.15

#### *Low Carbon Fuels Standard Amendment*

On September 27, 2018, the CARB Board approved amendments to the Low Carbon Fuel Standard (LCFS), which strengthens and smooths the Carbon Intensity (CI) benchmarks through 2030 in-line with California's 2030 GHG target enacted through SB32. The LCFS transforms and diversifies the fuel pool in California to reduce petroleum dependency and achieve air quality benefits. The LCFS is a key part of a comprehensive set of programs in California to reduce emissions from the transportation sector.

The LCFS sets annual CI standards, or benchmarks, which reduce over time, for gasoline, diesel, and the fuels that replace them. The new fuels will not only lower GHGs but also improve California's air quality relative to current (2016) conditions and to the business-as-usual

scenario. The total statewide NO<sub>x</sub> and PM<sub>2.5</sub> emissions are estimated to be lower in each year from 2019 through 2030.

***ATCM for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater, and the Statewide Portable Equipment Registration Program Regulation***

On November 16, 2017, CARB approved amendments to the Portable Equipment ATCM and PERP Regulation (PERP Regulation). The PERP Regulation requires operators to upgrade their equipment by 2020 to meet emissions requirements. The PERP Regulation was designed to force the development of retrofit emissions control technologies and new engine technologies to meet regulatory requirements. Some of these technologies materialized and some did not. Because some technologies did not develop as anticipated, the current PERP Regulation requirements are financially and, in some cases, technologically infeasible. The new PERP Regulation restructures the emissions requirements so that implementation and enforcement of the regulation is feasible, the regulated fleets can comply, and emissions reductions are achieved.

***Heavy Duty Truck Inspection and Maintenance Program***

Scheduled for consideration by CARB in early 2020, the Heavy-Duty Truck Inspection and Maintenance Program (HD I/M program) will be designed to incentivize vehicle owner and driver behavior to ensure that heavy-duty vehicles are well maintained and properly repaired.

In California, heavy-duty diesel vehicles with a gross vehicle weight rating over 14,000 pounds represent one of the largest sources of mobile air pollution. 2019 estimates indicate that these vehicles contribute approximately 58 percent of the statewide on-road mobile source NO<sub>x</sub> emissions. Some of these emissions are attributed to broken or failing emissions-related equipment.

CARB's existing heavy-duty inspection programs rely on random field inspections by CARB staff and annual self-inspections by truck owners to test for smoke opacity levels. However, these programs do not ensure that vehicle owners are regularly inspecting and repairing their vehicles' broken emissions controls. The HD I/M program will ensure that vehicles' emissions control systems are operating as designed to reduce emissions, and also remove gross polluting HD vehicles from the roads.

**c. CARB Innovative New Measures**

California has identified additional, innovative measures beyond those regulations identified above that were not identified in the 2016 AQMP and State SIP Strategy, but have been adopted, or are soon to be adopted by CARB. These actions are more innovative in nature and represent a next-level effort to continue to reduce emissions in the Basin. In some cases, these measures go



beyond the historical model of programs and regulations and represent the level of transformation needed of every sector to achieve clean air. These measures are described below.

#### *Tier 5 Off-Road Diesel Engine Standard*

CARB has adopted four increasingly stringent tiers of regulations to reduce emissions from off-road diesel engines since 1995 to minimize the adverse health effects of diesel emissions. However, it has been almost 14 years since the off-road diesel standards were last updated (Tier 4 in 2005), which now lag behind the European Stage V nonroad diesel standards in stringency. As a result, the emissions contribution from off-road diesel engines continues to increase and will exceed the contribution from on-road diesel engines by 2025, making off-road diesel the single largest source of mobile NO<sub>x</sub> emissions in California. This measure would include adopting more-stringent standards that reduce NO<sub>x</sub> and PM emissions by up to 90% below the current Tier 4 standards, as well as potential requirements to offer off-road vehicles with zero-emission technology for sale.

#### *State Green Contracting*

California's State Transportation Agency spends approximately \$5 billion annually on building and maintaining California roads. In addition, the State government purchases new vehicles and equipment each year. This measure would consider requiring State contractors to use the cleanest equipment available in order to be considered for these contracts and State agencies to purchase the cleanest vehicles and equipment that are available. This measure builds on Governor Newsom's recent directive for State government to immediately redouble efforts to reduce greenhouse gas emissions and mitigate the impacts of climate change while building a sustainable, inclusive economy.

#### *Reduction in Growth of Single-Occupancy Vehicle Travel*

This measure would consider applying a regional transportation system pricing program in conjunction with requirements to use the generated funding to encourage people to take public transit, carpool, bike, walk, and/or adjust trip times at congested times of day. The regional pricing program would implement a suite of regional and locally focused pricing strategies for use of certain lanes, driving into certain areas, parking in prime locations, driving at peak times, and/or utilizing non-pooled ridehailing services. Funds generated from the program must be used to either encourage use of existing identified clean transportation options or to provide additional clean transportation options. Some examples include, but are not limited to: reducing the cost of transit via transit passes, providing rebates for e-bikes, providing lower cost or reserved parking spaces for carpools, educating the public about the availability of per-mile car insurance pricing options, and providing traveler incentives to encourage travel at times when roads are less congested.



### *Locomotive Emission Reduction Measure*

CARB is evaluating concepts for a potential regulation to reduce criteria, toxics, and greenhouse gas emissions from locomotives. These concepts address in-use locomotive emissions, idling, and maintenance activities. The potential regulation includes elements that could be implemented at the state and/or district level.

Previously, state action to limit rail emissions has been through enforceable agreements. Although a regulation will take more time to implement than an agreement, it will not sunset like previous MOUs, it will be more transparent in its development, it will be enforceable, and it will achieve additional emissions reductions.

Specifically, one of CARB's concepts, called the Locomotive Emissions Reduction Spending Account, requires that the Class 1 railroads set aside funds each year to purchase Tier 4 or cleaner locomotives. The amount to be set aside is based on the usage of Tier 3 and lower (dirtier) locomotives in California. The charge increases with the emissions level of the locomotive used, which should encourage cleaner locomotive operation within the state. The Account could begin implementation by the end of 2022, with potential PM and NO<sub>x</sub> reductions achieved by the end of 2023. Note, CARB staff will coordinate with the South Coast AQMD to ensure this measure does not duplicate the FBMSM for railyards.

### *VMT and Land Conservation*

Integrating land and transportation strategies can have synergistic effects and help the state further reduce both criteria and greenhouse gas emissions by protecting land-based carbon while providing simultaneous reductions in emissions from transportation. Protection of lands that are at risk of conversion to urban or rural development through use of conservation easements or the implementation of local and regional planning policies that protect land from development result in the extinguishment of development rights, thereby avoiding increases in VMT by limiting opportunities for expansive, vehicle-dependent forms of development. Currently, only some sustainable community strategies in regional transportation plans explicitly include conservation and management of natural and working lands. While cities and counties across California have developed local and county climate action plans to reduce GHG emissions and increase climate resilience, few capture the potential GHG reductions from conserving, restoring, and managing Natural Working Lands. Although limited research is available on the direct effect of land conservation on VMT, the State is expanding efforts to understand the relationship and synergies of taking an integrated cross-sector approach.

### *Regional VMT Reductions*

Today's California is shaped by historic patterns of growth in transportation and housing. While we have grown to be the fifth largest economy in the world, our residents, in search of an

affordable place to live, and with insufficient transportation options, are too often left with little choice but to spend significant time and money driving from place to place. Where we put transportation and housing also imposes and often reinforces long-standing racial and economic injustices by placing a disproportionate burden on low-income residents, who end up paying the highest proportion of their wages for housing and commuting. Staff and elected officials of local, sub-regional, regional, and state government bodies all have critical authorities and roles to contribute and could take steps to improve these outcomes, but so far, have not been able to enact the magnitude of change needed given the state's current structure of incentives, political forces, and policy restrictions. There are unique opportunities for elected officials to improve the transportation sector to reduce emissions and help with attainment of health-based air quality standards in the South Coast.

*Co-Benefits from Electrification of Buildings due to 2017 Climate Change Scoping Plan*

Buildings contribute directly to emissions when fuel (primarily natural gas) is combusted on-site for space and water heating. As grid electricity in California transitions to 100 percent clean energy, building electrification can reduce fuel combustion emissions in buildings. The framework for this measure is contained in Alternative 1 of the 2017 Climate Change Scoping Plan, and includes measures pertaining to appliance technology substitution; demand reduction; electrical efficiency in industry, agriculture, residential, and commercial lighting; and residential air conditioning, freezing, and refrigeration. An implementation framework for building electrification would consider mechanisms to require and incentivize early retirement/replacement and new installations of residential and commercial water heating, space heating, and air conditioning appliances with zero or near-zero emission technologies such as high efficiency electric heat pumps. Quantification of surplus emission reductions in this sector must consider the 2016 AQMP commitments as well as any additional South Coast AQMD regulatory actions.

#### **4. ADDITIONAL INCENTIVE FUNDING THROUGH SOUTH COAST AQMD'S STATE LEGISLATIVE EFFORTS**

South Coast AQMD has been making sustained efforts locally and with the state legislature to seek funding to implement the 2016 AQMP for the South Coast region and will continue to do so going forward. The 2016 AQMP calls for over \$1 billion per year in incentive funding for clean vehicles, infrastructure, and equipment.

In 2017, the South Coast AQMD sponsored AB 1274 (O'Donnell), which was signed into law. Beginning in 2019, this bill creates annual smog abatement fees that are transferred to the Carl Moyer Program for more effective reductions in diesel particulate matter and nitrogen oxide emissions. This bill is anticipated to create a sustainable funding source of about \$25-30 million annually for the South Coast region. Also, through budget trailer bill AB 134, South Coast AQMD received a one-time allocation of \$107.5 million in Greenhouse Gas Reduction Fund (GGRF) monies for increased Carl Moyer Program funding for incentives to accelerate turnover to cleaner vehicles and equipment and reduce criteria air pollutant and toxic air contaminant emissions in the South Coast region.

In 2018, as a result of budget trailer bill SB 856, South Coast AQMD ultimately received a one-time allocation of about \$86 million in GGRF funding for AB 617 incentives to accelerate turnover to cleaner vehicles and equipment and reduce criteria air pollutant and toxic air contaminant emissions that will benefit disadvantaged communities within the South Coast region that are in the AB 617 program or are being considered for that program in future years.

In 2019, as a result of budget bill AB 74 (Ting), South Coast AQMD is expected to again receive a one-time allocation of about \$86 million in GGRF funding that shall be available for financial incentives to reduce mobile and stationary sources of criteria air pollutants or toxic air contaminants within the South Coast region, consistent with community emissions reduction programs developed pursuant to the AB 617 program and its statutory requirements (Section 44391.2 of the Health and Safety Code).

Moving forward, through 2023, several funding sources will be advocated for including: (1) GGRF funds, (2) Statewide Bond Funding, and (3) The Voting District Authorization for Clean Air legislation, SB 732 (Allen).

1. GGRF - Given that the South Coast region already has three approved communities in the AB 617 program and is likely to add 2 more in 2020, South Coast AQMD will be advocating for at least \$150 to \$200 million in sustainable annual GGRF monies for incentive funding going forward, to benefit disadvantaged communities within the South Coast region that are in the AB 617 program or are being considered for that program in future years.

2. Statewide Bond Funding – Currently, there are multiple pieces of state legislation that would result in bond measures for the statewide ballot (e.g. AB 352 (E. Garcia); AB 1298 (Mullin); and SB 45 (Allen)), that include funding at around the \$4 billion level, for purposes that include the funding of zero-and near-zero-emission vehicle technologies and infrastructure. These bills are expected to be consolidated into one primary bond bill in 2020 and represent a potential substantial source of incentive funding to benefit air quality within the South Coast region. South Coast AQMD staff will be working with the California Air Pollution Control Officers Association (CAPCOA) to secure a portion of these bond monies for incentive funding for local air districts, including in the South Coast region, to reduce air pollution and facilitate attainment of federal air quality standards.
3. Voting District Authorization for Clean Air Legislation, SB 732 (Allen):
  - South Coast AQMD is currently sponsoring state legislation, SB 732 (Allen), which seeks authorization from the Legislature to create a voting district in the South Coast region to allow local funding measures to be placed on the ballot. The bill allows the people of the South Coast region to decide for themselves whether they want to invest in clean air and address climate change. Once the bill passes the state legislature and is signed into law, it would allow a sales tax measure to be put on a ballot within the South Coast region, either by voter initiative or by South Coast AQMD Board action.
  - This bill could result in the South Coast region receiving a sustainable source of funding in the amount of about \$1.4 billion per year, to be used primarily for incentive funding for clean vehicles, infrastructure, and equipment to facilitate implementation of the 2016 AQMP and future AQMPs within the South Coast region.

Further, South Coast AQMD will continue working hard to explore all additional options, as needed, to help secure sufficient funding to implement the 2016 AQMP and attain federal air quality standards in the South Coast region.

The anticipated future funding of \$1.4 billion from the Voting District Authorization bill per year is expected to generate 15 tpd of NO<sub>x</sub> reductions in 2023. Using detailed on-road and off-road vehicle populations (including by horsepower bin and model years), vehicle utilization (e.g., miles/year or horsepower-hours/year), and emissions data from CARB's EMFAC and ORION databases, staff calculated the potential emission reductions from future incentive funding programs. Incentive funding levels per vehicle/equipment type and fuel type (e.g., natural gas, electric, etc.) were estimated by analyzing South Coast AQMD's historical and current implementation of funding programs such as Carl Moyer and HVIP. The calculation ranked each vehicle category by cost-effectiveness (dollars per ton of NO<sub>x</sub> reduced in 2023) and

assumed that the entire population of that category would be funded before moving on to the next most cost-effective category, and so on, until total available funding was utilized.

## 5. FEDERAL MEASURES AND FEDERAL RESPONSIBILITY

### a. California Lacks Direct Regulatory Authority Over Significant Sources of Emissions

Emission reductions from mobile sources rely on regulatory actions by CARB, Bureau of Automotive Repair (BAR), and U.S. EPA. California’s authority to regulate mobile sources varies by category and circumstance. Under California law, CARB can set new engine standards for mobile sources, but federal preemptions and practical limitations apply to many diesel engine categories. For example, under the federal Clean Air Act, only U.S. EPA can set new engine standards for interstate trucks, locomotives, airplanes and construction and farm equipment equipped with off-road engines less than 175 horsepower.

In the case of new heavy-duty diesel trucks and other new and in-use off-road engines, CARB may establish emission standards, but must obtain a waiver/authorization from U.S. EPA before it can enforce such regulations. With a waiver to establish its own truck standards, California can achieve reductions from trucks sold within the State. However, the interstate nature of trucking means that many of the trucks operating in the Basin on any given day are not subject to California’s new engine emissions standards. This makes national standards for new trucks operating in California a practical necessity for achieving healthy air for the residents in the Basin. With regard to emissions from shipping, we further recognize that U.S. EPA has the responsibility to represent California’s interests in the international standard setting process for OGVs. In short, California must rely on federal action to set the new technology standards that will accelerate cleanup of legacy diesel fleets.

**Table 5-1**  
Sources under Federal and International Control

<b>New heavy-duty trucks and engines sold outside of California</b>
<b>Locomotives (passenger and freight)</b>
<b>All aircraft engines (U.S. EPA advocates to the International Civil Aviation Organization)</b>
<b>Construction and agricultural equipment under 175 horsepower</b>
<b>Ocean-going vessels (U.S. EPA advocates to the International Maritime Organization)</b>

Given that California is required by federal law to reduce NOx emissions in the Basin to a sufficient level to meet the 80 ppb ozone standard, and that federal sources under federal and international control (OGVs, locomotives, aircraft, interstate trucks and some offroad equipment) are projected to account for over one third of the NOx emissions in the attainment year, it is appropriate and necessary to include measures that get reductions from these sources. In addition, given that the State is pushing the boundaries of technology to develop

measures to reduce emissions from mobile sources under State control, the following federal measures are achievable and necessary to provide the NO<sub>x</sub> reductions from federal and international sources to meet the healthy air goals set by federal law.

**b. NO<sub>x</sub> Emissions from Sources Under Federal Responsibility are an Increasing Portion of the Inventory**

Over the last two decades, despite significant increases in population and vehicles, air quality has improved drastically in the Basin largely due to the implementation of emission control measures by the South Coast AQMD and CARB. As a direct result of California’s programs (including newly identified emission reduction strategies in this contingency measure plan), California is anticipated to slash emissions by 83% for sources under California’s authority between 2002 and 2023. Table 5-2 shows the magnitude of emission reductions that California has achieved since the 2007 AQMP – the first AQMP designed to achieve the 1997 standard. In 2002, the base year of the 2007 AQMP, NO<sub>x</sub> emissions under California’s authority were at 761 tpd. Through rigorous rules and regulations, as well as incentive programs, the emissions were projected to be 172 tpd in 2023. In the 2016 AQMP, CARB and the South Coast AQMD committed to reduce 27 tpd of NO<sub>x</sub> emissions by 2023 through a series of defined measures. In this Contingency Measure Plan, CARB and the South Coast AQMD have identified additional defined measures to reduce NO<sub>x</sub> emissions for at least another 16 tpd by 2023, leaving 129 tpd of NO<sub>x</sub> emissions under California regulated sources in 2023.

**Table 5-2**  
Reductions in NO<sub>x</sub> Emissions for Sources under California’s Authority

	Sources under California’s Authority	Attainment Scenario
<b>2002 NO<sub>x</sub> Emissions</b> (baseline emissions incorporating existing rules and regulations)	761 tpd	761 tpd
<b>2023 NO<sub>x</sub> Emissions</b> (future baseline emissions incorporating existing rules and regulations)	172 tpd	-
<b>2023 Controlled NO<sub>x</sub> Emissions</b> (controlled emissions incorporating existing rules and regulations, aggregate commitments, and identified emission reductions)	129 tpd*	-
<b>2023 Carrying Capacity</b>	-	141 tpd
<b>Percentage Reductions from 2002 to 2023</b>	83%	81%

\* Includes 27 tpd of defined reduction commitments in the 2016 AQMP and 16 tpd of newly identified emissions reductions in the Contingency Measure Plan

As shown above, using its authority, California has been doing its part to protect air quality. In fact, California's NO<sub>x</sub> reductions of 83% has exceeded its fair share for what is needed to meet the carrying capacity (81%, Table 5-2). In contrast, U.S. EPA has not done its part. Due to limited action from U.S. EPA, pollution from sources over which it has been given substantial responsibility — including interstate trucks, aircraft, locomotives, ocean-going vessels, and off-road equipment — had not been reduced to the extent that is needed to reach attainment. Traditionally, NO<sub>x</sub> emissions from sources outside of California's control were a relatively small portion of the total NO<sub>x</sub> inventory in the State. For example, in 2000, emissions from interstate trucks, aircraft, trains, ocean-going vessels, and some off-road engines together made up approximately 20 percent of California's total NO<sub>x</sub> inventory.

As California adopted programs to control NO<sub>x</sub> emissions from sources under State and local air district authority, the share of NO<sub>x</sub> emissions from sources under federal and international control has increased. For example, those same sources – interstate trucks, aircraft, locomotives, OGVs, and some off-road engines – will be responsible for 36 percent of the NO<sub>x</sub> emissions in 2023. While total NO<sub>x</sub> emissions will decrease in the South Coast by almost 50 percent from 2012 levels in 2023, almost all of these reductions are from sources under California regulatory authority. For example, over this time NO<sub>x</sub> emissions from light-duty vehicles will be reduced by over 70 percent. Meanwhile, NO<sub>x</sub> emissions from aircraft, locomotives, and ocean going vessels will grow by almost 10 percent over this same period.

Because out-of-state heavy-duty vehicles operating in the South Coast are a significant part of the fleet, timely federal action to implement a national low-NO<sub>x</sub> performance standard is necessary to achieve an in-use fleet average that provides the emission reductions from heavy-duty trucks needed for ozone attainment. A federal standard would be able to ensure that all trucks traveling within California would eventually be equipped with an engine meeting the lower NO<sub>x</sub> standard, while emission reductions resulting from California-only regulations would come mostly from Class 4-6 vehicles (as most miles traveled by Class 7 and 8 vehicles operating in California were originally purchased outside the State). The preponderance of interstate trucking's contribution to in-state VMT, especially within the heavier truck categories, means that a federal low-NO<sub>x</sub> standard would be substantially more effective at reducing in-state emissions than a California-only standard. Although EPA is currently working on revising the NO<sub>x</sub> emission standards for heavy-duty trucks, it appears that emission reductions will not occur before 2027.

Timely federal action is also needed on locomotives and ocean going vessels. EPA has also been petitioned to act on locomotives but has to date failed to initiate rulemaking. Given the severity of South Coast AQMD's ozone air quality problem, and the level of reductions needed by 2023 to meet the 80 ppb ozone standard, NO<sub>x</sub> reductions from these sources are paramount and necessary to achieve clean air. While federal regulatory actions to achieve the remaining level of



reductions for attainment in 2023 would provide assurance that the reductions are achieved, in lieu of this, significant federal incentive funding could also result in emissions reductions from the federal sources.

### c. Defined Measures to Reduce NO<sub>x</sub> from Federal and International Sources

California has identified the following actions regarding sources under federal and international control that are needed to usher in the cleanest technology and to address these sources' emissions, which are either increasing or not keeping pace with reductions in other sectors in the Basin. These measures represent the transition to cleaner technologies that is needed in all sectors to achieve the goals set forth in this document and to achieve air quality standards in the future. The emissions reductions from these measures represent complete transitions of these fleets and the maximum potential reductions from these sources. Thus, they may achieve more reductions than necessary to meet the standard if every single measure were implemented to the maximum extent. In any case, some combination of these federal measures are necessary, through regulations, incentives or other means, for California to achieve the final increment of emissions reductions needed to meet the 1997 ozone standard. These measures and the extent of the NO<sub>x</sub> emissions reductions that can be achieved from them are summarized in the Table 5-3. More developed measures follow in the next section. While the first federal measure addressing heavy duty diesel trucks is reliant on U.S. EPA adopting a low-NO<sub>x</sub> truck standard for all new trucks, each of the federal measures described below includes turnover of existing fleet to the cleanest technology. The accelerated penetration of the clean technology into the fleet could be implemented via regulation, incentives, voluntary agreements, or a combination of these approaches. We estimate that it could cost ~~approximately at least~~ at least \$6 billion to achieve emission reductions from sources under federal authority / responsibility as described below.

**Table 5-3**  
Potential Federal Measures

Measures	Measure Description	2023 NO <sub>x</sub> Reductions (tpd)
<b>Low-NO<sub>x</sub> Heavy-Duty Vehicles</b>	Heavy-duty vehicles (above 14,000 lbs. GVWR) powered by low-NO <sub>x</sub> standard in 2023	Up to 35
<b>Low-NO<sub>x</sub> Ocean-Going Vessels</b>	Ocean-going vessels coming to California powered by Tier 3 engines in 2023	Up to 28
<b>Low-NO<sub>x</sub> Locomotives</b>	Locomotives coming to California powered by Tier 4 engines in 2023	Up to 11
<b>Low-NO<sub>x</sub> Aircraft</b>	Aircraft NO <sub>x</sub> reductions assumption of 20% if emissions are held at 2012 levels.	Up to 4
Total Reductions		<b>Up to 78</b>

## **i. Accelerate Implementation of Federal Low-NOx Heavy-Duty Truck Standard**

### *Description of Source Category*

This measure addresses low-NOx engines for onroad heavy-duty engines used in class 4 through 8 medium-and heavy-duty trucks. Most of the NOx emissions from heavy-duty engines come from diesel engines, especially in the higher weight classes. Gasoline and natural gas Otto cycle spark-ignited engines are also used in heavy-duty trucks, to a lesser extent, and primarily in the lower weight classification vehicles. Medium and heavy-duty trucks are currently the fastest growing transportation sector in the United States, and are responsible for 25 percent of South Coast's NOx emissions.

### *Background / Regulatory History*

California is the only state with the authority to adopt and enforce emission standards for new motor vehicle engines that differ from the federal emission standards. Since 1990, heavy-duty engine NOx emission standards have become dramatically more stringent, dropping from 6 grams per brake horsepower-hour (g/bhp-hr) in 1990 down to the current 0.2 g/bhp-hr standard, which took effect in 2010. Starting in 2015 in California, engine manufacturers could certify to three optional NOx emission standards of 0.1 g/bhp-hr, 0.05 g/bhp-hr, and 0.02 g/bhp-hr (i.e., 50 percent, 75 percent, and 90 percent lower than the current mandatory standard of 0.2 g/bhp-hr). The optional California standards allowed local air districts and CARB to preferentially provide incentive funding to buyers of cleaner trucks, which encouraged the development of cleaner engines. While California has the authority to regulate the engine standards for trucks sold in California, about 60 percent of total heavy-duty vehicle miles traveled in the South Coast on any given day are by trucks that were purchased outside of California. For this reason, it is critical that U.S. EPA establish a new national low-NOx standard for heavy-duty trucks. In response to petitions for a low-NOx rulemaking from over 20 organizations including state and local air agencies from across the country, on November 13, 2018, U.S. EPA announced the "Cleaner Truck Initiative" to develop regulations to further reduce NOx emissions from on-road heavy-duty trucks and engines. However, it is not clear whether the proposed rulemaking will result in early reductions.

### *Proposed Actions*

With a federal low-NOx standard for all new heavy-duty trucks sold nationwide proposed to begin in 2024, all trucks traveling within California would eventually be equipped with an engine meeting the low-NOx standard. However, to meet the 2023 ozone standard, all heavy-duty trucks above 14,000 lbs. operating in the Basin must have low NOx engines by 2023. U.S. EPA would thus need to adopt the low-NOx standard to be in effect in 2022 and develop a

strategy, through incentives or other actions, to turn over the fleet of vehicles registered outside of California and operating in the Basin ahead of the mandated standard.

**Possible Emission Reductions: Up to 35.7 tpd of NO<sub>x</sub>**

## ii. Accelerate Implementation of Tier 3 Ocean Going Vessels

### *Description of Source Category*

OGVs are large vessels designed for deep water navigation and include large cargo vessels such as container vessels, tankers, bulk carriers, and car carriers, as well as passenger cruise vessels. These vessels transport containerized cargo; bulk items such as vehicles, cement, and coke; liquids such as oil and petrochemicals; and passengers. OGVs travel internationally and may be registered by the U.S. Coast Guard (U.S. flagged), or under the flag of another country (foreign-flagged). The majority of vessels that visit California ports are foreign-flagged vessels.

### *Background/Regulatory History*

While OGVs are a large contributor of NO<sub>x</sub> in the South Coast, both South Coast AQMD and the State have little authority to regulate this source. Regulation of these emissions is under the authority of the International Maritime Organization (IMO). The IMO Annex VI (“Regulations for the Prevention of Air Pollution from Ocean-going ships”) specifies new engine NO<sub>x</sub> standards and sets fuel sulfur limits. Tier 2 IMO NO<sub>x</sub> standards have applied to new vessels since 2011, and in 2016, Tier 3 NO<sub>x</sub> standards applied within NO<sub>x</sub> Emission Control Areas (ECAs) such as the North American ECA. Unfortunately, under current conditions, Tier 3 marine engines are not expected to infiltrate the South Coast ports in significant number until 2030 to 2040.<sup>10</sup> This delayed arrival is a result of 1) few Tier III vessels being in service as OGV fleets turn over slowly, and 2) shipping companies generally assigning the new OGVs to the Asia to Europe routes instead of trans-Pacific routes. The delay in the production of Tier III OGVs are also caused by a significant increase in keels laid prior to Tier III standard deadline, allowing for “new” vessels to be constructed to Tier II standards.

### *Proposed Actions*

U.S. EPA would advocate with international partners for the IMO to require extensive deployment of OGVs meeting Tier 3 NO<sub>x</sub> standards operating in the waters off the South Coast Air Basin by 2023. The measure could be implemented via regulation, incentives, voluntary agreements, or a combination of these approaches.

### **Possible Emission Reductions: Up to 28.2 tpd of NO<sub>x</sub>**

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<sup>10</sup> Mercator International LLC, San Pedro Bay Long-term Unconstrained Cargo Forecast, July 12, 2016

### iii. Accelerate Implementation of Tier 4 In-Use Locomotives

#### *Description of Source Category*

There are three major categories of freight locomotives that BNSF and Union Pacific operate both nationally and in California. The first category is interstate line haul locomotives, which are primarily approximately 4,400 horsepower. The second category is made up of medium-horsepower (MHP) locomotives, as defined by CARB staff as typically between 2,301 and 3,999 horsepower. MHP locomotives are typically older line haul locomotives that have cascaded down from interstate service. And lastly, there are switch (yard) locomotives, specifically defined by U.S. EPA as between 1,006 and 2,300 horsepower.

Locomotives operating at railyards and traveling through California are a significant source of emissions of NO<sub>x</sub>, diesel PM, and GHGs. In addition, these emissions often occur in or near densely populated areas and neighborhoods, exposing residents to unhealthy levels of pollutants. The long useful life of locomotive engines means that natural turnover of engines to cleaner technology can take decades.

#### *Background/Regulatory History*

In 1998, U.S. EPA approved the initial set of national locomotive emission regulations. These regulations primarily emphasized NO<sub>x</sub> reductions through Tier 0, 1, and 2 emission standards. Tier 2 NO<sub>x</sub> emission standards reduced older uncontrolled locomotive NO<sub>x</sub> emissions by up to 60 percent (i.e., from 13.2 to 5.5 g/bhp-hr). CARB, along with the California Railroads and the U.S. EPA, signed a MOU in July 1998 that included provisions for early introduction of clean units, with requirements for a fleet average in the South Coast equivalent to U.S. EPA's Tier 2 locomotive standard by 2010.

In 2008, U.S. EPA approved a second set of national locomotive regulations. New, and older locomotives upon remanufacture, were required to meet more stringent particulate matter (PM) and NO<sub>x</sub> emissions standards. Both new Tier 3 and the remanufactured “Plus” standards result in 50 percent or more reductions in PM than the original Tier 0-2 PM emission standards. These standards also provided a small NO<sub>x</sub> benefit.

The 2008 regulations also included new Tier 4 (2015 and later model years) locomotive NO<sub>x</sub> and PM emissions standards. The U.S. EPA Tier 4 NO<sub>x</sub> and PM emissions standards further reduced emissions by approximately 95 percent from uncontrolled levels.

For the 2007 California State Strategy, CARB proposed a measure requesting U.S. EPA to replace existing locomotive engines with Tier 4 engines beginning in 2012 and conducting concurrent rebuilds of older engines to Tier 2.5 standards. CARB estimated

that by 2023, the measure would reduce NO<sub>x</sub> by 70 percent from the locomotive fleet in the South Coast. Although U.S. EPA has failed to initiate such action, this measure demonstrates the need for U.S. EPA to act on replacing locomotives in the Basin with Tier 4 locomotives.

Even with U.S. EPA setting the Tier 4 Standard, there have been a minimal number of Tier 4 locomotives visiting the South Coast. In 2017, CARB petitioned U.S. EPA to exercise its authority to adopt more stringent emission standards for locomotives to lower emissions of toxic and criteria air pollutants beyond Tier 4 levels. CARB requested promulgation of updated emission standards, including standards for newly manufactured locomotives and standards for emissions upon remanufacture. To date, U.S. EPA has failed to initiate such action. U.S. EPA rulemaking to tighten the national locomotive emission standards beyond the current Tier 4 requirements is the most efficient and cost-effective path. Such U.S. EPA action would not only support attainment of the 80 ppb ozone standard in the Basin but also local environmental justice initiatives in rail-impacted communities.

### *Proposed Actions*

U.S. EPA would accelerate the turnover or repower of in-use locomotives in the South Coast to achieve extensive deployment of Tier 4 or better emission levels by 2023. This strategy may be executed through a regulation, incentives or other approaches to increase the turnover rate of in-use interstate, regional and switch locomotives to lower NO<sub>x</sub> emission locomotives that meet Tier 4 or better emission levels.

**Possible Emission Reductions: Up to 11.2 tpd of NO<sub>x</sub>**

#### iv. Low-NO<sub>x</sub> Aircraft

##### *Description of Source Category*

There are five commercial airports in the South Coast. NO<sub>x</sub> emissions from aircraft has grown dramatically over the past 20 years. In 2000, aircraft only contributed a little more than 1 percent of the mobile NO<sub>x</sub> emissions in the Basin. By 2023, NO<sub>x</sub> emissions from aircraft are projected to be responsible for 8 percent of the NO<sub>x</sub> emissions in the Basin. And while total mobile NO<sub>x</sub> emissions will be reduced in the South Coast by close to 80 percent of 2000 NO<sub>x</sub> values in 2023, aircraft NO<sub>x</sub> emissions will increase by almost 60 percent in that time period.

##### *Background / Regulatory History*

In 2012, U.S. EPA adopted emission standards for aircraft gas turbine engines with rated thrusts greater than 26.7 kilonewtons, primarily used on commercial passenger and freight aircraft. The requirements were previously adopted by the International Civil Aviation Organization (ICAO) and included two new tiers of more stringent emission standards for nitrogen oxides (NO<sub>x</sub>). These are referred to as Tier 6 standards and Tier 8 standards. The Tier 8 standards apply to engines in the United States for which the first individual production model is manufactured after December 31, 2013. Overall, Tier 8 represents an approximate 15 percent reduction in NO<sub>x</sub> emissions from Tier 6.

##### *Proposed Actions*

U.S. EPA would require engines in aircraft visiting airports in the Basin to substantially lower their NO<sub>x</sub> emissions.

**Possible Emission Reductions:** Initial reductions are based on a range of reductions from a no growth assumption from 2012 to an assumption that Aircraft NO<sub>x</sub> reductions can be in line with other Heavy-duty transportation sources, i.e. Heavy Duty Diesel Vehicles, locomotives, and OGVs. If emissions are held at 2012 levels, 3.52 tpd of NO<sub>x</sub> reductions can be achieved in 2023, and if emissions are reduced by 63%, 10.9 tpd reductions of NO<sub>x</sub> can be achieved in 2023. This strategy may be executed through a regulation, incentives or other approaches.

## 6. CALIFORNIA ENVIRONMENTAL QUALITY ACT

South Coast AQMD, as Lead Agency, has reviewed the project pursuant to the California Environmental Quality Act (CEQA) and has determined that the proposed Contingency Measure Plan is considered a later activity within the scope of the project covered by the March 2017 Final Program Environmental Impact Report (PEIR) for the 2016 Air Quality Management Plan (AQMP) because no substantial changes or revisions to the project are necessary and no new significant environmental effects and no substantial increase in the severity of previously identified significant effects will occur as result of this later activity. As such, in accordance with CEQA Guidelines Section 15168(e)(2), the March 2017 Final PEIR for the 2016 AQMP adequately describes and analyzes the environmental effects of the project for the purposes of CEQA. Thus, no new environmental document is required pursuant to CEQA Guidelines Section 15168(c) and no subsequent CEQA document is required pursuant to CEQA Guidelines Section 15162.

Mitigation measures were included in the March 2017 Final PEIR and were made a condition of approval of the 2016 AQMP. A Mitigation, Monitoring, and Reporting Plan, pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, was required and adopted for the 2016 AQMP. No new or modified mitigation measures will be made as a condition of the approval of this later activity. However, the mitigation measures that were made a condition of approval of the 2016 AQMP as analyzed in the March 2017 Final PEIR and the corresponding Mitigation, Monitoring, and Reporting Plan that was adopted at that time will remain in effect. In addition, Findings pursuant to CEQA Guidelines Section 15091 and a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 which were required and adopted for the 2016 AQMP, will remain in effect.

The March 2017 Final PEIR for the 2016 AQMP and supporting documentation for the record of project approval, including Findings, the Statement of Overriding Considerations, and the Mitigation, Monitoring, and Reporting Plan, may be examined at:

<http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2017/2017-mar3-035.pdf>  
or South Coast AQMD, 21865 Copley Drive, Diamond Bar, CA 91765.



## **7. SOCIOECONOMIC ANALYSIS**

A socioeconomic assessment is not required under Health & Safety Code section 40440.8(a) which applies to rules. Also, the impacts from the Contingency Measure Plan fall within the scope of the Socioeconomic Report for the 2016 AQMP.

## **8. PUBLIC PROCESS**

Development of the Draft Contingency Measures Plan was conducted through a public process. South Coast AQMD staff held a Public Workshop at South Coast AQMD Headquarters in Diamond Bar on October 18, 2019, to solicit information, comments, and suggestions from the public, affected businesses and stakeholders. Furthermore, the 2022 AQMP Advisory Group provided feedback and recommendations on the draft Contingency Measure Plan. The Advisory Group represents a diverse cross section of stakeholders such as large and small businesses, government agencies, environmental and community groups, and academia. The Draft Contingency Measure Plan was presented to the AQMP Advisory Group on October 9, 2019 and to the Mobile Source Committee on October 18, 2019. The Draft Final Contingency Measure Plan incorporating the public comments will be presented to the AQMP Advisory Group and the Mobile Source Committee on November 21, 2019 and November 15, 2019 respectively. A Public hearing will also be held at the South Coast AQMD Headquarters on December 6, 2019. Following the South Coast AQMD Governing Board approval, the Draft Contingency Measure Plan will be submitted to CARB. CARB will consider adoption of the Contingency Measure Plan at its December 12 -13, 2019 Board hearing in Sacramento. If adopted, CARB staff will submit the Contingency Measure Plan to U.S. EPA for inclusion into the SIP.

## 9. RESPONSE TO COMMENTS

**From:** Alyssa Beltran [<mailto:ABeltran@ph.lacounty.gov>]  
**Sent:** Tuesday, October 29, 2019 4:42 PM  
**To:** AQMPTeam <[AQMPTeam@aqmd.gov](mailto:AQMPTeam@aqmd.gov)>  
**Cc:** Katie Butler <[KButler@ph.lacounty.gov](mailto:KButler@ph.lacounty.gov)>; Charlene Contreras <[chcontreras@ph.lacounty.gov](mailto:chcontreras@ph.lacounty.gov)>; Janet Scully <[jscully@ph.lacounty.gov](mailto:jscully@ph.lacounty.gov)>; Cyrus Rangan <[crangan@ph.lacounty.gov](mailto:crangan@ph.lacounty.gov)>  
**Subject:** LAC DPH Comments on Draft Contingency Measure Plan for the 1997 Ozone Standard

Hello SCAQMD,

As a member of the 2022 AQMP Advisory Group, Los Angeles County Department of Public Health (Public Health) is providing comments on the Draft Contingency Measure Plan for the 1997 Ozone Standard. Public Health recommendations are listed below for consideration.

1. **Land Use:**
  - A. Proposed and existing land use improvements (i.e. I-5 & proposed I-710 expansions) could impact nitrogen oxides (NOx) & ozone emissions in the South Coast Air Basin (Basin). As designed, these improvements could increase traffic speeds which in general would decrease vehicle emissions in the affected areas. Other improvements which may result in emissions reductions involve adjoining streets to improve traffic flow, adding special lanes for freight vehicles, etc. Will the Draft Contingency Measure Plan address and quantify anticipated emissions reductions in NOx and ozone as a result of land use changes? 1-1
  - B. The Sacramento Metropolitan Air Quality Management District has a guide (updated in 2016) for California Environmental Quality Act (CEQA) practitioners that provides easily accessible tools to quickly identify and analyze proposed development projects that may have a significant adverse effect on local air quality. Public Health urges South Coast to consider their role in the CEQA process and the ways in which the Draft Contingency Measure Plan can account for identified emissions increases or reductions in NOx and ozone due to development projects. 1-2
2. **Climate Change:**
  - A. It is noted that "South Coast AQMD is currently conducting a study to analyze meteorological factors and trends to explain the poor air quality observed in the recent years despite continuing and demonstrable reductions in emissions". The effects of climate change will impact the trajectory for attainment of the 1997 8-Hour Ozone standard and subsequent standards. Public Health agrees that this study is necessary to inform our understanding of future climate-related increases in NOx and ozone emissions in the Basin. The estimation of anticipated emissions reductions from future advanced technologies must account for potential climate-related increases in NOx and ozone. 1-3
3. **Hot Spots:**
  - A. Several environmental justice/health equity-related resources have been published since the 2016 Air Quality Management Plan. These include, but are not limited to, the Office of Environmental Health Hazard Assessment's CalEnviroScreen 3.0 and the Los Angeles County's Environmental Justice Screening Method tool. Public Health recommends South Coast to consider these resources as a means of identifying hot spots in the Basin. Similar to what is being done through AB617, South Coast can tailor emissions reductions strategies in heavily burdened communities where significant improvements in air quality (and health) can be achieved. 1-4

Kindly confirm receipt of comments.

Regards,  
Alyssa

**Alyssa Beltran, MPH**  
 Environmental Scientist  
 Toxicology and Environmental Assessment Branch  
 Los Angeles County Department of Public Health

### Response to Comment 1-1

The Contingency Measure Plan has been prepared to address the contingency measure requirements of Clean Air Act (CAA) section 182(e)(5) for the 1997 8-hour ozone NAAQS for the Basin. The goal of this Plan is to provide the emissions reductions needed to achieve the 108 tpd of NOx reductions allocated to section 182(e)(5) measures. Land use improvements are an integral part of air quality planning and future improvements would be considered in the development of the next Air Quality Management Plan to the extent that they are included in SCAG's 2020 Regional Transportation Plan.

### Response to Comment 1-2

The comment refers to the Guide to Air Quality Assessment in Sacramento County that was developed by Sacramento Metropolitan Air Quality Management District. It is important to note

that this guide is intended for land use projects within Sacramento County<sup>11</sup>. The South Coast AQMD has a similar document plus other online reference materials and guidance for evaluating land use projects under CEQA within South Coast AQMD's jurisdiction. CEQA practitioners are recommended to visit South Coast AQMD's CEQA webpage at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

The proposed project is located within South Coast AQMD's jurisdiction, and not within Sacramento County. Thus, the Guide to Air Quality Assessment in Sacramento County is not applicable to the proposed project. As explained in Chapter 6 of this staff report, South Coast AQMD, as lead agency, considered CEQA and evaluated the proposed project accordingly. South Coast AQMD staff determined that the proposed Contingency Measure Plan is considered a later activity within the scope of the project previously evaluated in the March 2017 Final Program Environmental Impact Report (PEIR) for the 2016 Air Quality Management Plan (AQMP) such that no new environmental document would be required pursuant to CEQA Guidelines Section 15168(c) and no subsequent CEQA document would be required pursuant to CEQA Guidelines Section 15162.

#### Response to Comment 1-3

Thank you for the comments in regards to the on-going study being funded by the South Coast AQMD to analyze meteorological factors and trends in the recent years. Persistent episodes of high ozone and PM2.5 concentrations, coupled with more frequent and record-breaking high temperatures in recent years, raise the question as to whether the regional climate in the SCAB is changing in such a manner that weather conditions leading to poor air quality will become more frequent in the future. Understanding the meteorological factors that contributed to the recent higher ozone events and comparing recent weather trends with predicted global climate change scenarios can assist in answering this important question, and informing the development of more effective strategies for improving air quality and protecting public health. The study is currently underway and is anticipated to be completed in fall 2020. The study results will be available to the public and will be considered in the development of the next Air Quality Management Plan.

#### Response to Comment 1-4

South Coast AQMD staff appreciates the concerns raised on environmental justice and health equity resources ensuring priority for reducing emissions in environmental justice areas and staff agrees that environmental justice communities should continue to be a priority. South Coast AQMD will continue to use the best available tools to identify environmental justice areas and disadvantaged communities as part of air quality planning and through implementation of AB617

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<sup>11</sup> Sacramento Metropolitan Air Quality Management District, Guide to Air Quality Assessment in Sacramento County, <http://www.airquality.org/businesses/ceqa-land-use-planning/ceqa-guidance-tools>; accessed November 1, 2019.

and other programs, prioritize these communities in emission reductions strategies and incentive programs.



November 1, 2019

Britney C. Gallivan  
Air Quality Specialist  
South Coast AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

**Re: Draft Contingency Measure for the 1997 Ozone Standard**

Dear Ms. Gallivan:

On behalf of Earthjustice and Sierra Club, I submit comments on the Draft Contingency Measure Plan for the 1997 Ozone Standard. Overall, the need for this plan to achieve such a significant amount of pollution reductions at the back end of a 20-year ozone planning horizon confirms the warnings several organizations put into comments on the 2007 AQMP that the use of section 182(e)(5) "black box" measures provide breathers in the region an unfavorable tradeoff. Even worse, many of the emissions reductions promised by 2023 have never actually materialized meaning we will continue to breathe air that does not even meet the standard determined clean two cycles ago. The contingency measure plan needs additional measures to achieve the significant gap in attainment through a robust set of regulatory and other enforceable strategies. The following recommendations provide additional areas where emissions reductions are needed when our region fails to meet the 1997 ozone standard.

*Residential Fuel Combustion*

The contingency measure plan should have additional commitments to achieve emissions reductions from regulatory measures aimed at reducing and/or eliminating emissions from residential fuel combustion. In the 2023 and 2031 summer planning NOx inventories, residential fuel combustion amounts to 9 tons per day ("tpd") of NOx emissions. CMB-02 from the 2016 AQMP is only designed to achieve 1.1 tpd and 2.8 tpd of NOx reductions by 2023 and 2031 respectively. This leaves ample room for a commitment to tighten emissions standards for a range of appliances, including water heaters, stoves, dryers, pool heaters, and other equipment. In addition to inclusion of this type of commitment in the contingency measure plan, the South Coast AQMD should immediately begin a regulatory process to tighten emissions standards for the appliances that are the biggest culprits in this significant amount of NOx emissions from the residential fuel combustion sector. Finally, the plan needs to include a provision that all new development should not include combustion appliances because we need to start thinking about how do we make sure we are not making our air pollution problems worse as new development occurs.

} 2-1

*NOx RECLAIM*

Initially, we appreciate the South Coast AQMD staff's significant efforts to dismantle the utterly broken NOx RECLAIM program. We are encouraged by the inclusion of additional emissions reductions in this contingency measure plan, but we encourage the South Coast AQMD to achieve even more emissions reductions. The California Supreme Court has been clear that Best Available Retrofit Control Technology can be technology forcing. Despite this direction, much of the current conversion to command and control in the NOx RECLAIM program simply amounts to requirements for installing already existing and available technologies. The contingency measure plan should include additional emissions reduction measures centered around forcing the next generation of cleaner and even zero-emissions technologies at NOx RECLAIM facilities.

2-2

*Transportation Planning*

The current plan is lacking in real commitments to achieve reductions in NOx emissions from our transportation system. The plan should commit to more measures to achieve two goals: 1) reduction in Vehicle Miles Traveled ("VMT") and 2) advancing zero-emission transportation infrastructure. Because our transportation plan for decades has assumed we will close the black box, we have built a transportation system untethered from the reality of how we need to put our transportation dollars to work in solving our air pollution crisis. As such, we recommend including a measure to reduce the NOx Motor Vehicle Emissions Budgets if we fail to attain the 1997 ozone standard by 20% or more. By reducing the NOx budget, the Southern California Association of Governments ("SCAG") would need to produce a plan more reflective of the reality that we cannot continue to build a transportation system that makes solving our air pollution crisis more difficult.

2-3

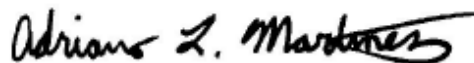
*Transportation Control Measures (TCMs)*

The plan should include a commitment to adopt additional TCMs. In particular, the South Coast should use its authority under section 182(e)(4) of the Clean Air Act that allows TCMs "applicable during heavy traffic hours to reduce the use of high polluting vehicles or heavy-duty vehicles, notwithstanding any other provision of law." Other TCMs should be included to provide additional benefits and perks to use zero-emissions equipment in freight impacted communities.

2-4

We appreciate your consideration of these comments, and we look forward to working with the South Coast AQMD to actually meet an ozone standard.

Sincerely,



Adriano L. Martinez  
Earthjustice

Response to Comment 2-1

Staff agrees that reducing, managing, and changing the way energy is used in the residential sectors can provide additional NO<sub>x</sub> emission reductions, and will continue to seek those opportunities. With the understanding of the potential emission reductions from the residential and commercial sector, the 2016 AQMP includes control measures for the applications of zero or near-zero NO<sub>x</sub> emissions appliances in the residential and commercial sectors (CMB-02), additional enhancements in reducing energy use in existing residential buildings (ECC-03), and co-benefits from existing residential and commercial building energy efficiency mandates (ECC-02). CARB is also accounting for the co-benefits for measures associated with the 2017 Climate Change Scoping Plan, which include measures pertaining to appliance technology substitution; electricity demand reduction, and improving electrical efficiency in industry, agriculture, residential, and commercial lighting; and residential air conditioning, freezing, and refrigeration. South Coast AQMD will continue to evaluate opportunities for additional feasible NO<sub>x</sub> reductions in existing and new residential and commercial buildings, including potential rulemaking in the 2020-2022 timeframe. Any potential surplus reductions achieved beyond the South Coast AQMD's aggregate reduction commitments in 2023 can be applied toward the reductions claimed under section 182(e)(5) measures and attainment in 2023.

Response to Comment 2-2

The adoption resolution for the 2016 AQMP directed staff to achieve five tpd of NO<sub>x</sub> emission reductions as soon as feasible but no later than 2025, and to transition the RECLAIM program to a command-and-control regulatory structure requiring BARCT as soon as practicable (CMB-05). Given the progress made in the NO<sub>x</sub> RECLAIM transition, it is anticipated that a portion of the emission reductions from CMB-05 could be achieved earlier (by 2023). Therefore, in this Contingency Measure Plan, 2 out of the 5 tpd of NO<sub>x</sub> emission reductions from CMB-05 are allocated as part of the South Coast AQMD Identified Emission Reduction Strategies towards section 182(e)(5) commitments.

As facilities transition out of NO<sub>x</sub> RECLAIM, a command-and-control rule that includes NO<sub>x</sub> emission standards reflecting BARCT is needed for all equipment categories. The BARCT assessment consists of a multi-step analysis, including technology assessments where staff reviews current South Coast AQMD regulatory requirements, surveys other air districts and agencies outside of the South Coast AQMD's jurisdiction to identify emission limits that exist for similar equipment, and identifies and assesses pollution control technologies to determine what degree of reduction could be achievable for the affected sources. Based on the collected information, initial BARCT emission limits are established. Once the initial BARCT emission limits are determined, a cost-effectiveness analysis is conducted. The BARCT assessment, as part of each rule development process, is conducted through a public process which takes into account comments, concerns and input from a cross section of stakeholders including representatives from affected businesses, environmental groups, public agencies, consultants, and other interested parties. Thus, BARCT is implemented as the RECLAIM program is



transitioned into a command-and-control regulatory structure. Staff will continue to evaluate BARCT periodically for equipment categories to assess technological changes that may reflect lower emission limits.

Response to Comment 2-3

Section 40717 of the Health and Safety Code establishes a process for air district involvement in developing transportation control measures and the emission reduction goals for the Regional Transportation Plan. Currently, the 2016 AQMP reflects the emission benefits associated with SCAG's Final 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Section 176(c) of the CAA establishes transportation conformity requirements to ensure that transportation activities do not interfere with attaining and maintaining air quality standards. Motor vehicle emissions budgets are the mechanism for ensuring that transportation planning activities conform to the SIP. The long-term transportation planning requirements for emission reductions from onroad mobile sources within the Basin are met by SCAG's Regional Transportation Plan (RTP), which is developed every four years with a 20-year planning horizon.

In this Contingency Measure Plan, CARB is committing to achieve 3 tpd of NO<sub>x</sub> reductions as part of the Innovative New Measures, which also includes measures for reduction in growth of single-occupancy vehicle travel, VMT and land conservation, and regional VMT reductions (more details in Section 3c). Emission reductions from these measures will be applied toward the 182(e)(5) commitment. Staff agrees that there could be additional opportunities for emission reductions transportation; however, we note that the NO<sub>x</sub> emission benefits from VMT reduction strategies are likely modest. Staff will work with SCAG and other stakeholders on the next RTP to evaluate future potential emission reduction opportunities for VMT reductions and advancement of cleaner transportation options for inclusion into the 2022 AQMP, and reflection in the transportation conformity emissions budgets for future years. Staff welcomes input from stakeholders concerning what methods may be used to reduce VMT, as well as additional efforts to reduce vehicle emissions, and thus allow the implementation of lower transportation conformity budgets in the future.

Response to Comment 2-4

The commenters request that the South Coast AQMD staff propose transportation control measures as authorized by Section 182(e)(4) of the CAA [42 U.S.C. Section 7511a(e)(4)], which provides that an extreme area's state implementation plan "may contain provisions establishing traffic control measures applicable during heavy traffic hours to reduce the use of high-polluting vehicles or heavy duty vehicles, notwithstanding any other provision of law." In the early 1990's, South Coast AQMD staff worked on developing such a measure to apply to heavy-duty trucks. However, Section 246(h) of the CAA [42 U.S.C. Section 7586(h)] appears to limit Section 182(e)(4), by providing that "The Administrator shall by rule, within 1 year after November 15, 1990, ensure that transportation control measures including time-of-day or day-of-week restrictions, and other similar measures that restrict vehicle usage, do not apply to any clean-fuel vehicle that meets the requirement of this section. This subsection shall apply notwithstanding subchapter 1 of this chapter." The section allowing extreme areas to implement time-of-day restrictions for heavy-duty vehicles is included in subchapter 1. Therefore, even though Section 182(e)(4) states that it applies "notwithstanding any other provision of law," that section is in reality limited by Section 246(h).

EPA actually issued its regulation exempting clean fuel heavy-duty vehicles from time-of-day transportation control measures on March 1, 1993. 58 Fed. Reg. 11888, “Clean Fuel Fleet Credit Programs, Transportation Control Measure Exemptions, and Related Provisions.” EPA explained that “eligible clean-fuel fleet vehicles would be exempt from measures which forbid vehicle transit only during certain hours of the day, days of the week, days of the month, or during other defined periods of time...” 58 Fed. Reg. 11888, 11895 col. 3. Thus, eligible clean fuel vehicles would be exempt from any measure in an extreme area that limits vehicle travel based on time of day, such as that referred to in Section 182(e)(4). *Id.* EPA proposed its standards for clean fuel heavy-duty vehicles on June 10, 1993, at 3.5 g/bhp/hr NO<sub>x</sub>. 58 Fed. Reg. 32474, 32489 c. 3. EPA finalized its clean fuel fleet standard for heavy-duty vehicles at 3.8 g/bhp/hr for Federal fuel and 3.5 g/bhp/hr for California fuel. 40 C.F.R. Section 88.105-94. Currently, heavy-duty diesel fleets are phasing in the 2010 model year standard, which requires a maximum of 0.2 bhp/hr NO<sub>x</sub>. The Federal 2010 standard is the same. [Transportpolicy.net/standard/California-heavy-duty-emissions](http://Transportpolicy.net/standard/California-heavy-duty-emissions). Thus it is highly likely that any truck operating in the South Coast region today will meet or exceed the outdated “clean fuel” standard and thus be exempt from time-of-day transportation controls.

In any event, staff is uncertain about the possible emissions benefit to be derived from time-of-day limits on heavy-duty-trucks, which appear to be shifting as much of their travel as possible to off-peak hours already. Any such program would not eliminate emissions, but primarily move them to a different time of day, so that the only real emission benefit would be from reduced congestion.



# **Contingency Measure Plan for the 1997 8-Hour Ozone Standard in the South Coast Air Basin**

**Governing Board Meeting  
December 6, 2019**

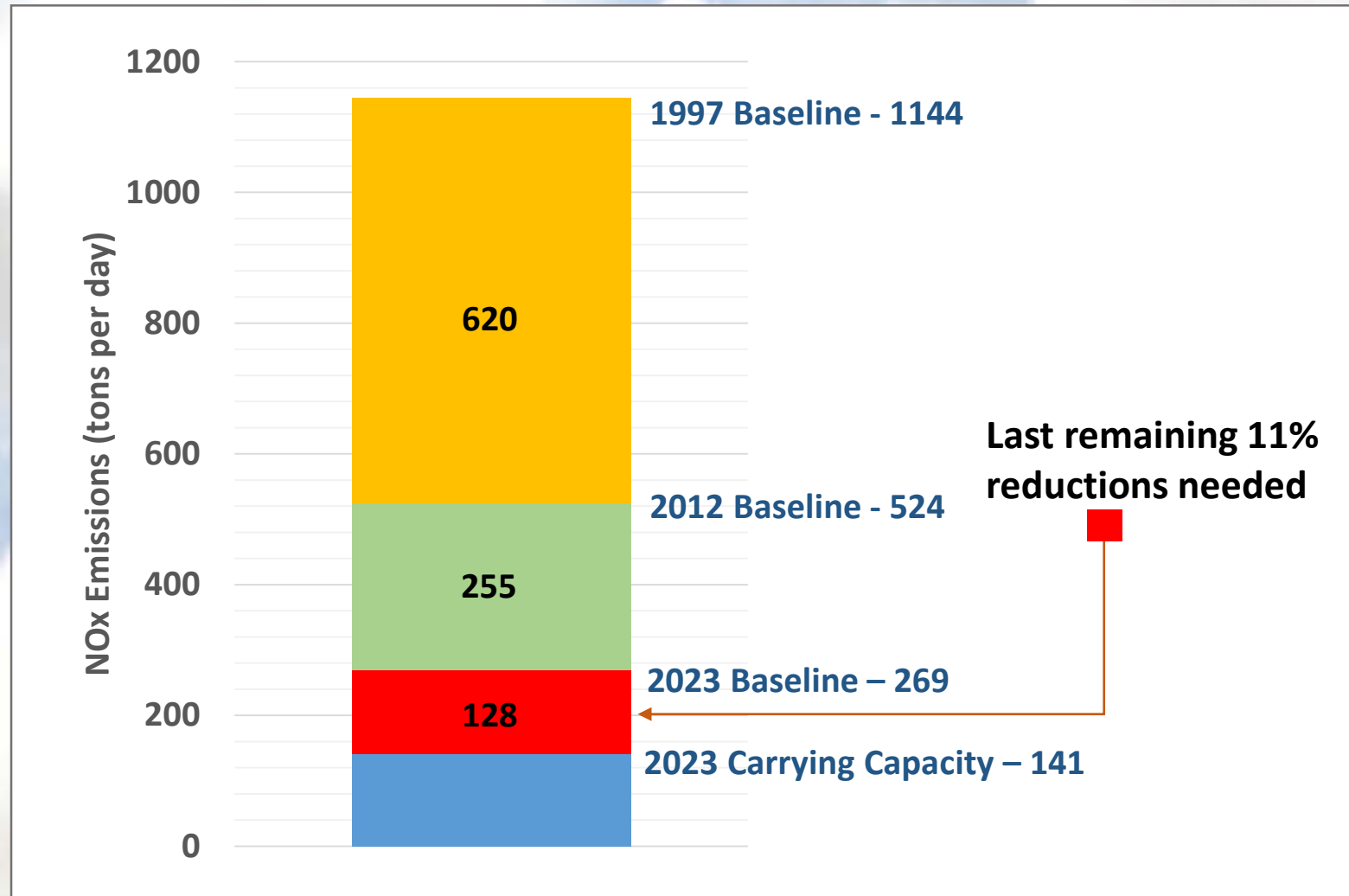


# 1997 8-hour Ozone Standard - Background

**South Coast Air Basin – Extreme nonattainment area with an attainment date of June 15, 2024**

- **2007 AQMP - Initial submission of State Implementation Plan (SIP)**
- **2016 AQMP Control Strategy Update**
  - **Defined measures**
  - **Further Deployment of Cleaner Technologies measures**
    - **Approved by U.S. EPA under section 182(e)(5) (i.e. black box)**
- **Contingency measures required for section 182(e)(5) reductions three years prior to implementation of plan provisions (i.e., 2023 attainment date)**
- **Draft Final Contingency Measure Plan prepared by South Coast AQMD and CARB**

# Progress in Overall NOx Reductions Since 1997





# 2016 AQMP - Overall Control Strategy (NOx)

Sources	NOx (tpd)
<b>Year 2023 Baseline<sup>1</sup></b>	<b>269</b>
<b>Carrying Capacity</b>	<b>141</b>
<b>Total Emission Reductions (All Measures):</b>	<b>135</b>
Defined Measures:	27
South Coast AQMD Stationary Source Control Measures	7
South Coast AQMD Additional Mobile Source Control Measures	16
CARB Defined Measures	4
Further Deployment of Cleaner Technologies	108
<b>Set Aside Budget<sup>2</sup></b>	<b>3</b>
<b>2023 Remaining Emissions</b>	<b>137<sup>3</sup></b>

<sup>1</sup> Reflects CARB's 2018 Updates to the California State Implementation Plan

<sup>2</sup> As SIP reserve for potential technology assessment and for general conformity purposes

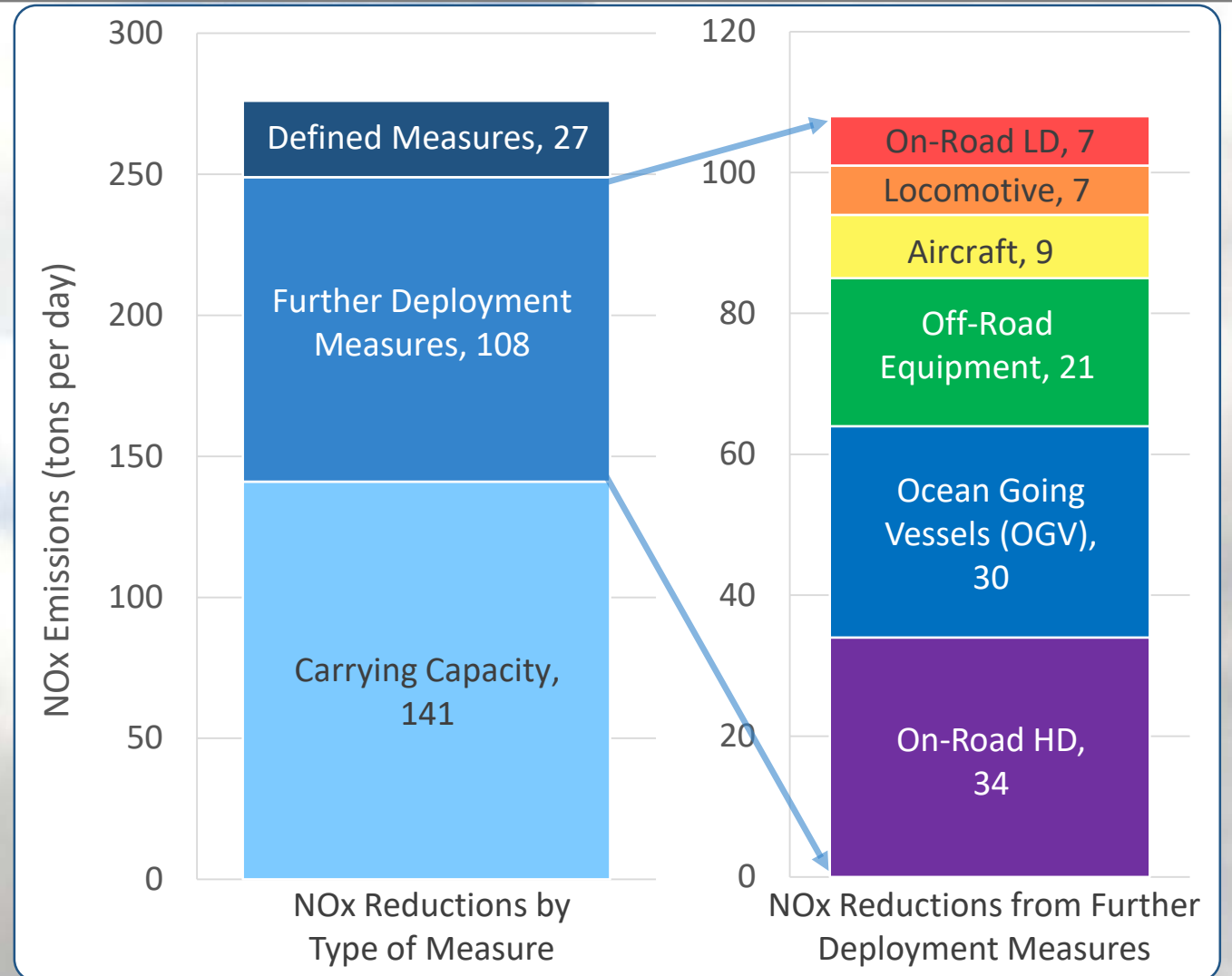
<sup>3</sup> Reflects an additional 4.2 tons per day of NOx emission reductions beyond the projected carrying capacity of 141 tons per day to accommodate changes in ocean-going vessel (OGV) emission inventory and CARB's SIP strategy for OGV





# CAA Section 182(e)(5) for Extreme Non-Attainment Areas

- Allows for reliance on emission reductions from anticipated new technologies or improvement of existing technologies
- EPA approved Further Deployment measures in the 2016 AQMP under section 182(e)(5) – 108 tpd
- Contingency measures required 3 years prior to implementation of plan provisions (i.e., 2023 attainment date)
  - Provide full reductions assigned to 182(e)(5) measures



# Draft Final Contingency Measure Plan



Identified Emission Reduction Strategies



Additional Incentive Funding



Federal Measures/Responsibilities





# Identified Emission Reduction Strategies

Measures Description	Agency	NOx Reductions (tpd)
RECLAIM BARCT Rules	South Coast AQMD	2
Ports MOU	South Coast AQMD	3.2 – 5.2
Airports MOU	South Coast AQMD	0.5
Metrolink Locomotives	South Coast AQMD	3
Funding Incentives (Expected Future Funding)	South Coast AQMD	1.5
Low Carbon Fuel Standard and Alternative Diesel Fuels Regulation	CARB	1.7
ATCM for Portable Engines, and the Statewide Portable Equipment Registration Program Regulation	CARB	0.25
HD Inspection and Maintenance (I/M) program	CARB	4.2
Innovative New Measures	CARB	3.0
<b>Total Reductions Towards 182(e)(5) Commitment*</b>		<b>24 – 26 tpd</b>

\* Estimated reductions including 4.2 tons per day of reductions associated with updated OGV emissions inventory and CARB's SIP Strategy for OGV



# CARB's Innovative New Measures (3 tpd)



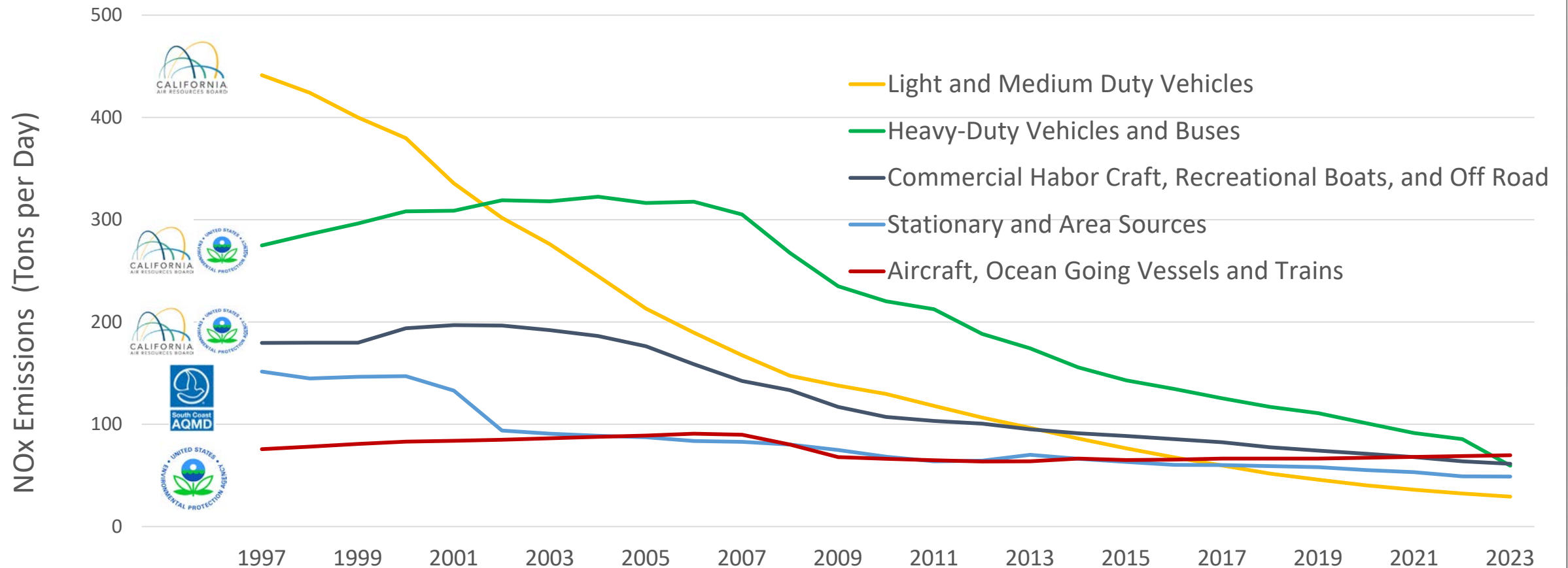
- **Tier 5 Off-Road Diesel Engine Standard**
- **State Green Contracting**
- **Reduction in Single-Occupancy Vehicle Travel Growth**
- **Locomotive Emission Reduction Measure**
- **VMT and Land Conservation**
- **Regional VMT Reductions**
- **Co-Benefits of Climate Change Scoping Plan Building Electrification**



# Additional Incentive Funding

- **2016 AQMP**
  - Estimated need over \$1 billion per year over 14 years
  - Current effort will update this estimate based on latest information
- **Expected Future Funding (approximately \$800 M over 4 years)**
  - AB 617-Related Incentives - \$80-90 M/yr.
  - Carl Moyer - \$40-50 M/yr.
  - Prop 1B - \$30 M
  - VW Settlement - \$67 M
  - AB2766 Subvention Fund - \$22 M/yr.
  - Mobile Source Air Pollution Reduction Review Committee - \$17 M/yr.
- **Additional Funding Needed**
  - Voting District Authorization Legislation - \$1.4 B/yr.
  - Other Mechanisms - TBD
  - Expected 2023 NOx Reductions: 15 tons per day

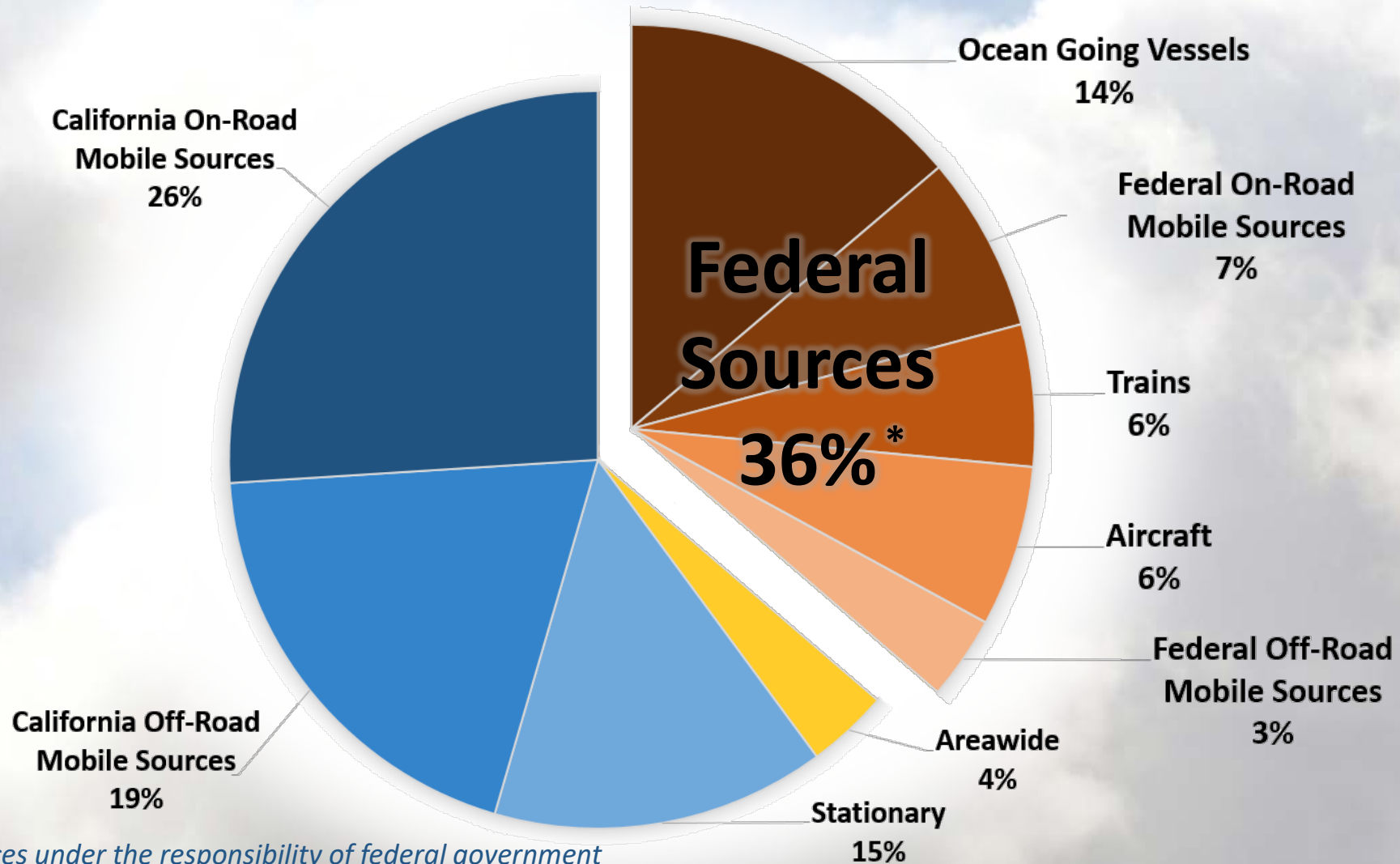
# Emission Trends for Major Sources







# Contribution of Federal Sources (2023 NOx emissions)



\* Includes international sources under the responsibility of federal government



# Potential Federal Measures



Measures	Measure Description	2023 NOx Reductions (tpd)
<b>Low-NOx Heavy-Duty Vehicles</b>	Heavy-duty vehicles (above 14,000 lbs. GVWR) powered by low-NOx engines in 2023	Up to 35
<b>Low-NOx Ocean-Going Vessels</b>	Ocean-going vessels coming to California powered by Tier 3 engines in 2023	Up to 28
<b>Low-NOx Locomotives</b>	Locomotives coming to California powered by Tier 4 engines in 2023	Up to 11
<b>Low-NOx Aircraft</b>	Aircraft NOx reductions assumption of 20% if emissions are held at 2012 levels.	Up to 4
<b>Total Possible Reductions Towards Further Deployment Commitment</b>		<b>Up to 78</b>



# Preliminary Estimation of Funding for Federal Reductions\*

Category	Measure Description	Expected Reductions (tpd)	Incentive Funding Needed (\$Bil)
<b>Ocean-Going Vessels</b>	<ul style="list-style-type: none"> <li>Tier 3 vessels and retrofits</li> <li>Early/voluntary at-berth compliance for ROROs/tankers/bulk/cargo</li> <li>Voluntary compliance for anchorage</li> </ul>	11 - 15	\$1.7 - \$2.3
<b>Locomotives</b>	<ul style="list-style-type: none"> <li>Tier 4 locomotives</li> </ul>	4	\$0.4
<b>Aircraft</b>	<ul style="list-style-type: none"> <li>Operational modifications (de-rated take-off and single engine taxiing)</li> </ul>	1 - 2	ND
<b>HD and LD Vehicles</b>	<ul style="list-style-type: none"> <li>Low-NOx CNG trucks, ZE LD vehicles</li> </ul>	50	\$13
<b>Off-Road Equipment</b>	<ul style="list-style-type: none"> <li>Highest available tier for large horsepower equipment, ZE in limited low horsepower applications</li> </ul>		
<b>Total</b>		<b>66 - 71</b>	<b>\$15 - \$16</b>

\* 67 to 69 tpd of NOx reductions needed under federal measures and/or funding in Contingency Measure Plan.



# Contingency Measure Plan for Further Deployment Reductions

Strategy	2023 Reductions (tpd)
Identified Emissions Reduction Strategies	24 – 26
Additional Incentive Funding	15
Federal Measures and / or Funding	67 – 69
<b>All Strategies</b>	<b>108</b>





# Key Public Comments



Comment	Staff Responses
<b>1</b> <b>Concerns about funding availability</b>	<ul style="list-style-type: none"><li>• Staff to continue to pursue funding opportunities locally and with the state legislature</li><li>• May utilize the remaining reductions from federal measures (a total of 78 tpd) if the anticipated funding does not fully materialize</li></ul>
<b>2</b> <b>Zero emission technologies for residential sector and co-benefits for climate goals</b>	<ul style="list-style-type: none"><li>• Net Emissions Analysis Tool (NEAT) developed to estimate changes in emissions and costs associated with deployment of zero and near-zero emission technologies for residential applications</li><li>• Continue to implement 2016 AQMP measures through replacing existing appliances with zero or near-zero NOx emissions technologies in residential and commercial sectors<ul style="list-style-type: none"><li>✓ \$47 M incentive funding for projects awarded in January 2019<ul style="list-style-type: none"><li>▪ \$14 M for 9 projects in residential and commercial sectors</li></ul></li><li>✓ Potential for rulemaking in 2020-2023</li></ul></li><li>• CARB is accounting for co-benefits of 2017 Climate Change scoping plan</li></ul>

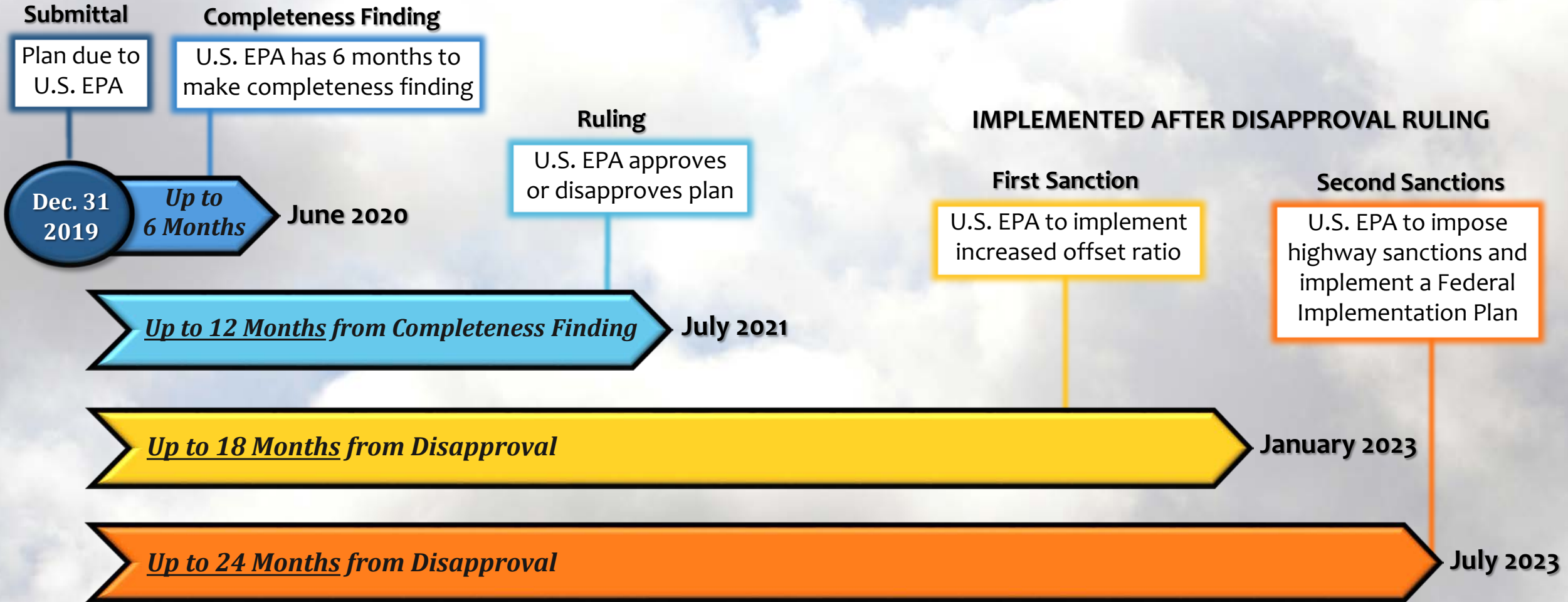
# Key Public Comments (cont.)



Comment	Staff Responses
<b>3</b> <b>Emissions from transportation sector and transportation planning</b>	<ul style="list-style-type: none"><li>• Emission benefits for transportation control measures are included in the 2016 AQMP</li><li>• Staff will work with SCAG and other stakeholders on the next Regional Transportation Plan (RTP) for inclusion in the 2022 AQMP</li></ul>
<b>4</b> <b>Timing for Sanctions</b>	<ul style="list-style-type: none"><li>• Sanction clock timelines and potential actions provided and summary was posted on AQMP website</li></ul>



# CAA Statutory Timeline for Sanction Clocks





# CAA Sanctions

## Increased Offset Ratio

### New Source Review:

- Current offset ratio is 1.2 to 1
- Offset ratio will be increased to 2 to 1 for new and modified major sources of ozone precursors (VOC and NOx)

## Federal Implementation Plan (FIP)

### Federal measures may include:

- No-drive days
- Emission caps for airlines, marine vessels and railroads
- Gas rationing

## Highway Funding

- Highway funding will be cutoff
- Funds for transit and certain safety projects may continue

- The sanctions and FIP are removed only when plan meets U.S. EPA's expectations and is subsequently approved



# A Call to Action

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- **California is doing all we can to reduce emissions with current funding and authority**
- **All levels of government need to take action to reduce emissions**
- **More incentive funding is needed to accelerate turn over of existing fleet to cleaner technologies to meet air quality standards**
- **Federal action is absolutely needed on sources California cannot address**



# Public Process





# Staff Recommendations for December Board Meeting

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## Adopt Resolution:

- **Determining that the Contingency Measure Plan is within the scope of the March 2017 Final Program Environmental Impact Report for the 2016 AQMP such that neither a new nor a subsequent environmental document is required under the California Environmental Quality Act**
- **Approving the Contingency Measure Plan**
- **Submitting the approved Contingency Measure Plan to CARB for its approval and subsequent submittal to the U.S. EPA for inclusion into the State Implementation Plan**

BOARD MEETING DATE: December 6, 2019

AGENDA NO. 29

**PROPOSAL:** Determine That Facility-Based Mobile Source Measure for Commercial Airports Is Exempt from CEQA and Approve Facility-Based Mobile Source Measure for Commercial Airports

**SYNOPSIS:** In May 2018, the Board directed staff to pursue a voluntary Memorandum of Understanding (MOU) approach based on the airports' development of Air Quality Improvement Plans (AQIPs) to implement the 2016 AQMP Facility-Based Mobile Source Measure (FBMSM) MOB-04 (Emission Reductions at Commercial Airports). All five commercial airports have developed their own AQIPs or Air Quality Improvement Measures (AQIMs) for non-aircraft airport emissions. The draft MOUs specify State Implementation Plan (SIP) creditable AQIP or AQIM measures, which the airports agree to implement. In addition, the airports will provide annual reports to South Coast AQMD. South Coast AQMD is making an enforceable commitment to U.S. EPA to achieve the emission reductions associated with implementation of these measures and seeks to obtain SIP credit.

**COMMITTEE:** Mobile Source, October 18 and November 15, 2019, Reviewed

**RECOMMENDED ACTIONS:**

Adopt the attached Resolution to:

1. Determine that the FBMSM for Commercial Airports is exempt from the requirements of the California Environmental Quality Act;
2. Approve the MOU with the City of Los Angeles Department of Airports Regarding Los Angeles International Airport;
3. Approve the MOU with Orange County Regarding John Wayne Airport;
4. Approve the MOU with Burbank-Glendale-Pasadena Airport Authority Regarding Hollywood Burbank Airport;
5. Approve the MOU with The City of Long Beach Regarding Long Beach Airport;
6. Approve the MOU with Ontario International Airport Authority Regarding Ontario International Airport;



7. Approve the South Coast AQMD's enforceable commitment as specified in the attached Resolution; and
8. Direct the Executive Officer to submit the South Coast AQMD's enforceable commitment to CARB for approval and subsequent submittal to U.S. EPA for inclusion into the SIP.

Wayne Nastri  
Executive Officer

JW:PF:SR:ZP:SML:EP

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## **Background**

The 2016 Air Quality Management Plan (AQMP) is the latest regional blue print for achieving the federal and state air quality standards in the South Coast Air Basin (Basin). Significant additional NO<sub>x</sub> reductions beyond what will be achieved through existing regulations are needed to achieve the federal 1997 and 2008 8-hour ozone standards in the Basin – a 45% reduction beyond baseline levels in 2023 and a 55% reduction beyond baseline levels in 2031. Controlling mobile source emissions is key to achieving these targets, as mobile sources comprise over 80% of Basin NO<sub>x</sub> emissions and are the largest contributor to the region's ozone problem. The Facility-Based Mobile Source Measures included in the 2016 AQMP are South Coast AQMD's proposed mobile source measures covering marine ports (MOB-01), railyards (MOB-02), warehouse/distribution centers (MOB-03), commercial airports (MOB-04), and new development and redevelopment projects (EGM-01). These measures are intended to help achieve the emission reductions attributed to CARB's Further Deployment of Cleaner Technology measures by reducing emissions from these facilities through South Coast AQMD actions (e.g., indirect source rules or other programs).

The Facility-Based Mobile Source Measure (FBMSM) for Commercial Airports implements the 2016 AQMP Control Measure MOB-04, Emission Reductions at Commercial Airports. This measure applies to Los Angeles International Airport (LAX), John Wayne Orange County Airport (SNA), Hollywood Burbank Airport (BUR), Ontario International Airport (ONT), and Long Beach Airport (LGB). Following the adoption of the 2016 AQMP, staff conducted 17 working group meetings to address the FBMSM sectors during a year-long public process. Based on the working group discussions, staff recommended that South Coast AQMD pursue a voluntary MOU approach for commercial airports.

On May 4, 2018, the Board considered staff's recommendations for all FBMSMs and provided specific direction regarding both regulatory and voluntary approaches. For commercial airports, the Board directed staff to pursue a voluntary MOU approach based on the airports' willingness to develop airport-specific Air Quality Improvement

Plans/Measures (AQIPs or AQIMs) for non-aircraft mobile source emissions. In the event that the MOU approach was not successful, staff was directed to report back to the Board and seek Board recommendation to pursue a regulatory approach (i.e., indirect source rule).

Following the Board's direction, staff established an Airports MOU working group consisting of representatives from the five commercial airports, passenger and cargo airlines, the California Airports Council, CARB, U.S. EPA, environmental organizations, and other stakeholders. Four working group meetings were conducted. During this process, staff communicated regularly with airport representatives and their consultants to provide technical guidance on the development of AQIPs/AQIMs. Specifically, guidance was provided regarding the emission benefit calculation methodologies and the development of base and future year emissions inventories. Subsequently, all five commercial airports developed their individual AQIPs/AQIMs with specific measures and initiatives to reduce emissions from non-aircraft mobile sources related to airport operations (e.g., ground support equipment, shuttle buses, delivery trucks). The AQIPs/AQIMs also include the 2017 baseline emissions as well as emissions forecasts in 2023 and 2031 under business as usual (BAU) and AQIP/AQIM implementation scenarios.

Based on the draft AQIPs/AQIMs developed by the five commercial airports, draft MOUs were developed for each of the five commercial airports through extensive negotiations between airport and airline representatives and technical/legal staff from South Coast AQMD. The draft MOUs are provided in Appendix A of the attached staff report. The MOUs represent voluntary agreements between South Coast AQMD and each commercial airport, with each party having specific responsibilities and commitments. Based on an evaluation of each airport's AQIP/AQIM, specific measures were identified that are potentially eligible for SIP emission reduction credit (i.e., reductions can be applied toward the attainment demonstration of ozone standards in 2023 and 2031). The purpose of the MOU is to quantify the emission reduction benefits associated with the implementation of the airports' AQIP/AQIM strategies that are eligible for SIP credit. For the MOU measures, staff also developed SIP credit calculation methodologies to convert the emissions reductions provided by the airports into the SIP currency (i.e., to be consistent with the 2016 AQMP emissions inventory). The SIP credit calculations are provided in Appendix B of the attached staff report. The potential SIP credit is estimated to be 0.52 and 0.37 tons per day of NO<sub>x</sub> reductions in 2023 and 2031, respectively. The emissions reductions for each of the AQIP/AQIM measures in the MOUs that are potentially eligible for SIP credit are provided in the attached staff report.

In order for emission reductions from the AQIP/AQIM measures specified in the MOUs to be eligible for SIP credit, these reductions need to meet the U.S. EPA's guidelines. These guidelines require that the emission reductions meet U.S. EPA's integrity

elements (i.e., reductions must be surplus, quantifiable, permanent, and enforceable), and that the SIP submittal has a federally enforceable backstop commitment, technical support, a demonstration of state funding and legal authority, public disclosure procedures, and provisions to assess progress. The emission reductions associated with implementation of the AQIP/AQIM measures included in the five MOUs with the commercial airports meet these requirements, as described in the attached staff report. For the federal enforceability requirement, South Coast AQMD is making an enforceable commitment to achieve the projected emission reductions associated with implementation of AQIP/AQIM measures in the MOUs with the airports and to develop and submit substitute measures to U.S. EPA in the event of any potential emission reduction shortfall.

### **Proposal**

Staff is recommending approval of the FBMSM for Commercial Airports, which includes the MOUs with each of the five commercial airports and the South Coast AQMD's enforceable commitment to achieve NO<sub>x</sub> emission reductions of 0.52 tons per day in 2023 and 0.37 tons per day in 2031 associated with implementation of SIP creditable measures in the MOUs.

The key elements of the FBMSM for Commercial Airports include:

- 1) MOUs – The MOUs include schedules for AQIP/AQIM measures eligible for SIP credit that specify the performance targets, timeline for implementation, and the details of the annual reports to be prepared by the airports and submitted to South Coast AQMD. Under the MOUs, the airports agree to implement the AQIP/AQIM measures by the timelines specified in the MOUs and achieve the performance targets for these measures. The airports also agree to provide annual reports to South Coast AQMD, by June 1 of each year beginning in 2021 and through the end of the MOU term in 2032, on the implementation of these measures, including detailed equipment/vehicle data and emissions inventories with supporting methodology and calculations for emission benefits. South Coast AQMD agrees to quantify the corresponding SIP emission reductions associated with these AQIP/AQIM measures in the MOUs and to make an enforceable commitment for these reductions to U.S. EPA for inclusion into the SIP. Based on the annual reports submitted by the airports, staff will also quantify the actual emission reductions for these measures for the attainment years (2023 and 2031), and prepare and submit the necessary documentation to U.S. EPA and also make the information publicly available for tracking these reductions.
- 2) Federally Enforceable Commitment – South Coast AQMD is making an enforceable commitment to achieve 0.52 and 0.37 tons per day of NO<sub>x</sub> in 2023 and 2031, respectively. In the event that the actual emission reductions from the implementation of the AQIP/AQIM measures specified in the MOUs are less than the projected emission reduction benefits, South Coast AQMD will adopt and submit

substitute measures to U.S. EPA to remedy the potential shortfall by working with the airports and other stakeholders. A public process will be initiated to facilitate the consideration of potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD meet any potential shortfall.

### **Public Process**

Staff has conducted four MOU working group meetings with representatives from the airports and passenger and cargo airlines, agencies, environmental organizations, other stakeholders, and members of the public. The preliminary draft staff report, including the draft AQIP/AQIMs and draft MOUs, was released on September 20, 2019. In addition, a public consultation meeting was held on October 10, 2019. Written comments were requested to be provided by October 21, 2019. Two comment letters were received and responses are provided in the attached staff report.

### **California Environmental Quality Act**

Pursuant to the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency for the proposed project, has reviewed the proposed project 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.

Entering into MOUs regarding voluntary airport AQIP/AQIM measures with the five airports, as well as quantifying emissions for the purpose of establishing an enforceable commitment and crediting the emission reductions into the SIP, are administrative and procedural actions. Further, the MOUs will have no new physical impacts beyond the potential environmental impacts that were previously analyzed under CEQA for each of the five commercial airport's AQIP or AQIM, as applicable. As a result, South Coast AQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed project 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) – Common Sense Exemption. In addition, as provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Additionally, because the proposed project is designed to further protect or enhance the environment by supporting the reduction of non-aircraft mobile source emissions at five commercial airports within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. Further, South Coast AQMD staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions

apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA. A Notice of Exemption for each airport MOU has been prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption and can be found in Attachment C of this Board package. If the proposed project is approved, the Notices of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

### **Resource Impacts**

The action would be implemented using existing staff resources. Resources will be required for reviewing the annual reports, quantifying emission reduction benefits, ensuring public access to all relevant documentation by posting it online, reporting to U.S. EPA, and, if necessary, developing substitute measures through a public process to address any potential reduction shortfall.

### **Attachments**

- A. Resolution
- B. Draft Staff Report – Facility-Based Mobile Source Measure for Commercial Airports
  - a. Appendix A - Draft Revised MOUs with Commercial Airports
  - b. Appendix B - SIP Credit Calculations
- C. CEQA Notices of Exemption
- D. Board Meeting Presentation

## ATTACHMENT A

### RESOLUTION NO. 19-\_\_\_\_\_

**A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) determining that the Facility-Based Mobile Source Measure (FBMSM) for Commercial Airports is exempt from the requirements of the California Environmental Quality Act (CEQA).**

**A Resolution of the South Coast AQMD Governing Board approving the FBMSM for Commercial Airports.**

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the FBMSM for Commercial Airports 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 South Coast AQMD Governing Board finds and determines that 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 the FBMSM for Commercial Airports is determined to be exempt from CEQA; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that it can be seen with certainty that there is no possibility that the proposed project may have any significant adverse effects on the environment, and is therefore, exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption, because the proposed project: 1) is comprised of voluntary Memoranda of Understanding (MOUs) between the South Coast AQMD and five commercial airports, related to activities the airports have already agreed to implement, that outline each airport’s Air Quality Improvement Plan/Measure (AQIP/AQIM) designed to achieve State Implementation Plan (SIP) creditable emission reductions from non-aircraft mobile sources related to airport operations, and the act of crediting these emission reductions into the SIP is administrative and procedural in nature; and 2) the MOUs will have no new physical impacts beyond the potential environmental impacts that were previously analyzed under CEQA for each of the five commercial airport’s AQIP/AQIM, as applicable; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15306 – Information Collection, because the proposed project will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource; and

**WHEREAS**, the South Coast AQMD Governing Board finds and determines that, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment, because the proposed project is designed to further protect or enhance the environment by supporting the reduction of non-aircraft mobile source emissions at five commercial airports within South Coast AQMD’s jurisdiction; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions; and

**WHEREAS**, the South Coast AQMD staff has prepared Notices of Exemption for the proposed project, that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

**WHEREAS**, the proposed project and supporting documentation, including but not limited to, the Notices of Exemption, were presented to the South Coast AQMD Governing Board and the South Coast AQMD Governing Board has reviewed and considered this information, and has taken and considered staff testimony and public comment prior to approving the project; and

**WHEREAS**, the South Coast AQMD Governing Board has determined that no socioeconomic assessment is required under Health and Safety Code Section 40440.8(a) since the FBMSM for Commercial Airports will be implemented through voluntary MOUs with commercial airports based on the airports implementation of measures in the airports’ AQIPs/AQIMs as specified in the MOUs, rather than through a South Coast AQMD rule; and

**WHEREAS**, the FBMSMs included in the 2016 Air Quality Management Plan (AQMP) are South Coast AQMD’s proposed mobile source measures covering marine ports (MOB-01), railyards (MOB-02), warehouse/distribution centers (MOB-03), commercial airports (MOB-04), and new development and redevelopment projects (EGM-01); and

**WHEREAS**, the FBMSMs are intended to help achieve some of the emission reductions attributed to the California Air Resources Board’s (CARB’s) Further Deployment of Cleaner Technology measures by reducing emissions from these facilities through South Coast AQMD’s actions; and

**WHEREAS**, the FBMSM for Commercial Airports implements the 2016 AQMP Control Measure MOB-04 – Emission Reductions at Commercial Airports covering Los Angeles International Airport (LAX), John Wayne Orange County Airport (SNA),

Hollywood Burbank Airport (BUR), Ontario International Airport (ONT), and Long Beach Airport (LGB); and

**WHEREAS**, following the adoption of the 2016 AQMP, staff conducted several working groups to address the FBMSM sectors and made recommendations to the South Coast AQMD Governing Board for either regulatory or voluntary approaches for all five FBMSM sectors including commercial airports; and

**WHEREAS**, on May 4, 2018, the South Coast AQMD Governing Board directed staff to pursue a voluntary memorandum of understanding (MOU) approach with the commercial airports in the Basin based on the airports' Air Quality Improvement Plans/Measures (AQIP or AQIM) for non-aircraft airport emissions; and

**WHEREAS**, in the event that the MOU approach is not successful with the commercial airports, staff will report back to the South Coast AQMD Governing Board and recommend consideration of a regulatory approach for the South Coast AQMD Governing Board's consideration; and

**WHEREAS**, through South Coast AQMD's airports MOU working group process, all five commercial airports have developed their own AQIP or AQIM with specific measures and initiatives to reduce emissions from non-aircraft mobile sources related to airport operations; and

**WHEREAS**, the South Coast AQMD Governing Board obtained its authority to enter into the MOUs from sections 40701(f) and 40702 of the California Health and Safety Code; and

**WHEREAS**, draft MOUs have been developed through a public process for each of the five commercial airports based the airports' AQIP/AQIM measures that are eligible for state implementation plan (SIP) credit; and

**WHEREAS**, the MOUs represent agreements between South Coast AQMD and each commercial airport to achieve SIP creditable emission reductions from non-aircraft mobile sources related to airport operations; and

**WHEREAS**, each MOU includes measures or schedules for the eligible SIP creditable AQIP/AQIM measures that specify the metrics, performance targets, timeline for implementation, and the details of the annual reports to be prepared by the airports and submitted to South Coast AQMD; and

**WHEREAS**, under the MOUs, the airports agree to implement the AQIP/AQIM measures specified in the MOUs and achieve the performance targets in these measures; and



**WHEREAS**, South Coast AQMD has quantified the corresponding SIP creditable emission reductions associated with the AQIP/AQIM measures specified in the MOUs and is making an enforceable commitment for these reductions to U.S. EPA for inclusion into the SIP; and

**WHEREAS**, under the MOUs, the airports also agree to provide annual reports to South Coast AQMD, by June 1st of each year beginning in 2021 and through the end of the MOU term in 2032, on the implementation of the AQIP/AQIM measures specified in the MOUs, including detailed equipment/vehicle data and emissions inventories with supporting methodology and calculations for emission benefits; and

**WHEREAS**, based on the annual reports submitted by the airports, South Coast AQMD will quantify the actual emission reductions for these measures for the attainment years (2023 and 2031), prepare and submit the necessary documentation to U.S. EPA, and make the emissions related information available to the public; and

**WHEREAS**, South Coast AQMD will report to the Mobile Source Committee on the progress of implementing the AQIP/AQIM measures in the MOUs and achieving corresponding emission reductions by November of each year beginning 2021; and

**WHEREAS**, the FBMSM for Commercial Airports includes both the MOUs with the five commercial airports and South Coast AQMD's enforceable commitment to provide substitute measures in the event of any potential shortfall; and

**WHEREAS**, the enforceable commitment by South Coast AQMD will be submitted for inclusion into the SIP; and

**WHEREAS**, the South Coast AQMD's enforceable commitment includes the following commitments:

1. Beginning in 2021 and every year thereafter until 2032, track the implementation of the airports' AQIP/AQIM measures with SIP creditable emissions reductions that are specified in the MOUs for the Los Angeles International Airport, John Wayne Airport, Burbank Airport, Ontario International Airport, and Long Beach Airport based on the annual reports submitted by these airports as specified in the MOU with each airport;
2. By January 1, 2023, achieve 0.52 ton per day (tpd) of NO<sub>x</sub> emission reductions from the 2023 baseline inventory contained in the 2016 AQMP;
3. By November 1st of each year beginning in 2021 and through 2024, report annually to U.S. EPA the following information:
  - a. Identify the portion of NO<sub>x</sub> emission reductions achieved and all emissions-related information necessary to independently quantify emission reductions;

- b. Document actions by the airports on implementation of the SIP creditable AQIP/AQIM measures in the MOUs; and
  - c. Determine whether the implementation of SIP creditable AQIP/AQIM measures in the MOUs is projected to achieve the full 0.52 tpd of NOx emission reductions in 2023.
4. If U.S. EPA determines by February 1, 2022 that information provided by South Coast AQMD is insufficient to demonstrate that the emissions reductions required under Paragraph 2 will occur on schedule, adopt and submit to U.S. EPA, no later than November 1, 2022, substitute measures and/or rules through a public process that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2023.
5. By January 1, 2031, achieve 0.37 tpd of NOx reductions from the 2031 baseline inventory contained in the 2016 AQMP;
6. By November 1st of each year beginning in 2024 and through 2032, report annually to U.S. EPA the following information:
  - a. Identify the portion of NOx emission reductions achieved and all emissions-related information necessary to independently quantify emission reductions;
  - b. Document actions by the airports on implementation of SIP creditable AQIP/AQIM measures in the MOUs; and
  - c. Determine whether the implementation of SIP creditable AQIP/AQIM measures in the MOUs is projected to achieve the full 0.37 tpd of NOx reductions in 2031.
7. If U.S. EPA determines by February 1, 2030 that information provided by South Coast AQMD is insufficient to demonstrate that emissions reductions required under Paragraph 5 will occur on schedule, adopt and submit to U.S. EPA, no later than November 1, 2030, substitute measures and/or rules through a public process that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2031; and
8. Make each annual demonstration report publicly available or available by request.

**WHEREAS**, the public hearing has been properly noticed by providing a 30-day notice in the newspapers in accordance with U.S. EPA Code of Federal Regulations Part 40 Section 51.102(d); and

**WHEREAS**, the South Coast AQMD Governing Board has held a public hearing to consider approval of the FBMSM for Commercial Airports in accordance with all provisions of law; and

**WHEREAS**, the South Coast AQMD specifies the manager of the FBMSM for Commercial Airports as the custodian of the documents or other materials which constitute the record of proceedings upon which the approval is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California.

**NOW, THEREFORE, BE IT RESOLVED**, that the South Coast AQMD Governing Board does hereby determine, pursuant to the authority granted by law, that the proposed project is exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption, CEQA Guidelines Section 15306 – Information Collection, and CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. No exceptions to the application of the categorical exemptions set forth in CEQA Guidelines Section 15300.2 – Exceptions, apply to the proposed project. This information was presented to the South Coast AQMD Governing Board, whose members reviewed, considered and approved the information therein prior to acting on the proposed project; and

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Governing Board does hereby approve, pursuant to the authority granted by law, the FBMSM for Commercial Airports, which includes the MOUs for LAX, BUR, SNA, LGB, and ONT as specified in Attachment B (Appendix A) of the Board Letter and the South Coast AQMD’s enforceable commitment described herein.

**BE IT FURTHER RESOLVED**, that the South Coast AQMD Executive Officer is hereby directed to forward a copy of this Resolution, which contains South Coast AQMD’s enforceable commitment, to CARB, and to request that these documents be forwarded to the U.S. EPA for approval as part of the California SIP. In addition, the South Coast AQMD Executive Officer is directed to forward any other information requested by the U.S. EPA in support of the SIP submittal.

DATE: \_\_\_\_\_

\_\_\_\_\_  
CLERK OF THE BOARD

## ATTACHMENT B

# SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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## **Draft Final Staff Report Facility-Based Mobile Source Measure for Commercial Airports**

**December 2019**

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Planning, Rule Development, and Area Sources  
Philip M. Fine, Ph.D.

### **Assistant Deputy Executive Officer**

Planning, Rule Development, and Area Sources  
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**EXECUTIVE OFFICER:**

WAYNE NASTRI

# Table of Contents

<b>Executive Summary .....</b>	<b>6</b>
<b>Chapter 1: Background</b>	
<b>Introduction.....</b>	<b>10</b>
<b>A. Airports MOU Working Group Activities .....</b>	<b>11</b>
<b>B. Regulatory Background.....</b>	<b>12</b>
<b>C. <u>U.S.</u> EPA’s Requirements for SIP Credits .....</b>	<b>14</b>
<b>Chapter 2: Air Quality Improvement Plans/Measures</b>	
<b>Introduction.....</b>	<b>18</b>
<b>A. Los Angeles International Airport (LAX) AQIM.....</b>	<b>18</b>
Background.....	18
Baseline and BAU Emissions Inventories .....	19
List of AQIM Measures .....	19
<b>B. John Wayne Airport (JWA) AQIP .....</b>	<b>21</b>
Background.....	21
Baseline and BAU Emissions Inventories .....	21
List of AQIP Measures.....	22
<b>C. Long Beach Airport (LGB) AQIP .....</b>	<b>24</b>
Background.....	24
Baseline and BAU Emissions Inventories .....	25
List of AQIP Measures.....	25
<b>D. Ontario Airport (ONT) AQIP .....</b>	<b>26</b>
Background.....	26
Baseline and BAU Emissions Inventories .....	27
List of AQIP Measures.....	27
<b>E. Burbank Airport (BUR) AQIP .....</b>	<b>29</b>
Background .....	29
Baseline and BAU Emissions Inventories .....	29
List of measures.....	29
<b>Chapter 3: Memorandum Memoranda of Understanding Understanding</b>	

<b>Introduction.....</b>	<b>33</b>
<b>A. General MOU Sections Applicable to All Airports .....</b>	<b>33</b>
MOU Purpose.....	33
MOU Term .....	33
MOU Applicability.....	33
Airport Responsibilities.....	34
South Coast AQMD Responsibilities .....	34
<b>B. Airport Specific MOU Sections .....</b>	<b>34</b>
Los Angeles <del>World</del> <u>International</u> Airport.....	35
John Wayne Airport.....	36
Burbank Airport.....	37
Ontario Airport.....	38
 <b>Chapter 4: Potential SIP Creditable Emission Reductions</b>	
<b>Introduction.....</b>	<b>40</b>
A. Enforceable Commitment .....	40
B. <u>U.S.</u> EPA’s Integrity Element Demonstration.....	43
C. Technical Analyses.....	53
D. Funding .....	53
E. Legal Authority .....	53
F. Tracking actual emission reductions from MOU measures .....	53
G. Public disclosure.....	54
H. Reporting to <u>U.S.</u> EPA.....	54
 <b>Chapter 5: California Environmental Quality Act (CEQA) and Socioeconomic Assessment .....</b>	
<b><u>A. CEQA Analysis</u></b> .....	56
<b><u>B. Socioeconomic Assessment</u></b> .....	60
<b><u>Chapter 6: Response to Public Comments .....</u></b>	<b><u>61</u></b>

**Appendix A: Draft Air Quality Improvement Plans/Measures Memoranda of Understanding**

**A. Los Angeles International Airport**

**B. Burbank Airport**

**C. John Wayne Airport**

**D. Long Beach Airport**

**E. Ontario International Airport**

**~~Appendix B: Draft Memorandum of Understandings~~**

**~~Appendix C: SIP Credit Calculations~~**



## Executive Summary

The 2016 Air Quality Management Plan (AQMP) is the latest regional blue print for achieving the federal and state air quality standards in the South Coast Air Basin (Basin). Based on the analysis in the 2016 AQMP analysis, significant additional NOx reductions beyond what will be achieved through existing regulations are needed to achieve the federal 8-hour ozone standards in the Basin – a 45% ~~reduction beyond baseline levels in 2023 and~~ and 55% reduction beyond baseline levels in 2023 and 2031., respectively. Controlling mobile source emissions ~~are~~ is key to achieving these targets, as mobile sources comprise over 80% of Basin NOx emissions and are the largest contributor to the region’s ozone problem. The Facility-Based Mobile Source Measures included in the 2016 AQMP are South Coast AQMD’s proposed mobile source measures covering marine ports (MOB-01), railyards (MOB-02), warehouse/distribution centers (MOB-03), commercial airports (MOB-04), and new development and redevelopment projects (EGM-01). These measures are intended to help achieve the emission reductions attributed to CARB's Further Deployment of Cleaner Technology measures by reducing emissions from these facilities through South Coast AQMD’s actions (e.g., indirect source rules or other programs).

The Facility-Based Mobile Source Measure (FBMSM) for Commercial Airports implements the 2016 AQMP Control Measure MOB-04, Emission Reductions at Commercial Airports. This measure applies to Los Angeles International Airport (LAX), John Wayne Orange County Airport (SNA), Hollywood Burbank Airport (BUR), Ontario International Airport (ONT), and Long Beach Airport (LGB). Following the adoption of the 2016 AQMP, staff conducted 17 working ~~groups~~ group meetings to address the FBMSM sectors during a year-long public process. Based on the working group discussions, staff recommended that South Coast AQMD pursue a voluntary Memorandum of Understanding (MOU) approach for commercial airports.

On May 4, 2018, the Board considered staff’s recommendations for all FBMSMs and provided specific direction regarding both regulatory and voluntary approaches. For commercial airports, the Board approved staff’s recommendation to pursue a voluntary MOU approach based on the airports’ development of Air Quality Improvement Plans/Measures (AQIP or AQIM) for non-aircraft emissions. Following the Board’s direction, South Coast AQMD established a new Airports MOU working group for the purpose of developing MOUs with individual commercial airports based on their respective AQIPs/AQIMs. All five commercial airports committed to preparing their own AQIPs/AQIMs and developing MOUs with South Coast AQMD.

Since that time, South Coast AQMD staff has conducted four working group meetings. During this process, staff has communicated regularly with airport representatives and their consultants to provide technical support regarding emission calculation methodologies for base and future years’ emissions inventories. In addition, staff has reviewed the airports’ preliminary emission inventory data, draft AQIPs or AQIM emission reduction measures and initiatives, and collaborated to ~~assisted with the development of~~ the draft MOUs.

As part of the MOU process, each airport has developed its own AQIP or AQIM with specific measures and initiatives. The AQIPs (or AQIMs) represent the airports’ comprehensive plans to reduce emissions from non-aircraft mobile sources related to airport operations (e.g., ground

support equipment, shuttle buses, delivery trucks)<sup>1</sup>. In general, a measure represents a program in which the airport ~~commits~~agrees to a well-defined course of action with known emission reductions, while an initiative represents an objective that the airport intends to pursue, but the emission reductions are not readily quantifiable. The AQIPs/AQIMs also include the 2017 baseline emissions as well as emissions forecasts in 2023 and 2031 under business as usual (BAU) and AQIP/AQIM implementation scenarios.

Based on the draft AQIPs/AQIMs developed by the five commercial airports, draft MOUs have been developed for each of the five commercial airports. The MOUs represent voluntary agreements between South Coast AQMD and each commercial airport, with each party having specific responsibilities and commitments. The purpose of the ~~MOU~~MOUs is to quantify the emission reduction benefits associated with the implementation of the airports' AQIP/AQIM strategies that are eligible for SIP credits. Each MOU includes schedules for the eligible SIP creditable AQIP/AQIM measures that specify the metrics, performance targets, timeline for implementation, and the details of the annual reports to be prepared by the airports and submitted to South Coast AQMD.

Under the MOUs, the airports ~~commit~~agree to implement the AQIP/AQIM measures eligible for SIP credit and achieve the performance targets in these measures. The airports also ~~commit~~agree to provide annual reports to South Coast AQMD, by June 1st of each year beginning in 2021 and through the end of the MOU term in 2032~~1~~, on the implementation of these measures, including detailed equipment/vehicle data and emissions inventories with supporting methodology and calculations for emission benefits. South Coast AQMD ~~commits~~agrees to quantify the corresponding SIP emission reductions associated with these AQIP/AQIM measures in the MOUs and to make an enforceable commitment for these reductions to U.S. EPA for inclusion into the SIP. Based on the annual reports submitted by the airports, South Coast AQMD will also quantify the actual emission reductions for these measures for the attainment milestone years (2023 and 2031) and prepare and submit the necessary documentation to U.S. EPA for tracking these reductions. South Coast AQMD also ~~commits~~agrees to ensure that the relevant data including the AQIPs/AQIM, MOUs, annual reports submitted by the airports, and South Coast AQMD's reports to U.S. EPA are accessible to the public.

In the event that the actual emission reductions from the implementation of the AQIP/AQIM measures specified in the MOUs are less than the projected emission reduction benefits, South Coast AQMD will be responsible for achieving the emission reduction shortfall. In such instances, South Coast AQMD also ~~commits~~agrees to adopt and submit substitute measures to U.S. EPA to meet the shortfall, working in conjunction with the airports and other stakeholders. A public process will be initiated to facilitate the consideration of potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD meet any shortfall.

In order for emission reductions from the AQIP/AQIM measures specified in the MOUs to be eligible for SIP credit, these reductions need to meet the U.S. EPA's guidelines. These guidelines require that the emission reductions meet U.S. EPA's integrity elements (i.e., reductions must be surplus, quantifiable, permanent, and enforceable), ~~and have that the SIP submittal has~~ federally

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<sup>1</sup> Aircraft emissions are not covered in the AQIPs/AQIM/MOUs because of federal jurisdiction over aircraft.

enforceable backstop commitments, technical support, a demonstration of funding, and legal authority, public disclosure procedures, and provisions to assess progress. The emission reductions associated with implementation of the AQIP/AQIM measures included in the five MOUs with the commercial airports meet these requirements as described in this staff report.

The FBMSM for Commercial Airports is expected to achieve 0.52 and 0.3837 tons per day of NOx emission reductions in 2023 and 2031, respectively, based on the airports implementation of AQIP/AQIM measures in the MOUs. While these emission reductions are modest, they represent a significant reduction in emissions from ground support equipment. ~~T~~there are other AQIP/AQIM measures that airports are implementing that will result in emission reductions that may not be easily quantifiable or SIP creditable.

The draft ~~AQIPs/AQIM~~ MOUs for all five commercial airports are attached to the staff report. Each airport has its own public process and approval process for the draft AQIPs/AQIM and MOUs by its respective airport authority. Following South Coast AQMD's public process and the airports' approval of the MOUs, the FBMSM for Commercial Airports ~~including the (draft MOUs with the commercial airports and the South Coast AQMD's~~ enforceable commitment to backstop any emission reduction shortfall) will be considered by the South Coast AQMD Governing Board for approval.

## Chapter 1: Background

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Introduction

Airports MOU Working Group Activities

Regulatory Background

U.S. EPA's Requirements for SIP Emission Reduction Credits

## Introduction

The 2016 Air Quality Management Plan (AQMP), adopted by the South Coast Air Quality Management District (South Coast AQMD) Governing Board in March 2017, is the latest regional blue print for achieving the federal and state air quality standards in the South Coast Air Basin (Basin). Based on the 2016 ~~AQMP~~ AQMP's analysis, significant additional NO<sub>x</sub> reductions beyond existing regulations are needed to achieve the federal 8-hour ozone standards in the Basin (45% in 2023 and 55% in 2031). In addition to California Air Resources Board's (CARB's) State strategy, the 2016 AQMP also included mobile source measures proposed by South Coast AQMD including Facility-Based Mobile Source Measures (FBMSMs). FBMSMs cover facilities including ports (MOB-01), railyards (MOB-02), warehouse/distribution centers (MOB-03), commercial airports (MOB-04), and new development and redevelopment projects (EGM-01). These measures are intended to help achieve some of the emission reductions attributed to CARB's Further Deployment of Cleaner Technology measures by reducing emissions from these facilities through South Coast AQMD's actions (e.g., indirect source regulations, other programs).

MOB-04, Emission Reductions at Commercial Airports, applies to commercial airports located within the Basin. These include Los Angeles International Airport (LAX), John Wayne Orange County Airport (SNA), Hollywood Burbank Airport (BUR), Ontario International Airport (ONT), and Long Beach Airport (LGB). During the 2016 AQMP adoption, the South Coast AQMD Board (Board) approved a motion to amend MOB-04 and directed staff to *“Undertake a stakeholder process and draft for our consideration an indirect source rule for commercial airports within the South Coast Basin by February 1, 2019 to control emissions of NO<sub>x</sub>, PM<sub>2.5</sub>, lead and diesel particulate matter from non-aircraft sources”*.<sup>22</sup> The Board discussion accompanying this amendment provided further direction, including a desire to let the airports prepare their own airport-specific Clean Air Action Plans (AirCAAPs). The Board would then consider this information to determine the level of control in any proposed Indirect Source Rule (ISR).

Following the adoption of the 2016 AQMP, staff initiated several working groups to address the FBMSM sectors including the commercial airports. During the year-long period, South Coast AQMD staff conducted 17 Working Group Meetings covering all five sectors. Some of the key topics discussed during the Working Group meetings included: 1) a framework for developing FBMSMs, 2) potential methods for obtaining SIP credit for voluntary measures, and 3) potential voluntary and regulatory emission reduction strategies for each facility sector. Based on working group discussions, South Coast AQMD Staff recommended that the Governing Board pursue a voluntary MOU approach for commercial airports because of the limited emissions reductions that would be available from the non-aircraft mobile sources operating at the airports, federal preemption of aircraft standards, existing emission reduction programs, and the potential willingness of airports to enter into cooperative agreements ~~were the additional reasons to pursue a voluntary approach.~~

On May 4, 2018, ~~the~~ South Coast AQMD's Board considered staff's recommendations for all FBMSMs and provided specific ~~directions~~ direction regarding both regulatory and voluntary

approaches.<sup>2</sup> For commercial airports, the Board approved staff's recommendation to pursue a voluntary Memorandum of Understanding (MOU) approach (instead of an ISR approach) based on the ~~airports~~airports' willingness to develop airport-specific Air Quality Improvement Plans/Measures (AQIP or AQIM), and the fact that commercial airports contribute only about 8 tons per day of NOx (absent aircraft emissions). However, in the event that the MOU approach ~~is~~was not successful, staff ~~will~~was directed to report back to the Board and recommend ~~consideration~~of an airport ISR for the Board's consideration.

## A. Airports MOU Working Group Activities

Following the May 2018 Board direction, South Coast AQMD established a new Airports MOU working group for the purpose of developing MOUs with individual commercial airports based on their respective AQIPs/~~AQIM~~AQIMs. The working group consisted of representatives from South Coast AQMD, five commercial airports, commercial airlines, the California Airports Council, CARB, U.S. Environmental Protection Agency (U.S. EPA), environmental organizations, freight industries, and other stakeholders. All five commercial airports concurred with the MOU approach and committed to develop individual MOUs with South Coast AQMD based on their respective AQIPs/~~AQIM~~AQIMs. Since the establishment of the working group, South Coast AQMD staff has conducted four working group meetings, which are summarized below. During this process, South Coast AQMD staff communicated regularly with airport representatives and their consultants to provide technical support on emission calculation methodologies for ~~base~~baseline and future years' emissions inventories, review preliminary emission inventory data, review draft AQIPs/AQIMs and proposed strategies, and develop draft MOUs.

During ~~the first~~ Airports MOU Working Group meeting #1, ~~held on February 28, 2019,~~<sup>3</sup> group members discussed the framework and key principles of the MOU, the process of the MOU development, and the specific commitments required by the airports and South Coast AQMD to develop and implement the MOUs. The working group members were advised on the tight timeline for MOU development to accommodate South Coast AQMD's December 2019 deadline to address Further Deployment of Cleaner Technology measures (Section 182(e)(5) measures) included in the 1997 8-hour ozone attainment strategy, ~~by the end of 2019.~~ Staff clarified that airports would develop their own respective AQIPs/~~AQIM~~AQIMs, which would represent the airports' best efforts to develop programs and strategies for reducing emissions from airport operations based on their existing authority over non-aircraft mobile source emissions. The AQIP/AQIM would then be used as the basis for the MOUs between South Coast AQMD and the airports. All five commercial airports confirmed their commitment to develop their own AQIPs/~~AQIM~~AQIMs and their willingness to enter into MOUs with South Coast AQMD. California Airports Council provided updates on the development of AQIPs/~~AQIM~~AQIMs on behalf of the airports. Staff discussed the U.S. EPA's integrity elements (i.e., emission reductions must quantifiable, permanent, surplus, and enforceable) and other requirements for emission reductions from AQIP/AQIM measures to be eligible for SIP credits. Staff also offered technical

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<sup>2</sup> *Potential Strategies for Facility-Based Mobile Source Measures Adopted in 2016 AQMP* (<http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2018/2018-may4-032.pdf?sfvrsn=2>)

<sup>3</sup> Held February 28, 2019.

assistance to the airports in their development of emissions inventories and methodologies to estimate emission reduction benefits.

At the second Airports MOU working Group meeting #2, held on May 8, 2019,<sup>4</sup> staff provided an update on the MOU development, reiterating that the AQIPs/~~AQIMA~~AQIMs would serve as the basis for the MOUs and that staff would provide technical assistance in the quantification of emissions benefits for the purpose of obtaining SIP credits. Staff requested that the airports provide detailed emissions inventories for all non-aircraft mobile source emissions associated with airport operations that are under direct or indirect airport control. These sources include, but are not limited to, ground support equipment (GSE), trucks, off-road equipment/vehicles, and on-road vehicles (e.g., shuttles, buses, passenger vehicles). The truck category includes cargo trucks, delivery, and utility/service trucks. Inclusion of aircraft emissions in the ~~AQIP/AQIMA~~AQIPs/AQIMs was mentioned as an option that airports could include at their discretion. For all AQIP/AQIM emission sources, the emissions inventories would include the 2017 baseline, as well as 2023 and 2031 future milestone years. For the future years, staff requested that airports provide business as usual (BAU) and AQIP/AQIM emissions forecasts. The latter was meant to reflect emission reductions due to the implementation of the AQIP/AQIM measures. Staff also discussed the responsibilities of the airports and South Coast AQMD under the MOUs. Representatives from each of the commercial airports presented their preliminary AQIP/AQIM measures under development, and their schedule and public process for AQIP/AQIM/MOU adoption by their respective airport authority consistent with South Coast AQMD's schedule for a public hearing in late 2019.

The third Airports MOU Working Group meeting #3, held on July 18, 2019,<sup>5</sup> focused primarily on the presentations made by airport representatives regarding more details on the development of their AQIPs/~~AQIMA~~AQIMs. The presentations were largely focused on the proposed AQIP/AQIM measures and initiatives including preliminary targets being considered by the airports. Staff provided suggestions and comments on the draft AQIPs/~~AQIMA~~AQIMs and encouraged airports to consider stringent performance targets for all non-aircraft sources ~~which~~that were technically feasible and cost-effective through airport programs (e.g., requirements, incentives). The airports re-iterated their commitments to further refine their draft AQIPs/~~AQIMA~~AQIMs and also work with South Coast AQMD on developing draft MOUs through both the airport and South Coast AQMD's public processes.

~~The Airports MOU Working Group meeting #4 will be held on October 15, 2019. South Coast AQMD staff will also conduct~~The fourth Airports MOU Working Group meeting was held on October 15, 2019. At this meeting, staff presented the following items: draft AQIPs/AQIMs prepared by the airports, draft MOUs developed by South Coast AQMD and the airports, specific AQIP/AQIM measures with potential SIP creditable emissions reductions included in the MOUs, and potential SIP creditable emission reductions for MOU measures in 2023 and 2031, which represents South Coast AQMD's enforceable commitment. Each airport also provided the timeline for the MOU adoption according to its own public process. In addition, the airports' annual reporting requirements for GSE MOU measures, including the annual operating data and information on replaced GSE, were discussed. South Coast AQMD staff also conducted a public

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<sup>4</sup> Held May 8, 2019.

<sup>5</sup> Held July 18, 2019.



consultation meeting on October 10, 2019 at the South Coast AQMD headquarters. Responses to the comments received ~~will be~~ incorporated into the staff report. Additional changes to the GSE MOU measures on regarding the annual operating data and information on GSE being retired, sold, or relocated within the Basin were identified made based on comments received at the working group meeting and the public consultation meeting (refer to draft MOUs in Appendix A). The airport authorities will consider approval of the Draft MOUs with South Coast AQMD in October and November 2019. The South Coast AQMD Governing Board will consider approval of the FBMSM for Commercial Airports at its December 6, 2019 meeting.

## **B. Regulatory Background**

This section provides a brief summary of the existing and proposed CARB and South Coast AQMD regulations affecting non-aircraft on-road and off-road mobile emission sources related to airport operations. In order for AQIP/AQIM emission reductions to be SIP creditable, these reductions have to be surplus to existing regulations.

### **South Coast AQMD's Fleet Rules**

South Coast AQMD's fleet rules apply to several vehicle categories operating at airports. Rule 1191, Clean On-Road Light- and Medium-Duty Public Fleet Vehicles, applies to all state and local government agencies located in the South Coast AQMD's jurisdiction, including- state, regional, county, and city government departments and agencies, and any special districts such as water, air, sanitation, transit, and school districts, with 15 or more non-exempt light-duty vehicles. This regulation requires that these entities acquire low emission gasoline or ~~an~~ alternative fuel vehicles when procuring new vehicles. Rule 1196, Clean On-Road Heavy-Duty Public Fleet Vehicles, is a similar regulation that applies to on-road heavy-duty vehicles with a gross vehicle weight of at least 14,000 pounds. It requires all applicable government agencies and special districts with fleets of 15 or more vehicles (including commercial airports), to acquire a gasoline, dual-fuel or alternative fueled engine or vehicle when purchasing or leasing a new vehicle. Airports and operators must also comply with Rule 1194, Commercial Airport Ground Access, which requires all public ~~and private~~ fleets providing passenger transportation services out of commercial airports to acquire low emission or alternative-fueled vehicles. This rule applies to passenger cars, light-duty trucks, and medium- and heavy-duty transit vehicle fleets of 15 or more vehicles. Passenger shuttle buses and taxi cabs under a contract or exclusive franchise serving airports must comply with this rule as well.

### **CARB GSE MOU**

In 2002, CARB executed an MOU with commercial airlines and cargo operators in the Basin for Ground Support Equipment (GSE). GSE is utilized for various functions at airports such as refueling aircraft, transporting cargo and luggage, and providing maintenance. The main objectives of the 2002 MOU were to have airlines meet a 2.65 g/bhp-hr hydrocarbon plus NOx performance target, convert at least 30% of the aggregate GSE fleet to electric, have at least 45% of new GSE purchases be electric, and reduce diesel GSE emissions by installing particle filters. The date to achieve these objectives was December 31, 2010. However, the MOU was terminated in 2006 because CARB's statewide regulations addressed many aspects of the GSE MOU.



### **CARB In-Use Off-Road Diesel-Fueled Fleets Regulation**

CARB requires emission reductions from existing off-road diesel-fueled vehicles through its statewide In-Use Off-Road Diesel-Fueled Fleets Regulation. The regulation applies to all off-road diesel vehicles with engines greater than 25 horsepower including diesel-powered GSE and other diesel off-road equipment and vehicles operated at the airports. The regulation imposes limits on idling, restricts the addition of older vehicles to fleets, and requires fleets to retire, replace or repower older engines to achieve progressively lower average emission rates, or comply with the Best Available Control Technology (BACT) requirements. This rule requires mandatory reporting of applicable equipment to CARB through the Diesel Off-road On-line Reporting System (DOORS).<sup>6</sup>

### **CARB On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation**

CARB's regulation requires emission controls and replacements for existing diesel trucks and buses through its statewide On-Road Heavy-Duty Diesel Vehicles (In-Use) Regulation, commonly referred to as the Truck and Bus Regulation. Heavy-duty vehicles with a gross vehicle weight greater than 14,000 pounds are required to be retrofitted with diesel particulate filters based on truck model years and according to specified schedules. In addition, replacement of older heavy-duty vehicles is mandated based on a tiered schedule that began in 2015. By 2023, nearly all trucks and buses will be required to have model year 2010 engines or newer.

### **CARB Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation**

CARB's LSI regulation applies to off-road LSI engine forklifts, sweepers/scrubbers, industrial tow tractors, and airport ground support equipment operated within the State of California. Additionally, it applies only to vehicles with engines of at least 25 horsepower and 1.0 liter displacement that are part of fleets of four vehicles or more. The regulation requires that applicable fleets achieve specific fleet average emission levels (FAELs) for hydrocarbons and NOx. These standards became more stringent over time until reaching the lowest regulated FAEL in 2013. The regulation also mandates reporting of applicable equipment to CARB through DOORS.

### **CARB Zero-Emission Airport Shuttle Regulation**

CARB's Zero-Emission Airport Shuttle Regulation, adopted by the CARB Governing Board in June 2019, promotes the use of zero-emission ground transportation to and from airports in California. The regulation requires that at least 33%, 66%, and 100% of airport shuttle fleets be zero-emission vehicles by December 31, 2027, 2031 and 2035, respectively. It also requires fleet owners to report fleet information annually starting in 2022 and to have zero-emission certificates for 2026 and later model year vehicles.

### **CARB's Proposed Zero-Emission Airport Ground Support Equipment**

CARB is currently in the process of developing a zero-emission measure for GSE at airports in California. The proposed regulation is intended to advance GSE conversion to zero-emission technologies while accelerating the goals and requirements provided in the LSI Engine Fleet Requirements Regulation. CARB staff has is considering a preliminary target of 100% zero-

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<sup>6</sup> Available at [https://ssl.arb.ca.gov/ssldoors/doors\\_reporting/doors\\_login.html](https://ssl.arb.ca.gov/ssldoors/doors_reporting/doors_login.html)

emission GSE by 2032 ~~has been proposed~~. The proposed regulation is scheduled for Board consideration in late 2020.

### C. U.S. EPA's Requirements for SIP Credits

In order for emission reductions from the ~~MOUs and AQIPs/AQIMs~~ measures in the MOUs to be SIP creditable, which means the reductions can be relied upon in the attainment demonstration, (i.e., ~~allowing for the reductions to be counted toward~~ ~~towards attainment in the attainment demonstration~~), these reductions need to meet the U.S. EPA's guidelines. These guidelines include requirements regarding U.S. EPA's integrity elements, federally enforceable backstop commitments, technical support, funding, legal authority, public disclosure, and provisions to assess progress. Chapter 4 provides details on how these requirements are met for the AQIP/AQIM measures specified in the MOUs. The U.S. EPA's guidelines are briefly discussed below:

1. U.S. EPA's Integrity Elements – For emission reductions resulting from AQIP/AQIM measures to meet the Integrity Elements, they must be surplus, permanent, quantifiable, and enforceable. These four elements are briefly explained below.
  - i. Surplus  
Emission reductions are surplus if they are not otherwise required by or assumed in a SIP-related program (e.g., an attainment or reasonable further progress plan), any other adopted State, ~~federal~~ or local air quality regulation programs, a consent decree, or a federal rule designed to reduce emissions of a criteria pollutant or its precursors.
  - ii. Permanent  
Emission reductions are permanent if the reductions occur throughout the term stated in the airports' MOUs. The MOUs' terms are based on the 8-hour ozone National Ambient Air Quality Standards attainment dates of 2023 and 2031. Therefore, the emission reductions must continue through 2031.
  - iii. Quantifiable  
Emission reductions are quantifiable if they can be measured and supported by acceptable operating and technical data provided by the airports. The quantification must use well-established and publicly available calculation methods, including approved emission factors.
  - iv. Enforceable  
The emission reductions are enforceable if they are independently verifiable, program violations are defined, and if emission-related information is publicly available. The airports will be responsible for having specific procedures and mechanisms to ensure enforcement and implementation of the emission reduction measures identified in the MOUs.

2. Federal Enforceability

The enforceable commitment must include: (1) a commitment to monitor, assess, and regularly report on emission reductions achieved; and (2) a commitment to adopt and submit substitute measures to the U.S. EPA by specific dates if necessary to remedy any emission reduction shortfalls.

3. Technical Support

To explain how the emission reductions are translated into SIP credits and applied toward the attainment demonstration, documentation and technical analysis must be provided. This documentation should include a description of the assumptions used in estimating and tracking emissions and emissions reductions from affected sources. The level of information in the documentation should be sufficiently detailed so that the public can review and repeat the quantification of the emission benefits.

4. Funding

In the case that an incentive funding program is utilized to achieve emission reductions, adequate funding for the project needs to be available to show that the funds are committed already or are reasonably expected to be available to generate committed reductions.

5. Legal Authority to Administer the Program

In the case of incentive programs, the legal authority to administer these programs needs to be identified by South Coast AQMD, or the implementing authority.

6. Public Disclosure and Tracking Results

The emission reductions data and other pertinent information related to the MOU measures (i.e., emissions inventory, emission reduction benefits, and implementation of measures) must be fully accessible to the public and U.S. EPA in accordance with the requirements of CAA section 114 and U.S. EPA's implementing regulations in 40 CFR 2.301.

Chapter 2 provides a summary of the draft AQIPs/~~AQIM~~AQIMs developed by five commercial airports as part of this MOU process. In Chapter 3, a summary of the MOUs between South Coast AQMD and the five commercial airports is provided including the AQIP/AQIM measures for each airport that are potentially eligible for SIP credits. Chapter 4 presents the proposed SIP creditable emission reductions (quantified by South Coast AQMD staff) associated with the implementation of the AQIP/AQIM measures in the MOUs including South Coast AQMD's enforceable commitments and a demonstration of how the emission reductions from these measures satisfy U.S. EPA's requirements. Appendix A includes the ~~draft AQIPs prepared by the five commercial airports.~~ Appendix B includes the draft MOUs between the South Coast AQMD and the five commercial airports. Appendix ~~C~~B includes the draft SIP credit calculation methodology. The airports AQIPs/AQIMs are posted on South Coast AQMD's website at <http://www.aqmd.gov/airportsmous>.

## **Chapter 2: Air Quality Improvement Plans/Measures**

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Introduction

Los Angeles International Airport (LAX) AQIM

John Wayne Airport (JWA) AQIP

Long Beach Airport (LGB) AQIP

Ontario Airport (ONT) AQIP

Burbank Airport (BUR) AQIP

## Introduction

As part of the MOU process, each airport has developed its own Air Quality Improvement Plan (AQIP) or Air Quality Improvement Measures (AQIM). The AQIPs/AQIMs are the airports' comprehensive plans to reduce emissions from non-aircraft mobile sources related to airport operations. Specific measures and initiatives for the applicable sources are identified by each airport and included in the airports' AQIPs/AQIMs. The distinction between measures and initiatives varies among the airports. In general, a measure represents a program in which the airport ~~commits~~agrees to a well-defined course of action with known emission reductions, while an initiative represents an objective that the airport intends to pursue, but the emission reductions are not readily quantifiable.

The AQIPs/~~AQIM~~AQIMs include the 2017 baseline emissions as well as emissions forecasts in 2023 and 2031 under business as usual (BAU) and AQIP/AQIM implementation scenarios. The emission reduction benefits for the AQIP/AQIM measures presented in this chapter are estimates provided by the airports based on the difference between the BAU and AQIP/AQIM implementation scenarios. Although the airports have provided these estimated benefits, they are only committing to achieve the performance targets associated with these measures. Some of the measures do not have quantified emission reductions because they are either not well defined or they only include general goals or guidelines in lieu of specific performance targets.

The AQIPs/~~AQIM~~AQIMs also include implementation mechanisms for the measures and initiatives, which vary depending on the type of measure/initiative. For example, GSE measures establish airport-wide performance targets ~~which would to~~ be achieved by GSE operators and tenants. Other measures affect vehicles or equipment ~~which that~~ are entirely under the airport's authority. An incentive-based approach is also included in one of the AQIPs/AQIM.

This chapter provides summaries of the individual AQIPs or AQIMs including a brief description of each airport, baseline and BAU emissions inventories ~~and emission benefits, and,~~ a brief overview of the AQIP/AQIM measures, estimated emission benefits and AQIP/AQIM measures that were determined by South Coast AQMD to be eligible for SIP creditable (i.e., emissions for the source category covered by ~~in~~ the AQIP/AQIM measures were specifically identified in the SIP inventory and surplus reductions for the measures were quantifiable). The ~~draft~~ AQIPs/AQIMs for the five commercial airports are ~~included in Appendix A of this staff report~~ provided on South Coast AQMD's website at <http://www.aqmd.gov/airportsmous>.

## A. Los Angeles International Airport (LAX) AQIM

### Background

Los Angeles International Airport (LAX), located at the western edge of the City of Los Angeles, is owned and operated by Los Angeles World Airports, which is a department of the City of Los Angeles. It is surrounded by Westchester, Inglewood, El Segundo, and the Pacific Ocean. LAX is the primary international airport serving the City and County of Los Angeles and surrounding metropolitan areas. LAX covers approximately 3,500 acres of land and has four runways.

LAX is the fourth busiest airport in the world and the second busiest in the United States. LAX served more than 87.5 million passengers in 2018 and currently offers an average of 700 daily nonstop flights to 109 cities in the U.S. and 1,281 weekly nonstop flights to 93 markets in 47 countries on 69 commercial airlines. LAX ranks 10th in the world in terms of air cargo, with more than 2.4 million tons of air cargo processed in 2018. In 2018, LAX handled over 700,000 total aircraft operations (i.e., landing and take-off).

## Baseline and BAU Emissions Inventories

The non-aircraft mobile source emissions inventory included in the AQIM is summarized by source category in Table 2.1 and covers GSE, ~~on-road mobile sources,~~ and traffic and parking ~~(including on-airport and regional emissions). The on-road category represents emissions from on-airport traffic from shuttles, buses, and trucks greater than 8,500 Gross Vehicle Weight Rating (GVWR). Traffic and parking represents emissions from the airport-owned fleet.~~

Table 2.1. Baseline and BAU Non-Aircraft Mobile Source Emissions for LAX by Source Category (NOx, tons per year)

Category	2017	2023	2031
GSE	184.93	150.69	121.31
<del>On-road (&gt; 8,500 GVWR)<sup>†</sup></del>	<del>50.69</del>	<del>49.56</del>	<del>46.00</del>
Traffic and Parking <sup>‡</sup>	<del>83.04</del> 1,402.63	<del>25.29</del> 497.80	<del>21.11</del> 389.50
Total	<del>351.56</del> 1,587.56	<del>195.54</del> 648.49	<del>158.42</del> 510.81

<sup>†</sup> This inventory is for vehicles subject to the LAX Alternative Fuel Vehicle Requirement Policy

<sup>‡</sup> This inventory is for LAWA-owned fleet vehicles only.

## List of AQIM Measures

LAX’s AQIM includes 11 measures affecting various source categories. A summary list of LAX’s AQIM measures is presented in Table 2.2. The measures are grouped into ~~three~~ two categories – GSE, ~~on-road mobile,~~ and traffic and parking. ~~The categories are consistent with the ones listed in the emissions inventory.~~

There are two measures that affect GSE. The first is based on the airport’s GSE Emissions Reduction Policy<sub>2</sub>, which establishes airport-wide GSE fleet average emission rates. ~~The other two measures are~~ measure is an incentive fund to accelerate the turnover of the GSE fleet to zero-emission equipment. ~~Nine~~ Five measures target the ~~traffic and parking on-road mobile source~~ category. The first measure is the LAX Alternative Fuel Vehicle Policy which requires that medium and heavy duty vehicles be 13 years old or newer in order to operate at LAX, and requires that vehicles meet LEV III or the optional low-NOx standard. The Alternative Fuel Vehicle Incentive Program creates a \$500,000 fund to incentivize the conversion of 20 heavy-duty trucks to zero or near zero-emissions. The Clean Fleet Program for LAWA’s Vehicle Fleet has three ~~programs~~ elements. For LAWA’s light duty fleet, 25% and 100% of LAWA’s sedan fleet must be electric by 2023 and 2031, respectively. LAWA’s medium and heavy-duty vehicles must meet the LAX Alternative Fuel Vehicle Policy requirements. Additionally, LAWA-owned shuttle buses will be converted to electric by the end of 2030.

Traffic and parking is covered by an additional four measures, which reduce vehicle miles traveled and vehicle idle time. These measures include improvements to public transit with connections to airport terminals, the installation of smart parking systems, and continuation of the LAX FlyAway and LAWA employee rideshare programs.

The corresponding emission benefits for the AQIM measures with quantifiable emission reductions in 2023 and 2031 are provided in Table 2.2. ~~The measures included in the MOU are also identified in this table.~~

Table 2.2. Summary of AQIM Measures and Initiatives for LAX

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIM Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	2031 AQIM Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	SIP creditable (Y/N)
M	GSE	Ground Support Equipment (GSE) Emissions Reduction Policy - Require that the GSE fleet achieve average emission factors for Hydrocarbon and NO <sub>x</sub> combined of 1.8 g/hp-hr (2023) and 1.0 g/hp-hr (2031)	56.17	86.16	Y
M	GSE	GSE Incentive Program - \$500,000 fund allocated to incentivize zero-emission GSE by 2023	NQ	NQ	N
M	Traffic and Parking <del>On-road</del>	LAX Alternative Fuel Vehicle Policy – Third party medium and heavy duty vehicles to utilize clean-fueled low-emission engines			N
M	Traffic and Parking <del>On-road</del>	LAX Alternative Fuel Vehicle Policy – LAWA-owned medium and heavy duty vehicles to utilize clean-fueled low-emission engines	6.98	9.18	N
I	Traffic and Parking <del>On-road</del>	Alternative Fuel Vehicle Incentive Program - \$500,000 fund allocated to incentivize the conversion of 20 heavy-duty vehicles to zero or near-zero emission trucks by 2021			Y
I	Traffic and Parking <del>On-road</del>	LAWA Clean Fleet Program - 20% (2023) and 100% (2031) ZE buses	0.35	1.73	Y

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIM Benefit (NOx, tpy) <sup>2</sup>	2031 AQIM Benefit (NOx, tpy) <sup>2</sup>	SIP creditable (Y/N)
I	Traffic and Parking <del>On-road</del>	LAWA Clean Fleet Program – 25% (2023) and 100% (2031) EV light-duty sedans-	0.01	0.03	N
I	Traffic and Parking	LAX Employee Rideshare Program - Continue operation of LAWA employee rideshare program	NQ	NQ	N
I	Traffic and Parking	LAX FlyAway Program – Continue operation	NQ	NQ	N
I	Traffic and Parking	LAX Landside Access Modernization Program - Public transit improvements including consolidated car rental, parking lot, and Metro connection	3.99	NQ	N
I	Traffic and Parking	Smart Parking Systems - Improve traffic flow and reduce idling in parking lots	0.24	0.21	N

<sup>1</sup> A measure (M) is an air quality improvement program that has been or will be adopted by LAWA’s Board of Airport Commissioners and typically applies to LAWA tenants or third parties. An initiative (I) is a statement of airport policy and typically applies to LAWA-owned or controlled operations.

<sup>2</sup> NOx emission reduction benefit as determined by the airport.  
NQ = Not Quantifiable

**B. John Wayne Airport (JWA) AQIP**

**Background**

John Wayne Airport (JWA), which is owned and operated by the County of Orange, is the only commercial service airport in Orange County, California. It is located approximately 35 miles southeast of Los Angeles, between the cities of Costa Mesa, Irvine, and Newport Beach. The service area includes more than three million people within the 34 cities and unincorporated areas of Orange County.

In 2018, JWA served approximately 10.7 million passengers. A maximum of 85 Class A Average Daily Departures (ADDs) are currently allowed under a 2014 settlement agreement with municipalities and local stakeholders. ~~An additional 2 ADDs are allocated to cargo flights between JWA, the City of Newport Beach and two community groups.~~ As part of the agreement, commercial aircraft activity at the Airport is limited to 10.8 million passengers (MAP), 11.8 and 12.2 ~~or 12.5~~, for the years 2020, 2025 and 2030, respectively. If the number of passengers served in any one calendar year, between January 1, 2021 through December 31, 2025, is within 5 percent of 11.8 MAP, then the annual passenger level will be permitted to increase to 12.5 MAP through December 31, 2030. The average daily departures (ADDs) for



Class A aircraft at the Airport are limited to 85 ADDs in 2020 and 95 ADDs in 2025 and 2030; and up to four cargo ADDs.

## Baseline and BAU Emissions Inventories

The non-aircraft mobile source emissions inventory included in the AQIP is summarized by source category in Table 2.3 and covers GSE, fuel trucks, on-road mobile and off-road mobile sources, and passenger traffic (only including on-airport emissions). The on-road category incorporates emissions related to airport shuttles, the airport-owned on-road fleet, and delivery trucks. The off-road category incorporates emissions related to the airport-owned off-road fleet and construction equipment. Passenger and employee traffic, which only considers on-airport roadways and parking lots, includes passenger vehicles, taxis, and ~~taxis~~ Transportation Network Companies.

Table 2.3. Baseline and BAU Non-Aircraft Mobile Source Emissions for John Wayne Airport by Source Category (NOx, tons per year)

Category	2017	2023	2031
GSE	22.28	15.07	9.98
Fuel Trucks	3.69	1.70	1.51
On-road	<del>0.3563</del> 0.3563	<del>0.2757</del> 0.2757	<del>0.2456</del> 0.2456
Off-road	0.13	0.06	0.03
Passenger <u>and Employee Traffic</u>	0.64	0.37	0.26
Total	<del>27.09</del> 27.37	<del>17.48</del> 17.77	<del>12.03</del> 12.34

## List of AQIP Measures

John Wayne Airport’s AQIP includes 13 measures and initiatives covering various source categories. A summary list of JWA’s AQIP measures and initiatives is presented in Table 2.4. The measures are grouped into five categories – GSE, fuel trucks, on-road mobile, off-road mobile, and passenger traffic. The categories are consistent with the ones listed in the emissions inventory.

The GSE measure ~~is based on the airport’s GSE policy, which~~ establishes airport-wide fleet average emission rates. Another measure calls for the installation of a jet fuel pipeline, which will eliminate routine commercial passenger jet fuel truck deliveries. Three other measures affect the on-road mobile source category. These measures involve shifting the time of concession deliveries to the night, phasing out the existing Compressed Natural Gas (CNG) shuttle fleet in favor of electric vehicles, and introducing a greater percentage of low emission or alternative fueled vehicles in the JWA on-road fleet. The Concessions Nighttime Delivery Policy will require, where feasible, that deliveries are performed from 11 pm to 6 am. The JWA Owned Vehicle Clean Fleet Policy will require that vehicles and equipment with greater than 50 HP engines be replaced with zero-emission new electric, alternative fuel, or hybrid vehicles; through a replacement process of existing vehicles. Finally, the Parking Shuttle Bus Electrification Measure will require that 50% ~~(six)~~ and 80% ~~(ten)~~ of the ~~twelve existing~~ CNG shuttle buses be replaced with electric buses in 2023 and 2031, respectively. JWA may choose to keep ~~two~~ CNG

shuttle buses, which would ~~only be used rarely as backup~~ for standby and emergency use.  
Currently, there are twelve CNG shuttle buses.

The bulk of the measures benefit passenger traffic emissions by reducing vehicle miles traveled and vehicle idling time. These involve smart parking, congestion reduction, re-matching Transportation Network Company (TNC) rides to increase efficiency, and facilitating public transit access. The Smart Parking Features measure requires the installation of smart parking features to facilitate traffic movement and reduce idling. The Congestion and Passenger Vehicle Reduction measure is already implemented and has resulted in congestion reduction with existing holding lots for ~~standby taxis and passenger pick-up~~ vehicles. The TNC Vehicle Miles Traveled Reduction Policy will designate pickup and drop-off locations and establish a re-matching system. Finally, the Passenger Transportation Mode Shifts ~~measure~~ initiative will assign a liaison to work with the Orange County Transportation Agency (OCTA) to increase public transit access. In addition, the feasibility of installing EV charging infrastructure for transit vehicles and JWA employee rideshare programs will be explored.

Table 2.4. Summary of AQIP Measures and Initiatives for John Wayne Airport

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIP Benefit (NOx, tpy) <sup>2</sup>	2031 AQIP Benefit (NOx, tpy) <sup>2</sup>	SIP creditable (Y/N)
M	GSE	Ground Support Equipment (GSE) - Require that the GSE fleet achieve average emission factors for NOx and HC combined of 1.7 (2023) and 0.9 (2031) g/bhp-hr	4.80	3.92	Y
M	Fuel trucks	Jet Fuel Delivery Trucks – Install a jet fuel pipeline by the end of 2019 and eliminate routine jet fuel delivery trucks by 2023	1.70	1.51	Y
M	On-road	Concessions Nighttime Delivery Policy - Require, where feasible, that deliveries are performed from 11 pm to 6 am	0.02	0.02	N
M	On-road	JWA Owned Vehicle Clean Fleet Policy - Replace vehicles with >50 HP engines with zero emission or hybrid vehicles	<del>0.03</del> <u>0.01</u>	<del>0.02</del> <u>0.008</u>	N
M	On-road	Parking Shuttle Bus Electrification - Replace 50% (2023) and 80% (2031) of existing 12 CNG buses with electric buses	0.16	<del>0.35</del> <u>0.29</u>	Y
M	Off-road	Clean Construction Program - Require that heavy-duty diesel-fueled construction equipment meets Tier 4 standards	NQ	NQ	N

Table 2.4. Summary of AQIP Measures and Initiatives for John Wayne Airport (cont'd)

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	2031 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	SIP creditable (Y/N)
<b>I</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	Taxi Clean Fleet Policy - Codify Rule 1194 into taxi operating agreements to encourage adoption of cleaner technologies	NQ	NQ	N
<b>M</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	Smart Parking Features - Install smart parking features to facilitate traffic movement and reduce idling	0.09	0.08	N
<b>I</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	Electric Vehicle Charging Infrastructure - Increase the number of EV chargers in passenger and employee parking lots	NQ	NQ	N
<b>I</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	Passenger Transportation Mode Shifts - Assign a liaison to work with OCTA to facilitate public transit access and explore feasibility of installing EV charging infrastructure for transit vehicles	NQ	NQ	N
<b>M</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	TNC Vehicle Miles Traveled Reduction Policy - Designate pickup/drop-off locations and establish a re-matching system	0.06	0.03	N
<b>I</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	Orange County Employee Rideshare Program - Continue implementation of OC Rideshare	<del>NQ</del> 0.003	<del>NQ</del> 0.002	N
<b>M</b>	Passenger <del>traffic</del> and <u>Employee Traffic</u>	Congestion and Passenger Vehicle Reduction - Reduce congestion with existing holding lots for standby vehicles (passenger and taxi)	0.03	0.02	N

<sup>1</sup> A measure (M) represents a program, policy, or procedure ~~which~~ that is anticipated to result in emission reductions. An initiative (I) represents a program, policy, or procedure with less certain emission reductions.

<sup>2</sup> This is the NO<sub>x</sub> emission reduction benefit as determined by the airport.

NQ = Not Quantifiable

## C. Long Beach Airport (LGB) AQIP

### Background

Long Beach Airport (LGB), which is owned and operated by the City of Long Beach, covers 1,166 acres and has five runways. It is one of the world's busiest airports in terms of general aviation activity. In 2018, LGB served 4 million passengers, with approximately 45 daily commercial departures. LGB operations are governed by a noise reduction ordinance that restricts certain activities such as engine run-ups, missed approaches, and hours of operation. The ordinance also limits the total number of commercial flights per day.

### Baseline and BAU Emissions Inventories

Table 2.5 presents the non-aircraft mobile source emissions inventory included in the AQIP by source category including GSE, ~~on-road mobile sources~~, construction, and traffic and parking (including on-airport and regional emissions). ~~The on-road category incorporates emissions related to the airport-owned fleet. Traffic and parking, which only considers on-airport traffic,~~ includes passenger cars, taxis, limos, shuttles, buses, and cargo trucks.

Table 2.5. Baseline and BAU Non-Aircraft Mobile Source Emissions for Long Beach Airport by Source Category (NOx, tons per year)

Category	2017	2023	2031
GSE	16.78	13.23	10.54
<del>On-road</del>	<del>0.07</del>	<del>0.09</del>	<del>0.13</del>
Construction	2.91	8.59	2.91
Traffic and Parking	<del>2.25</del> <u>51.80</u>	<del>1.04</del> <u>24.20</u>	<del>0.62</del> <u>14.99</u>
Total	<del>22.01</del> <u>71.49</u>	<del>22.95</del> <u>46.02</u>	<del>14.20</del> <u>28.44</u>

### List of AQIP Measures

Long Beach Airport's AQIP includes 7 measures and initiatives covering various source categories. A summary of LGB's measures is presented in Table 2.6. The measures are grouped into five categories – GSE, ~~on-road mobile sources~~, construction, traffic and parking, and other. ~~The categories are consistent with the ones listed in the emissions inventory in the previous section, except for~~ Measures and initiatives that did not fall into any defined category (e.g. solar panel installation, LEED building certification). ~~These~~ are labeled “other” in the summary table.

The GSE measure is based on the airport's GSE Emission Reduction Policy, which establishes airport-wide GSE fleet emission rates. One measure ~~impacts the on-road category, which~~ involves a transition of the airport-owned fleet to low emission or alternative fueled vehicles. The target is to achieve 100% light duty compliance by 2023, and 75% compliance for ~~and~~ 100% medium and and ~~to~~ heavy duty compliance by 2023 and 100% by 2031, ~~respectively~~. Construction activities are targeted in a measure that will ensure the use of only the cleanest off-road equipment (e.g., compliance with U.S. EPA Tier 4). Two additional measures impact passenger traffic and will include a TNC re-match system, with designated pickup and drop-off locations, and the possible expansion of EV charging capabilities. The “other” category measures require a

minimum of LEED Silver certification for new buildings and the installation of a solar panel array.

Table 2.6. Summary of AQIP Measures and Initiatives for Long Beach Airport

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	2031 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	SIP creditable (Y/N)
M	GSE	Ground Support Equipment Emissions Reduction Policy - Require that the GSE fleet achieve average emission factors for HC and NO <sub>x</sub> combined of 0.93 (2023) and 0.44 (2031) g/bhp-hr	0.93	4.06	Y
M	Construction	Clean Construction Policy - Tier 4 compliance phase-in with full implementation in 2031	NQ	NQ	N
M	On-road	Airport-Owned Clean Fleet Policy - Transition to SULEV or alternative fuel vehicles. Light duty 100% by 2023; medium and heavy duty 75% by 2023, 100% by 2031	0.03	0.06	N
I	Traffic and Parking	Electric Vehicle Charging Infrastructure Initiative - Assess feasibility of equipping 2% of parking spaces with EVSE	NQ	NQ	N
I	Traffic and Parking	TNC Rematch Initiative - Designate pickup/drop-off locations with re-match system	NQ	NQ	N
M	Other	Sustainable Design Policy - LEED Silver minimum for Terminal Improvements Project	NQ	NQ	N
M	Other	Renewable Energy Policy - Implement solar power system by the end of 2020	NQ	NQ	N

<sup>1</sup> A measure (M) represents a program in which the airport ~~commits~~agrees to a well-defined course of action. An initiative (I) represents an objective that the airport seeks to achieve but is less well-defined.

<sup>2</sup> This is the NO<sub>x</sub> emission reduction benefit as determined by the airport.

NQ = Not Quantifiable

## D. Ontario Airport (ONT) AQIP

### Background

Ontario Airport (ONT), which is owned and operated by the Ontario International Airport Authority, is located 35 miles east of Los Angeles in the Inland Empire and covers 1,700 acres. ONT’s service area includes a population of six million people in San Bernardino and Riverside counties, and portions of Orange and Los Angeles counties. In 2018, the airport served approximately 5.1 million passengers with 60 average daily departures. In addition to commercial passenger flights, ONT also serves cargo flights, with approximately 650,000 tons of freight processed annually.

### Baseline and BAU Emissions Inventories

Table 2.7 presents the non-aircraft mobile source emissions inventory included in the AQIP by source category including GSE, ~~on-road and off-road sources~~, fuel and crash trucks, airport-owned vehicles, delivery trucks, and passenger traffic (including on-airport and regional emissions). ~~Crash trucks are designed and equipped to rescue victims in an air crash. The on-road category incorporates emissions related to the airport-owned fleet and delivery trucks. The off-road category incorporates emissions related to fire department vehicles and the maintenance contractor fleet. The fuel truck category accounts for emissions from refueling trucks operating on the tarmac. The crash truck inventory was compiled based on input received from the Ontario Fire Department. The Ontario International Airport Authority (OIAA) and maintenance vehicle category includes emissions from on-road vehicles and maintenance trucks driven by airport staff or contractors. The delivery truck category accounts for emissions from trucks servicing the commercial terminals. Passenger traffic considers regional travel.~~

Table 2.7. Baseline and BAU Non-Aircraft Mobile Source Emissions for Ontario Airport by Source Category (NOx, tons per year)

Category	2017	2023	2031
GSE	103.02	91.10	79.84
Fuel Trucks	2.21	1.98	0.60
<u>Crash Trucks</u>	<u>7.45</u>	<u>7.45</u>	<u>7.45</u>
<del>On-road</del>	<del>0.80</del>	<del>0.36</del>	<del>0.40</del>
<del>Off-road</del>	<del>8.55</del>	<del>8.08</del>	<del>7.82</del>
<u>OIAA and Maintenance Vehicles</u>	<u>1.37</u>	<u>0.81</u>	<u>0.52</u>
<u>Delivery Trucks</u>	<u>0.72</u>	<u>0.30</u>	<u>0.35</u>
Passenger Traffic	39.20	20.96	12.74
Total	<del>153.78</del> <u>153.97</u>	<del>122.48</del> <u>122.60</u>	<del>101.40</del> <u>101.50</u>

### List of AQIP Measures

Ontario Airport’s AQIP includes 9 measures and initiatives covering various source categories. A summary of the measures is presented in Table 2.8. The measures are grouped into five categories – GSE, fuel trucks, on-road mobile, off-road mobile, passenger traffic, and other. ~~The~~

~~categories are consistent with the ones listed in the emissions inventory in the previous section, except for Measures and initiatives that did not fall into any defined category (e.g. solar panel installation, LEED building certification). These are labeled “other” in the summary table.~~

The GSE measure is based on the airport’s GSE Policy, which establishes stringent airport-wide fleet average emission rates. Three measures affect the off-road portion of the crash trucks, and OIAA and maintenance categories, and they involve crash truck replacement, reducing the size of the airport maintenance fleet, and ensuring the use of only the cleanest off-road equipment for construction (e.g., compliance with U.S. EPA Tier 4). The Crash Truck Replacement measure will require the replacement of 7 out of 12 vehicles in the fire department fleet including four crash trucks. The new crash trucks will be Tier 4 compliant. Two measures, the Airport Fleet Policy and the Sally Port, affect the on-road portion of the OIAA and maintenance category. These measures involve a transition of the airport-owned fleet to low emission or alternative fueled vehicles and the creation of a centralized delivery location in lieu of terminal loading docks, which is anticipated to reduce vehicle miles travelled. Another measure will reduce passenger traffic emissions by expanding EV charging capability. Finally, the CalGreen and LEED Silver Requirement ~~affects~~affect the “other” category and will require new buildings to meet green building standards.

Table 2.8. Summary of AQIP Measures and Initiatives for Ontario Airport

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	2031 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	SIP creditable (Y/N)
M	GSE	GSE Policy - Require that the GSE fleet achieve average emission factors for NO <sub>x</sub> are 2.20 g/hp-hr (2023) and 1.00 g/hp-hr (2031)	22.66	46.03	Y
M	Fuel Trucks	Fuel Truck Operations - Addition of a second jet fuel loading rack to reduce distance travelled	NQ	NQ	N
M	Off-road	Crash Truck Replacement - Replace 7 of 12 vehicles in the fire department fleet, including 4 crash trucks, with Tier 4 compliant engines	3.26	3.26	N
M	On-road	Airport Fleet Policy - Gradually replace vehicles with CNG, hybrid, or electric. This measure is coupled to the following measure	0.05	0.05	N
M	Off-road	Maintenance Truck Reduction - Reduce size of maintenance fleet from 28 to 7 vehicles			N



<b>M</b>	On-road	Sally Port - Centralized delivery location in lieu of terminal loading docks	NQ	NQ	N
<b>M</b>	Off-road	Construction Equipment Policy - Require, where feasible, that contractors use Tier 4 equipment	NQ	NQ	N
<b>I</b>	Other	CalGreen and LEED Silver Requirement - Ensure future buildings meet CALGreen Title 24 regulations	NQ	NQ	N
<b>I</b>	Passenger traffic	EV Infrastructure in Passenger Parking Lots - Expand EV charging availability	NQ	NQ	N

<sup>1</sup> A measure (M) contains concrete goals that result in quantifiable emission reductions. An initiative (I) is a policy that provides infrastructure, incentives, or other tools that promote emission reductions, but ~~does~~ does not contain specific requirements.

<sup>2</sup> This is the NOx emission reduction benefit as determined by the airport.

NQ = Not Quantifiable

## E. Burbank Airport (BUR) AQIP

### Background

Burbank Airport (BUR) is owned by the Burbank-Glendale-Pasadena Airport Authority and is operated by TBI Airport Management. It is located approximately 13 miles northwest of Los Angeles and occupies 555 acres with 14 passenger gates. In 2018, BUR served over 5 million passengers, processed 109 million pounds of cargo, and logged over 130,000 total aircraft operations.

### Baseline and BAU Emissions Inventories

Table 2.9 presents the non-aircraft mobile source emissions inventory included in the AQIP by source category including GSE, ~~airport fleet~~, construction, and ~~passenger traffic and parking (including on-airport and regional emissions)~~. ~~The airport fleet category incorporates airport-owned on-road and off-road fleets. Passenger Traffic and parking, which only considers on-airport roadways and parking lots,~~ accounts for passenger vehicles, taxis, TNC, and hotel and airport shuttle rides.

Table 2.9. Baseline and BAU Non-Aircraft Mobile Source Emissions for Burbank Airport by Source Category (NOx, tons per year)

Category	2017	2023	2031
<b>GSE</b>	17.85	17.46	16.72
<del><b>BUR Fleet</b></del>	<del>1.27</del>	<del>0.78</del>	<del>0.44</del>
<b>Construction</b>	2.37	7.76	2.37
<del><b>Passenger Traffic and Parking</b></del>	<del>0.54</del> <u>22.71</u>	<del>0.28</del> <u>11.84</u>	<del>0.18</del> <u>7.64</u>
<b>Total</b>	<del>22.03</del> <u>42.93</u>	<del>26.28</del> <u>37.06</u>	<del>19.71</del> <u>26.73</u>

## List of measures

Burbank Airport's AQIP includes 9 measures and initiatives covering various source categories. A summary of the measures is presented in Table 2.10. The measures are grouped into ~~five~~ four categories, which include GSE, construction, ~~on-road mobile~~, ~~off-road mobile~~, and passenger traffic, and other. ~~The categories are consistent with the ones listed in the emissions inventory in the previous section, except for~~ Measures and initiatives that did not fall into any defined category (e.g. solar panel installation, LEED building certification). ~~These~~ are labeled "other" in the summary table.

The GSE measure is based the airport's GSE Emissions Policy, which establishes airport-wide fleet average emission rates. One measure affects the construction category by ensuring the use of only the cleanest equipment. In addition to compliance with U.S. EPA Tier 4 for off-road sources, this measure requires the use of 2010 or newer model year engines for on-road construction vehicles. ~~One measure, (The Airport-Owned Clean Fleet policy,~~ benefits ~~the on-road category~~ traffic and parking and involves a transition of the airport-owned fleet to zero-emission vehicles, with 100% EV light duty and shuttle buses by 2023 and 2031, respectively. Four additional measures are aimed at ~~passenger traffic and parking~~: the Regional Intermodal Transportation Center, the Burbank Airport Employee Ride Share Policy, the Burbank-Metrolink Shuttle Connection Program, and the Electrical Charging Infrastructure Initiative. The transportation center currently offers consolidated parking, car rental, and access to public transit. The Burbank-Metrolink Shuttle Connection Program will promote connections to Metrolink trains in an effort to increase ridership. The Electrical Charging Infrastructure Initiative will aim to equip 5% of parking lot spaces with EV chargers by 2031. Finally, the "other" category is affected by two measures which involve an existing LEED Platinum certified hangar and the installation of a solar panel array.

Table 2.10. Summary of AQIP Measures and Initiatives for Burbank Airport

Measure Type <sup>1</sup>	Source Category	Description	2023 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	2031 AQIP Benefit (NO <sub>x</sub> , tpy) <sup>2</sup>	SIP creditable (Y/N)
M	GSE	Ground Support Equipment Emissions Policy - Require that the GSE fleet achieve average emission factors for <del>HC and NOx combined</del> of 1.9266 g/hp-hr (2023) and 0.8274 g/hp-hr (2031)	0.70	8.70	Y
M	Construction	Clean Construction Policy - Require U.S. EPA 2010 standard for on-road, Tier 4 for off-road. Use grid power where available	1.55	NQ	N
I	<del>Passenger</del> Traffic and parking	Airport-Owned Clean Fleet - 100% EV light-duty by 2023; medium and heavy-duty 50% EV by 2031; 50% (2023) and 100% (2031) EV buses	0.04	0.09	Y
I	<del>Passenger</del> Traffic and parking	Electrical Charging Infrastructure - 5% of parking spaces equipped by 2031	NQ	NQ	N
I	<del>Passenger</del> Traffic and parking	The Regional Intermodal Transportation Center - Consolidated parking, car rental, and access to public transit			N
I	<del>Passenger</del> Traffic and parking	Burbank-Metrolink Shuttle Connection Program – Promote Metrolink-Shuttle programs to increase participation	0.33	0.21	N
M	<del>Passenger</del> Traffic and parking	Burbank Airport Employee Ride Share Policy – Increase ridership by 3% (2023) and 6% (2031)	0.04	0.05	N
I	Other	Replacement Terminal Project - CalGreen/LEED Silver terminal construction. LEED Platinum hanger	NQ	NQ	N
I	Other	RITC Solar Facility - Install 2.2 MWh solar array	NQ	NQ	N

<sup>1</sup> A measure (M) represents a program in which the airport ~~commits~~ agrees to a well-defined course of action. An initiative (I) represents an objective that the airport seeks to achieve but is less well-defined.

<sup>2</sup> This is the NO<sub>x</sub> emission reduction benefit as determined by the airport.

NQ = Not Quantifiable

## **Chapter 3: Memorandum Memoranda of Understandings Understanding**

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Introduction

General MOU Sections Applicable to All Airports

Airport Specific MOU Sections

## Introduction

This chapter provides a summary of the main elements contained in the five MOUs between South Coast AQMD and each of the commercial airports. The MOUs represent voluntary agreements between South Coast AQMD and the airports to implement the AQIP/AQIM measures that are eligible for SIP credit, as identified in Chapter 2. The airports agree to implement the measures and annually report progress to South Coast AQMD. South Coast AQMD ~~then~~ commits to quantify the emission reductions, and prepare and submit the necessary documentation to U.S. EPA for inclusion of the emission reductions into the SIP. South Coast AQMD's commitment also includes an enforceable commitment to achieve the emission reductions associated with implementation of AQIP/AQIM measures in the MOUs.

### A. General MOU Sections Applicable to All Airports

The MOUs contain sections common to all airports, with the primary difference being the attached schedules, which will be discussed in detail later. This section will summarize the common elements including the purpose, term, and applicability of the MOUs, and airport and South Coast AQMD responsibilities.

#### MOU Purpose

The central objective of the AQIPs/AQIMs and MOUs is to help achieve ~~the~~ NO<sub>x</sub> reductions necessary for attainment of the 1997 and 2008 8-hour ozone standards in 2023 and 2031, respectively. The MOUs describe the process of how South Coast AQMD and the airports intend to quantify the emission reduction benefits associated with the implementation of AQIP/AQIM measures eligible for SIP credit. For each of these measures, the specific implementation, monitoring, and reporting mechanisms are presented in the schedules attached to the MOUs. The schedules provide technical details including metrics and performance targets, the timeline for implementation, and annual reporting by the airport to South Coast AQMD. The emission reductions achieved through the MOUs will be credited into the SIP to the extent that they satisfy U.S. EPA's integrity elements (i.e. quantifiable, surplus, permanent, and enforceable). In the event that the actual achieved reductions fall short of those defined in Chapter 4, South Coast AQMD will be solely responsible for ensuring that the remaining reductions are achieved.

#### MOU Term

The MOUs will remain in effect from the date of execution through December 31, 2032~~1~~, unless terminated earlier. South Coast AQMD or the airports may choose to terminate the MOU by providing written notice to the other party at least 90 days in advance of the specified termination date. South Coast AQMD and the airports ~~commit~~ agree to work together to resolve any issues and negotiate an updated MOU. However, if no agreement is reached, the MOU will terminate on the date specified in the initial notice.

#### MOU Applicability

The MOUs ~~address only~~ include the airports' specific AQIP/AQIM measures and initiatives that are deemed eligible for SIP credit and ~~do not supersede rules that are established by the~~

~~U.S. EPA or CARB, or legal obligations that the airports are subject to. Additionally, the MOUs explicitly exclude sources that are not identified as an emission source in the AQIP (e.g. all aircraft parts and systems)/AQIM.~~ Furthermore, the MOUs do not establish an emissions cap or any other facility-wide limit for any pollutant for the airports.

### **Airport Responsibilities**

The airports' implementation of the AQIP/AQIM measures is voluntary, thereby qualifying the airports for incentives through various programs (e.g., FAA Voluntary Aviation Low Emissions Program). Nevertheless, the airports ~~commit~~agree to implement the AQIP/AQIM measures eligible for SIP credit and monitor and report on the implementation of these measures. Details regarding the implementation, monitoring, and reporting of these measures are provided in the schedules attached to the MOUs. The schedules provide technical details including metrics and performance targets, the timeline for implementation, and annual reporting requirements. Where feasible, the airports agree to provide monetary or non-monetary incentives for mobile sources included in the AQIP/AQIM. Additionally, the airports agree to support grant funding efforts.

### **South Coast AQMD Responsibilities**

South Coast AQMD's responsibility is to quantify the emission reduction benefits associated with implementation of the AQIP/AQIM measures in the MOUs ~~which~~that are eligible for potential SIP credit. The quantification of the emission reductions is based on the AQIP/AQIM measures and their supporting calculations provided by the airports as well as the SIP credit calculation methodology developed by South Coast AQMD (Appendix ~~C~~B). South Coast AQMD will provide a SIP update to U.S. EPA for the prospective SIP credits for these measures for the 2023 and 2031 attainment years. South Coast AQMD will also track the implementation of these measures based on the annual reports provided by the airports as specified in the schedules and submit the necessary documentation to U.S. EPA. All ~~emission reduction~~emissions related data and other pertinent information will be made fully accessible to the public.

South Coast AQMD is also responsible for the federally enforceable commitments and any potential emission reduction shortfall associated with implementation of the AQIP/AQIM measures in the MOUs. In the event that the actual reductions from the AQIP/AQIM measures in the MOUs fall short of those defined in Chapter 4, South Coast AQMD will be solely responsible for ensuring that the remaining reductions are achieved by developing and providing substitute measures to U.S. EPA. In such events, South Coast AQMD will work together with the airports and other stakeholders through a public process to consider potential new or enhanced programs, or better efforts to quantify existing programs.

South Coast AQMD may pursue additional funding programs and incentives, at the Governing Board's discretion, in order to accelerate the turnover of equipment to clean technology.

**B. Airport Specific MOU Sections**

The schedules are documents attached to the MOU that describe the metrics and performance targets of the AQIP/AQIM measures, the timeline for implementation, and the details of the annual reports prepared by the airports. One schedule is attached for each AQIP/AQIM measure that is eligible for SIP credit. In general, the airports’ commitments include implementing the ~~measure~~ AQIP/AQIM measures in the MOUs and submitting annual progress reports by June 1 of each year, beginning in 2021. ~~In 2023 and 2031, South Coast AQMD will quantify the actual emission reductions and achieved each year based on the annual reports provided by the airports to track progress toward achieving the emission reductions SIP credits in 2023 and 2031. South Coast AQMD will also ensure that the relevant emissions data is accessible to the public and submitted to U.S. EPA. The schedules for all airports are summarized below.~~

**Los Angeles International Airport**

The MOU schedules/measures<sup>7</sup> for LAX are summarized in Table 3.1.

Table 3.1. MOU ~~Schedules~~ Measures for LAX

Schedule	Title and Program Description
1	Ground Support Equipment Emissions Reduction Policy - Require that all ground support equipment operators at LAX achieve fleet average NOx + Hydrocarbon emission factors of 1.8 and 1.0 grams per brake horsepower-hour in 2023 and 2031, respectively.
2	LAX Alternative Fuel Vehicle Incentive Program - Implement an incentive program that will distribute up to \$500,000 dollars in funding to applicants based on the “incremental cost” differential of the zero or near-zero emission vehicles as compared to conventionally-fueled equivalents with a Gross Vehicle Weight Rating (GVWR) of 14,001 pounds or greater by December 31, 2021.
3	Zero Emission Bus Program – Replace 20% and 100% of LAWA-owned and operated buses with zero-emission buses by 2023 and 2031, respectively.

Under ~~Schedule~~ Measure 1, Los Angeles World Airports (LAWA) ~~commits~~ agrees to implement the AQIM measure by working with airport tenants to achieve the GSE performance targets. LAWA will also submit annual progress reports including detailed equipment and emissions inventories, in addition to data on replaced GSE. The data will include equipment type, fuel type, engine model year, power rating, engine tier level, and annual activity data (~~specific activity data to be determined~~).

Under ~~Schedule~~ Measure 2, LAWA will submit annual progress reports that provide detailed information, accompanied by an emissions inventory, regarding the purchased zero or near-zero emission vehicles as well as ~~the details of data~~ for the replaced vehicles.

<sup>7</sup> For the LAX MOU, the term “MOU Measures” are used instead of “MOU Schedules”.

Under ~~Schedule~~ Measure 3, LAWA will submit annual reports that include a list of buses in operation with associated vehicle identification number, model year, power rating, gross vehicle weight rating, fuel type, odometer reading, and annual vehicle miles travelled. Additionally, a detailed emissions inventory and a list of replaced and replacement buses will be provided by LAWA.

### **John Wayne Airport**

The MOU schedules for John Wayne Airport are summarized in Table 3.2.

Table 3.2. MOU Schedules for John Wayne Airport

Schedule	Title and Program Description
1	Ground Support Equipment - Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 1.7 and 0.9 g/bhp-hr in 2023 and 2031, respectively.
2	Jet Fuel Delivery Trucks - Install a jet fuel pipeline by the end of 2019 and eliminate routine commercial aviation jet fuel delivery trucks by 2023.
3	Parking Shuttle Bus Electrification – Replace a minimum of 50% and 80% of airport employee and passenger remote parking compressed natural gas (CNG) shuttle buses with battery-electric shuttle buses by 2023 and 2031, respectively. The airport may continue to maintain standby shuttle buses for emergency use.

Under Schedule 1, the airport ~~commits~~ agrees to implement the AQIP measure by working with airport tenants to achieve the performance targets. The airport will also submit annual progress reports including detailed equipment and emissions inventories, in addition to data on replaced GSE. The equipment data will include equipment type, fuel type, engine model year, power rating, engine tier level, and annual activity data.

Under Schedule 2, the airport will provide annual reports that include the number of commercial passenger jet fuel delivery truck trips, an estimate of vehicle miles travelled, total amount of jet fuel delivered by fuel trucks and fuel pipeline, and a detailed emissions inventory.

Under Schedule 3, the airport will provide annual reports that include a list of ~~conventionally fueled~~ shuttle buses in operation with associated vehicle identification number, model year, power rating, gross vehicle weight rating, fuel type, odometer reading, and annual vehicle miles travelled. Additionally, a detailed emissions inventory and a list of replaced and replacement buses will be provided by the airport.



## Burbank Airport

The MOU schedules for Burbank Airport are summarized in Table 3.3.

Table 3.3. MOU Schedules for Burbank Airport

Schedule	Title and Program Description
1	Ground Support Equipment - Require that all ground support equipment associated with commercial operations achieve fleet average hydrocarbon plus NOx <del>combined</del> -emission factors of 1.9266 and 0.8274 g/bhp-hr in 2023 and 2031, respectively.
2	Zero-Emission Shuttle Bus Program – Replace 50% and 100% of BUR-owned and operated buses with electric buses by 2023 and 2031, respectively.

Under Schedule 1, the airport ~~commits~~agrees to implement the AQIP measure by working with airport tenants to achieve the performance targets. The airport will also submit annual progress reports including detailed equipment and emissions inventories, in addition to a list of replaced GSE. The equipment inventories must include equipment type, fuel type, engine model year, power rating, engine tier level, and annual activity data.

Under Schedule 2, the airport will provide annual reports that include a list of ~~conventionally fueled~~ shuttle buses in operation with associated vehicle identification number, model year, power rating, gross vehicle weight rating, fuel type, odometer reading, and annual vehicle miles travelled. ~~Additionally, a detailed emissions inventory and a list of replaced and replacement buses will be provided by the airport.~~

## Long Beach Airport

The MOU schedules for Long Beach Airport are summarized in Table 3.4.

Table 3.4. MOU Schedules for Long Beach Airport

Schedule	Title and Program Description
1	Ground Support Equipment - Require that all ground support equipment associated with commercial operations achieve fleet average NOx emission factors of 0.93 and 0.44 g/bhp-hr in 2023 and 2031, respectively.

Under Schedule 1, the airport ~~commits~~agrees to implement the AQIP measure by working with airport tenants to achieve the performance targets. The airport will also submit annual progress reports including detailed equipment and emissions inventories, in addition to data on replaced GSE. The equipment inventories must include equipment type, fuel type, engine model year, power rating, engine tier level, and annual activity data.

## Ontario Airport

The MOU schedule for Ontario Airport is summarized in Table 3.5.

Table 3.5. MOU Schedule for Ontario Airport

Schedule	Title and Program Description
1	Ground Support Equipment Emissions Reductions Policy - Require that all ground support equipment achieve fleet average NOx emission factors of 2.20 and 1.00 g/bhp-hr in 2023 and 2031, respectively.

Under Schedule 1, the airport ~~commits~~agrees to implement the AQIP measure by working with airport tenants to achieve the performance targets. The airport will also submit annual progress reports including detailed equipment and emissions inventories, in addition to data on replaced GSE. The equipment data will include equipment type, fuel type, engine model year, power rating, engine tier level, and annual activity data.

## **Chapter 4: Potential SIP Creditable Emission Reductions**

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Introduction

Enforceable Commitment

U.S. EPA's Integrity Element Demonstration

Technical Analyses

Funding

Legal Authority

Tracking actual emission reductions from MOU measures

Public disclosure

Reporting to U.S. EPA

## Introduction

In order for the emission reductions associated with implementation of the airports' AQIP/AQIM measures to be SIP creditable, South Coast AQMD is making an enforceable commitment to U.S. EPA to achieve these emissions reductions and to ~~make-up~~ remedy any potential shortfall. South Coast AQMD is making this commitment based on the airports' commitment to implement the AQIP/AQIM measures specified in their respective MOUs with South Coast AQMD. Although the airports' AQIPs/AQIM include a number of measures and initiatives with potential emission reduction benefits, South Coast AQMD's commitment only covers the reductions from AQIP/AQIM measures that are eligible for SIP credits (i.e., ~~meets~~ satisfy U.S. EPA's integrity elements requirements). This chapter includes South Coast AQMD's enforceable commitment and ~~provides a demonstration of~~ demonstrates how the emission reductions from these AQIP/AQIM measures satisfy the U.S. EPA's requirements.

### A. Enforceable Commitment

South Coast AQMD commits to achieve 0.52 and 0.38~~37~~ tons per day (tpd) of NO<sub>x</sub> reductions in 2023 and 2031, respectively, based on implementation of the airports' AQIP/AQIM measures that are potentially SIP creditable. In the event of any shortfall in the prospective emission reduction benefits in 2023 and 2031, South Coast AQMD commits to adopt and submit substitute measures to U.S. EPA to remedy the shortfall. South Coast AQMD will work together with the airports and other stakeholders to consider potential new or enhanced programs, or better efforts to quantify existing programs, in addressing any shortfalls.

Specifically, South Coast AQMD will do the following:

1. Beginning in 2021 and every year thereafter until 2032~~4~~, ~~monitor~~ track the airports' implementation of the airports' AQIP/AQIM measures with SIP creditable ~~emission reductions~~ emissions reductions that are specified in the MOUs with the Los Angeles International Airport, John Wayne Airport, Burbank Airport, Ontario International Airport, and Long Beach Airport based on the annual reports submitted by ~~the~~ these airports as specified in ~~each~~ the MOU with each ~~individual~~ airport;
2. By ~~December 31~~ January 1, 2023, achieve 0.52 tpd of NO<sub>x</sub> emission reductions from the 2023 baseline inventory, ~~as detailed~~ contained in the 2016 South Coast Air Quality Management Plan;
3. By ~~December 31~~ November 1<sup>st</sup> of 2023 ~~and each year beginning in 2021 and through 2024~~, report annually to U.S. EPA the following information ~~to EPA~~:
  - a. Identify the portion of NO<sub>x</sub> emission reductions achieved in 2022 and 2023 and all emissions-related information necessary to independently quantify emission reductions;
  - b. Document actions by the airports on implementation of the SIP creditable AQIP/AQIM measures in the MOUs; and
  - c. Determine whether the implementation of SIP creditable AQIP/AQIM measures will in the MOUs is projected to achieve the full 0.52 tpd of NO<sub>x</sub> emission reductions in 2023.

4. If U.S. EPA determines by February 1, 2022, that information provided by South Coast AQMD is insufficient to demonstrate that emission reductions required under Paragraph 2 will occur on schedule, adopt and submit to U.S. EPA, no later than November 1, 2022, substitute measures and/or rules through a public process that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2023.

4.5. ~~By December 31~~ January 1, 2031, achieve ~~0.3837~~ 0.3837 tpd of NOx reductions from the 2031 baseline inventory, ~~as detailed~~ contained in the 2016 South Coast Air Quality Management Plan;

5.6. ~~By December 31<sup>st</sup> of 2031~~ each year beginning in 2024 and through 2032, report annually to U.S. EPA the following information ~~to EPA~~:

- a. Identify the portion of NOx emission reductions achieved in 2030 and 2031 and all emissions-related information necessary to independently quantify emission reductions;
- b. Document actions by the airports on implementation of SIP creditable AQIP/AQIM measures in the MOUs; and
- c. Determine whether the implementation of SIP creditable AQIP/AQIM measures will in the MOUs is projected to achieve the full 0.3837 tpd of NOx reductions in 2031.

7. If U.S. EPA determines by February 1, 2030 that information provided by South Coast AQMD is insufficient to demonstrate that emission reductions required under Paragraph 5 will occur on schedule, adopt and submit to U.S. EPA, no later than November 1, 2030, substitute measures and/or rules through a public process that will achieve emission reductions addressing the shortfall as expeditiously as practicable and no later than January 1, 2031.

6.8. Make each annual demonstration report publicly available or available by request

~~By December 31<sup>st</sup> of 2024 and 2032, adopt and submit substitute measures to EPA in the event of any shortfall in 2023 and 2031 reductions, respectively.~~

The annual reporting by the airports to South Coast AQMD and the South Coast AQMD's periodic reporting to U.S. EPA ensure that the projected emissions reductions will be achieved.

Table 4.1 provides a list of the airports AQIP/AQIM measures in the MOUs eligible for SIP credit and their estimated emission reductions in 2023 and 2031. These prospective SIP creditable emission reductions were estimated by South Coast AQMD staff based on the performance targets and the emission benefits for these measures specified in the AQIPs/AQIM. The methodology to estimate the SIP creditable emission reductions is provided in Appendix CB.

**Table 4.1 List of Potentially SIP Creditable AQIP/AQIM Measures and Estimated Emission Reduction Benefits**

<b>Airport</b>	<b>AQIP/AQIM Measure Title and Description</b>	<b>2023 Reductions (NOx, tpy)</b>	<b>2031 Reductions (NOx, tpy)</b>
<b>LAX</b>	Ground Support Equipment Emissions Reduction Policy - Require that all ground support equipment operators at LAX achieve fleet average NOx + Hydrocarbon emission factors of 1.8 and 1.0 grams per brake horsepower-hour in 2023 and 2031, respectively.	146.71	98.94
<b>LAX</b>	LAX Alternative Fuel Vehicle Incentive Program - Implement an incentive program that will distribute up to \$500,000 dollars in funding to applicants based on the “incremental cost” differential of the zero or near-zero emission vehicles as compared to conventionally-fueled equivalents with a Gross Vehicle Weight Rating (GVWR) of 14,001 pounds or greater by December 31, 2021.	0.1739	0.2152
<b>LAX</b>	LAWA Clean Fleet Program – Replace 20% and 100% of LAWA-owned and operated buses with zero-emission buses by 2023 and 2031, respectively.	6.40	<del>12.50</del> 8.25
<b>BUR</b>	Ground Support Equipment - Require that all ground support equipment associated with commercial operations achieve fleet average hydrocarbon plus-NOx combined emission factors of 1.9266 and 0.8274 g/bhp-hr in 2023 and 2031, respectively.	10.19	6.07
<b>BUR</b>	Zero-Emission Shuttle Bus Program – Replace 50% and 100% of BUR-owned and operated buses with electric buses by 2023 and 2031, respectively.	0.11	0.4007
<b>ONT</b>	Ground Support Equipment Emissions Reductions Policy - Require that all ground support equipment achieve fleet average NOx emission factors of 2.20 and 1.00 g/bhp-hr in 2023 and 2031, respectively.	7.83	9.93
<b>LGB</b>	Ground Support Equipment - Require that all ground support equipment associated with commercial operations achieve fleet average NOx emission factors of 0.93 and 0.44 g/bhp-hr in 2023 and 2031, respectively.	0.92	0.49

**Table 4.1 List of Potentially SIP Creditable AQIP/AQIM Measures and Estimated Emission Reduction Benefits (cont'd)**

Airport	AQIP/AQIM Measure Title and Description	2023 Reductions (NOx, tpy)	2031 Reductions (NOx, tpy)
JWA	Ground Support Equipment - Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 1.7 and 0.9 g/bhp-hr in 2023 and 2031, respectively.	14.53	7.46
JWA	Jet Fuel Delivery Trucks - Install a jet fuel pipeline by the end of 2019 and eliminate routine commercial aviation jet fuel delivery trucks by 2023.	1.52	1.13
JWA	Parking Shuttle Bus Electrification – Replace a minimum of 50% and 80% of airport employee and passenger remote parking compressed natural gas (CNG) shuttle buses with battery-electric shuttle buses by 2023 and 2031, respectively.	1.34	<del>1.06</del> <u>0.64</u>
<b>Total</b>		190	<del>138</del> <u>134</u>

## **B. U.S. EPA’s Integrity Element Demonstration**

This subsection demonstrates how each AQIP/AQIM measure that is eligible for SIP credit satisfies the U.S. EPA’s four integrity element requirements (i.e., surplus, permanent, quantifiable, enforceable).

### **a. Ground Support Equipment (GSE) AQIP/AQIM measures**

All five airports include a GSE measure in their AQIPs/AQIMs. As such, the demonstration provided in this section regarding the compliance with the U.S. EPA’s integrity element requirements covers all five airports’ commitments to implement their respective GSE measure. Table 4.2 presents the GSE performance targets for the five airports as specified in their AQIPs/AQIM. The performance targets are defined in terms of an airport-wide fleet-average emission factor in g/bhp-hr unit. Some airports use Hydrocarbon (HC) and NOx combined emission factors while others use NOx emission factors. CARB’s In-Use Off-Road Diesel-Fueled Fleets regulation<sup>8</sup> and Large Spark-Ignition (LSI) Engine Fleet regulation<sup>9</sup> are also based on fleet average targets. The performance targets reflect the unique mix of the GSE fleet at each airport and the estimated emission reductions that can be achieved based on each airport’s best efforts.

<sup>8</sup> In-Use Off-Road Diesel-Fueled Fleets Regulation; <https://ww2.arb.ca.gov/our-work/programs/use-road-diesel-fueled-fleets-regulation>

<sup>9</sup> Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation; <https://ww3.arb.ca.gov/msprog/offroad/orspark/orspark.htm>

**Table 4.2 GSE Performance Targets of NOx Emission Factors by Airport  
(NOx or HC + NOx g/bhp-hr)**

<b>Airport</b>	<b>2023</b>	<b>2031</b>
<u>BUR</u> <sup>1</sup> <u>BUR</u>	1.9266	0.8274
<u>JWA</u> <sup>2</sup> <u>JWA</u>	1.7	0.9
<u>LAX</u> <sup>1</sup>	1.8	1.0
<u>LGB</u> <sup>1</sup> <u>LGB</u>	0.93	0.44
<u>ONT</u> <sup>2</sup> <u>ONT</u>	2.2	1.0

<sup>1</sup> The airport LAX uses a HC + NOx combined emission factor

<sup>2</sup> The airport uses a NOx emission factor

All the five airports' GSE measures meet the required integrity elements as described below.

i. Surplus

Emission reductions are considered surplus when they are not otherwise required by or assumed in the SIP, SIP-related programs requirements, any other state or local air quality programs, a consent decree, or a federal rule designed to reduce criteria pollutant or precursor emissions. Also, emission reductions are surplus only for the remaining useful life of the vehicle, engine, or equipment being replaced.

For the GSE measures, surplus emission reductions will be achieved through the replacement of existing equipment with cleaner equipment that are above and beyond the requirements in the existing regulations applicable to GSEs. The airports have established more stringent airport-wide GSE fleet-average performance targets than those required under the current regulations affecting GSE. These regulations are briefly described below:

CARB's In-Use Off-Road Diesel-Fueled Fleets regulation applies to all off-road diesel vehicles with engines rated at 25 horsepower or greater including diesel-powered GSEs and other diesel off-road equipment and vehicles operated at the airports. The regulation requires statewide fleets to retire or retrofit older engines to achieve progressively lower average emission rates of NOx (Table 3 and 4 of CARB's regulation).

<https://ww3.arb.ca.gov/msprog/ordiesel/documents/finalregorder-dec2011.pdf>

CARB's LSI regulation applies to airport ground support equipment and other off-road vehicles powered by spark-ignited engines (e.g., gasoline, LPG) rated at 25 horsepower or more and greater than 1.0 liter displacement. The regulation requires that applicable statewide fleets achieve specific fleet average emission levels (FAELs) for HC and NOx. These FAELs became more stringent over time until



reaching the final level in 2013 (Table 2 of CARB's regulation).  
<https://ww3.arb.ca.gov/msprog/offroad/orspark/largesparkappa-clean.pdf>

Since the proposed GSE fleet average targets in the airports' AQIP/AQIM measures are generally more stringent than those required the statewide fleet average requirements under these existing regulations and the reductions associated with these measures are not reflected in the SIP inventory, the emission reductions from these measures are considered surplus. To track and verify the actual emission reductions achieved, the airports will submit annual reports with detailed GSE equipment data and annual emissions inventories.

ii. Permanent

Emission reductions are considered permanent if they are achieved for the entire period that they are credited into the SIP. The emission reductions from the MOU measures are intended to help reach attainment of the 1997 and 2008 8-hour ozone National Ambient Air Quality Standards (NAAQS) in 2023 and 2031, respectively.

The emission reductions from the MOUs' GSE measures will be achieved by ~~the attainment deadlines of~~ 2023 and 2031. The airports have set their GSE fleet average performance targets to become effective by January 1, 2023 and January 1, 2031. Following the ~~MOU~~ MOUs' adoption by the airport authorities and the South Coast AQMD Governing Board, the airports will begin implementing their GSE measures by working with their tenants to ~~provide sufficient time to achieve the target reductions~~ performance targets in 2023 and 2031. The airports have ~~committed~~ agreed to monitor the progress and track the implementation of their respective GSE measures to ensure that the emission reductions from these measures are permanent. Beginning 2021, the airports will provide detailed information on all GSEs subject to the measure for each preceding year to South Coast AQMD along with emission calculations to track progress toward meeting their performance targets. ~~The airports will also provide data on existing equipment that will be replaced with cleaner equipment.~~ Achieving these targets will require a gradual transition to zero-emission GSE or the cleanest available GSE. The annual emissions inventories provided by the airports will represent the emissions for the remaining non-zero emission GSE and they will provide the basis for tracking progress toward achieving the projected SIP credits in 2023 and 2031, and demonstrating permanency of emission reductions. The airports will also provide data on the sale, retirement and relocation of existing equipment to other airports within the South Coast Air Basin as specified in the MOUs.

iii. Quantifiable

~~Emissions~~ Emission reductions should be calculated by a reliable and replicable methodology and all analyses must be substantiated and documented.

All five airports have developed a 2017 base year GSE emissions inventory based on specific GSE data obtained from their tenants for equipment operated in 2017 at the airports (i.e., equipment type, fuel type, engine size, model year, and annual operating data). The GSE data at each airport was used in conjunction with

established calculation methodology from CARB's OFFROAD model<sup>10</sup> to estimate emissions. CARB's OFFROAD model provides specific parameters such as GSE emission factors by model year, deterioration factors, load factors, and average activity levels (hours/year/unit). For the 2023 and 2031 emission inventory projections, the age distribution of the GSE equipment was assumed to be the same as the 2017 base year equipment age distribution. Emission reductions expected from the implementation of the GSE measures are provided in the technical appendix of each AQIP/AQIM. While the emissions inventory and emission reduction benefits provided in the AQIPs/AQIM reflect the most updated operational data at each airport, the SIP emission reduction credits need to be based on the emissions inventory submitted to U.S. EPA as part of the 2016 AQMP. Therefore, the emission reductions provided by the airports were converted to SIP inventory currencies for consistency purposes. The reconciliation of the airports' emissions data with the 2016 AQMP emissions inventory is provided in Appendix ~~CB~~ of this report.

As specified in the MOUs, airports have committed to monitor the progress of the implementation of their GSE measures and to submit annual reports to South Coast AQMD. The annual reports will include annual emission inventories including methodology and calculations as well as a detailed list of all GSE operating within their airports for each preceding year (i.e., equipment ID, equipment type, fuel type, engine model year, engine power rating, engine tier and ~~activity data~~ annual activity data). South Coast AQMD will quantify the actual reductions based on the SIP inventory currency. The SIP creditable emission reduction calculations and methodologies are provided in Appendix B of this report. As such, the emissions reductions associated with implementation of these measures are quantifiable.

iv. Enforceable

Emission reductions are enforceable if they are practically enforceable, independently verifiable, program violations are defined, and if emission-related information is publicly available. A mechanism needs to be established to monitor, assess and report on the implementation of measures and the emission reductions achieved from the measures.

Under the MOUs with South Coast AQMD, the airports have ~~committed~~ agreed to implement their MOU measures including the GSE ~~measure~~ measures. Each airport will implement its own mechanism to ensure that their GSE performance targets are achieved by working closely with their tenants. ~~For instance, LAWA will receive GSE fleet inventory information from their GSE operators by January 31 of each year. Based on the fleet inventory data, LAWA will calculate the GSE fleet average emission factor. If the average emission factor exceeds the GSE performance targets for LAX, the GSE operator will have to provide LAWA with an action plan within 30 days to comply with the LAX performance targets. In addition, LAWA will~~

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<sup>10</sup> CARB Mobile Source Emission Inventory Off-Road Documentation: <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-road-documentation-0>

~~require each operator to identify GSEs that are being replaced, the disposal method of retired equipment, and the specifications of the new GSEs to determine compliance with the GSE performance targets. If a GSE fleet does not meet the LAX emissions target, and the failure continues for more than 60 days after the GSE operator receives a notice of failure from LAWA, the GSE operator will be deemed in breach of the measure. In such event, LAWA would take remedial actions against the GSE operator to offset the failure to reduce emissions. Each airport will calculate the overall fleet average GSE emission factor based on data collected from their tenants and provide all pertinent emissions data and calculations to South Coast AQMD.~~

~~In addition, as~~As part of the GSE schedules in the MOUs, beginning in 2021, all the airports have ~~committed~~agreed to submit annual reports to the South Coast AQMD (by June of each year) for each preceding year including the following specific information, as specified in Attachment A of each MOU:

1. List of ground support equipment operating at the airport with the following information:
  - a. Equipment ID
  - b. Equipment type
  - c. Fuel type
  - d. Engine model year
  - e. Power rating (hp or kW)
  - f. Engine tier level (for diesel engines)
  - ~~g. Annual activity data (TBD)~~
  - 2g. Annual activity data for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable)
2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from the airport to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.
3. A detailed annual emission inventory for all GSE operating at the airport, including methodology and calculations.

The airports' annual reports, the emission reductions achieved every year, and other pertinent emissions information related to the implementation of the MOU GSE measures will be fully accessible to the public and the U.S. EPA through a publicly accessible data portal on the internet provided by South Coast AQMD. As such, the emissions calculations can be independently verified.

**b. LAWA's Alternative-Fuel Vehicle Incentive Program**

To assist with implementation of its LAX Alternative Fuel Vehicle Requirement Program, LAWA is offering an incentive program to replace conventionally-fueled heavy-duty vehicles with zero or near-zero emission vehicles. Under this program, \$500,000 of incentive funding is allocated to help offset the higher cost of zero and near-zero emission vehicles compared to conventional diesel-fueled vehicles. The funding amount is expected to incentivize the replacement of approximately 20 heavy-duty diesel trucks under this program. This measure is expected to achieve emission reductions by accelerating the natural fleet turnover from conventional diesel trucks to zero or near-zero emission trucks which are certified at 0.02 or lower g/bhp-hr of NOx. Emission reductions associated with the implementation of this measure are eligible for SIP credit as demonstrated below.

**i. Surplus**

Emission reductions from this measure are surplus because they are above and beyond the requirements under the existing regulations. The funding criteria of zero or near-zero emission vehicles required in this incentive measure is more stringent than the existing regulations for heavy-duty trucks, and therefore, the emission reductions that are expected to be achieved with the incentive funding are considered as surplus.

Currently, on-road heavy duty vehicles are subject to CARB's In-Use On Road Diesel-Fueled Vehicles Regulation<sup>11</sup>, commonly referred to as the Truck and Bus Regulation. The regulation requires that heavy-duty vehicles with a gross vehicle weight rating (GVWR) greater than 14,000 pounds be retrofitted with diesel particulate filters, with implementation schedules based on truck model years. In addition, the older heavy-duty vehicles are required to be replaced according to a tiered schedule that began in 2015. By 2023, nearly all trucks and buses will be required to have model year 2010 engines or newer. The 2010 model year engine standard is 0.2 g/bhp-hr of NOx.

LAWA's Alternative-Fuel Vehicle Incentive program achieves surplus emission reductions above and beyond the existing requirements by funding near-zero or zero-emission trucks which are certified by CARB at 0.02 or lower g/bhp-hr of NOx. LAWA is administering this program through its own application process.<sup>12</sup>

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<sup>11</sup> In-Use On Road Diesel-Fueled Vehicles regulation, commonly referred to as CARB Truck and Bus Regulation: <https://ww2.arb.ca.gov/our-work/programs/truck-and-bus-regulation>

<sup>12</sup> Zero & Near-Zero Emission Heavy-Duty Vehicle Incentive Program Application: <https://www.lawa.org/-/media/lawa-web/environment/files/zero-and-near-zero-emission-heavy-duty-vehicle-incentive-program-application.ashx?la=en&hash=10DC4556153DEE5AECED40074B39D41AA0066EEE>

- ii. **Permanent**  
LAWA is committed to complete the vehicle replacements through its incentive program before 2023. The emission reductions associated with these vehicle replacements are expected to be permanent as these new trucks continue their operation at LAWA as specified under the MOU. LAWA commits to submit annual reports to South Coast AQMD with specific operational activity data for these funded trucks. LAWA is also responsible for providing documentation on how the retired vehicles are scrapped or relocated outside of California. The annual reports will thus ensure the permanency of the emission reductions.
  
- iii. **Quantifiable**  
Emission reduction benefits from the implementation of this measure were estimated using the vehicle information provided by LAWA. The emission reductions were calculated based on the vehicle model year, CARB's 2023 requirement for trucks meeting the 2010 engine standard, and the emission certification level for near-zero trucks. Each vehicle selected for the funding award is required to submit the following information, as required by LAWA:
  - Existing vehicle that is being replaced:
    - Vehicle type
    - Vehicle make
    - Vehicle Gross Vehicle Weight Rating (GVWR)
    - Vehicle Model
    - Vehicle Model Year
    - Engine Model Year
    - Registered Owner
    - Department of Transportation Number (if interstate)
    - California Highway Patrol CA Number (if applicable)
    - Total Annual Miles Traveled: or gallons of fuel used
  
  - Replacement vehicle:
    - ARB Certification Executive Order (EO) Number
    - Propulsion System Engine Make
    - Propulsion System Engine Model Year
    - Propulsion System Engine Model
    - Fuel Type (Fuel Cell, Battery, etc.)
    - Engine Family

While detailed methodology to estimate emission reductions are provided in LAWA's AQIM, the above data will ensure that the actual emission reductions are quantified correctly under this measure. The SIP creditable emission reduction calculations and methodology and calculation is provided in Appendix CB of this report.

iv. Enforceable

Under the MOU with South Coast AQMD, LAWA is committed to implement this program through its Alternative Fuel Vehicle Incentive Program described above. LAWA's Board of Airport Commissioners approved the Incentive Program in December 2018. Beginning in 2021, LAWA will also submit annual reports to the South Coast AQMD (by June of each year) for each preceding year including emissions inventory reports and the following specific information for trucks participating in this program:

1. Zero or near-zero Vehicle Identification Number
2. Zero or near-zero vehicle model year
3. Zero or near-zero vehicle GVWR
4. Zero or near-zero vehicle engine model year
5. Zero or near-zero vehicle engine power rating
6. Zero or near-zero vehicle fuel type
7. Executive Order number for the zero or near-zero vehicle engine
8. Zero or near-zero vehicle annual VMT
9. List of, and information on, replaced vehicles (e.g., scrapped)
10. A detailed emission inventory for near-zero or zero-emission trucks, including methodology and calculations.

The annual reports, the emission reductions achieved every year, and other pertinent emissions information related to the implementation of this MOU measure will be fully accessible to the public and the U.S. EPA through a publicly accessible data portal on the internet provided by South Coast AQMD. As such, the emissions calculations can be independently verified.

c. **Bus Electrification measures**

Three (LAX, BUR, and JWA) of the five airports propose to replace existing buses with zero-emission (ZE) electric buses. LAWA will replace its bus fleet (currently 84 buses) that provides transportation for passengers between the aircrafts' gates in the airfield and the airport terminals and for guests traveling between airport parking and passenger terminals (20% in 2023 and 100% in 2031). BUR will replace its buses providing transportation for guests traveling between airport parking and the passenger terminal (50% in 2023 and 100% in 2031). JWA will replace ~~40~~ a minimum of 12-50% and 80% of Airport employee and passenger remote parking compressed natural gas (CNG) shuttle buses that operate for with battery-electric shuttle buses by 2023 and 2031, respectively. JWA airport currently has 12 CNG shuttle buses in operation to transfer passengers and airport employees between off-site parking lots and the airport terminal (6 in 2023 and 4 in 2031). The emissions calculations are based on conversion of these shuttle buses. All three measures target either existing diesel-fueled or CNG-fueled buses to be replaced with ZE electric buses. While the target fleets are different among three airports, the measures are similar for the purpose of demonstrating the integrity elements as described here.

i. Surplus

Emissions reductions from these measures are surplus because these reductions are above and beyond those required under existing regulations.

There are three existing regulations affecting buses operating at airports. First, CARB's In-Use On Road Diesel-Fueled Vehicles regulation requires the replacement of existing diesel trucks and buses with a GVWR greater than 14,000 pounds to be equivalent to the 2010 or newer engine model year exhaust emissions standards by 2023. Because the airports plan to replace their existing buses with electric zero-emission buses, the emission reductions above and beyond those achieved by compliance with the 2010 engine standard of 0.2 g/bhp-hr NOx would be considered surplus in 2023 and 2031.

Second, South Coast AQMD Rule 1194 requires airports and operators of ~~both public and private~~ fleets providing passenger transportation services out of commercial airports to acquire low emission or alternative-fueled vehicles. This rule applies to passenger cars, light-duty trucks, and medium- and heavy-duty transit vehicle fleets of 15 or more vehicles operated by the airport authority, ~~or any other public or private fleet operators that transport passengers from commercial airports.~~ Passenger or and private fleets under contract or exclusive franchise to the airport. These described passenger shuttle buses and taxi cabs serving airports must comply with this rule as well. The rule requires fleets to use low-emission or alternative fuel vehicles for new purchases when serving in and out of the airports. Because the airports plan to replace ~~its~~ their existing CNG shuttle buses with electric ZE buses, the resulting emission reductions would be surplus to the requirements of Rule 1194.

Third, CARB's Zero-Emission Shuttle Bus regulation<sup>13</sup>, adopted by the CARB Governing Board in June 2019, requires that at least 33%, 66%, and 100% of airport shuttle fleets be zero-emission vehicles by December 31, 2027, 2031 and 2035, respectively. It also requires fleet owners to report fleet information annually starting in 2022 and to have zero-emission certificates for 2026 and later model year vehicles. LAWA plans to replace 20% of LAWA-owned buses with ZE buses at LAX by 2023. BUR plans to replace 50% of its contracted buses with ZE buses by 2023. JWA plans to replace ~~40~~50% of its contracted CNG buses with JWA-owned ZE buses by 2023. Because the replacement requirement under CARB's regulation does not start until 2027, all replaced buses by the airports by 2023 will be surplus to the regulation. ~~By~~In 2031, ~~however,~~ only 34~~67~~% of the buses that LAX and BUR plan to replace will be surplus based on the ~~66~~33% zero-emission bus replacement requirement in ~~2031~~2027 under CARB's regulation. ~~For JWA plans to replace 80% of buses with ZE buses by 2031. Thus, 16%, six of the replacement ZE~~ten electric buses will still be surplus to the regulation in 2031.

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<sup>13</sup> CARB Zero-Emission Airport Shuttle regulation; <https://ww2.arb.ca.gov/our-work/programs/zero-emission-airport-shuttle>

ii. Permanent

All three airports have phase-in schedules for the deployment of ZE buses by January 1, 2023 and January 1, 2031 under their respective measures. Following the MOU adoption by the airport authorities and the South Coast AQMD Governing Board, the airports will begin implementing their respective bus electrification measure.

Beginning 2021, the airports will submit annual reports to South Coast AQMD that include detailed information on shuttle buses replaced for each preceding year along with emission calculations to track progress toward meeting the performance targets. In the annual reports, LAWA, BUR and JWA will also provide documentation regarding the existing operation of their buses to ensure that the emission reductions are permanent.

iii. Quantifiable

Emission reduction benefits are estimated using vehicle specific information for ZE shuttle buses (i.e., vehicle miles traveled per year) along with applicable emission factors from CARB's EMFAC model.<sup>14</sup>

Under the MOUs, both the three airports have committed to monitor the progress of the implementation of their respective zero-emission bus replacements and to submit annual reports to South Coast AQMD including a detailed annual emission inventory for each preceding year. The report will also include information on the calculations and methodology to further substantiate the emission reductions from the measure.

Further details for calculating the emission reductions are included in the technical support document portion of each airport's AQIP/AQIM. The SIP credit calculation methodology for these measures will be based on the VMTs for these ZE buses and the corresponding EMFAC emission factors as described in Appendix CB of this staff report.

iv. Enforceable

Under the MOUs with South Coast AQMD, LAWA, BUR, and JWA have committed/agreed to implement these measures. Beginning in 2021, LAWA, BUR and JWA are also committed to submit annual reports to the South Coast AQMD (by June of each year) for each preceding year including the following specific information for buses covered under these measures:

1. List of buses operating at the airport with the following information:
  - a. Vehicle Identification Number
  - b. Vehicle model year
  - c. GVWR
  - d. Engine model year
  - e. Engine power rating

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<sup>14</sup> <https://ww2.arb.ca.gov/our-work/programs/mobile-source-emissions-inventory/msei-modeling-tools>



- f. Vehicle fuel type
  - g. Odometer reading
  - h. Annual vehicle miles travelled
2. A detailed emission inventory for buses, including methodology and calculations.
  3. List of buses replaced during the reported year and above listed information on both replaced and replacement buses ~~including documentation for proof of scrapping or equipment or moved out of state.~~

The annual reports, the emission reductions achieved every year, and other pertinent emissions information related to the implementation of these MOU measures will be fully accessible to the public and the U.S. EPA through a publicly accessible data portal on the internet provided by South Coast AQMD. As such, the emissions calculations can be independently verified.

**d. JWA Jet Fuel Pipeline Installation measure**

JWA will install a new pipeline to transport jet fuel to a new storage tank at the airport facility by the end of 2019. This project eliminates routine commercial aviation jet fuel delivery trucks before 2023.

i. Surplus

Fuel delivery trucks are covered under CARB’s In-Use On Road Diesel-Fueled Vehicles regulation (described in previous sections), which requires that all existing trucks meet the 2010 model year engine standard by 2023. Therefore, since this measure eliminates emissions from jet fuel delivery trucks to the airport, the reductions above and beyond the existing regulation (i.e., compliance with the 2010 engine standard) are considered surplus.

ii. Permanent

JWA plans to complete the pipeline project by the end of 2019 and once constructed, the pipeline will ~~replace the delivery of~~eliminate routine commercial passenger jet fuel by delivery trucks ~~permanently~~.

Beginning 2021, JWA will submit annual reports to South Coast AQMD, for each preceding year, to document the implementation of this measure and the permanency of the emission reductions. The annual report will provide data on the existing routine and non-routine commercial ~~aviation~~passenger jet fuel delivery trucks (number of trucks trips, truck model year, and vehicle miles traveled), volume of fuel delivered by trucks, and an emissions inventory for trucks including methodology and calculations.

iii. Quantifiable

The new jet fuel pipeline will eliminate the emissions associated with the existing routine commercial passenger jet fuel delivery trucks. Emission reduction benefits resulting from the measure are estimated by using information provided by JWA on fuel delivery trucks and applying emission factors from CARB’s EMFAC model.

The annual reports provided by JWA will ensure that the emission reductions estimated from the eliminated truck delivery trips are real and quantifiable in subsequent years.

Further details for calculating the emission reductions are included in the technical support document portion of JWA's AQIP. The SIP credit calculation methodology for these measures will be based on the VMTs for these trucks and the corresponding EMFAC emission factors as described in Appendix ~~C~~B of this staff report.

iv. Enforceable

Under the MOU with South Coast AQMD, JWA is committed to implement the measure. Beginning in 2021, JWA is also committed to submit an annual report to the South Coast AQMD (by June of each year) for each preceding year including the following specific information for this measure:

1. Total number of routine and non-routine truck trips delivering jet fuel for commercial passenger aviation, and truck model years, if available.
2. Total amount of jet fuel delivered by trucks.
3. An estimate of total vehicle miles travelled.
4. A detailed emission inventory for fuel delivery trucks, including methodology and calculations.

~~The annual reports provided by JWA will include specific information that will enable and to independently verify emission reduction benefits. The information will also become part of the record keeping and will be maintained for public access throughout the MOU period.~~

The annual reports, the emission reductions achieved every year, and other pertinent emissions information related to the implementation of these MOU measures will be fully accessible to the public and the U.S. EPA through a publicly accessible data portal on the internet provided by South Coast AQMD. As such, the emissions calculations can be independently verified.

## C. Technical Analyses

The airports have provided emissions inventories for base year (2017) and two future milestone years (2023 and 2031) under the business-as-usual scenario and the MOU implementation scenarios. These inventories are included in the airports' AQIPs and AQIM. The South Coast AQMD has also provided the necessary documentation and technical analysis for estimating SIP related emission reduction benefits in Appendix ~~C~~B of this staff report. South Coast will make the annual reports submitted by the airports (beginning in 2021), emissions calculations and methodologies, and other pertinent emissions data publicly accessible.

## D. Funding

LAWA's Alternative-Fuel Vehicle Incentive Program is the only AQIP/AQIM measure that is based on incentive funding to implement the program. LAWA has allocated a total of \$500,000

for this incentive program, which has already been approved by the airport's authority. LAWA will be responsible for administering its own program.

### **E. Legal Authority**

Pursuant to Section 40702 of the California Health and Safety Code, South Coast AQMD "shall adopt rules and regulations and do such acts as may be necessary or proper to execute the powers and duties granted to, and imposed upon" South Coast AQMD. Moreover, Section 40701(f) of the California Health and Safety Code provides that a district shall have power to "cooperate and contract with any federal, state, or local governmental agencies, private industries, or civic groups necessary or proper to the accomplishment of the purposes of this division." Such acts that are necessary to attain the federal ozone NAAQS in 2023 and 2031 include entering into MOUs with the airport authorities to achieve emission reductions from non-aircraft related mobile sources at the airports.

### **F. Tracking actual emission reductions from MOU measures**

Beginning in 2021, the airports have ~~committed~~agreed to submit annual reports to South Coast AQMD on their eligible SIP creditable AQIP/AQIM measures in the MOUs. The annual reports will contain detailed information on the implementation of these measures including equipment and vehicle data (e.g., engine size, model year, annual operating data, etc.), annual emissions inventories along with methodologies and calculations, and information on ~~replaced~~existing equipment and vehicles ~~including~~(e.g., retired, sold, and relocated within South Coast Air Basin), where applicable, ~~documentation regarding proof of scrappage or equipment being moved out of state~~. The annual reports will be made available to the public by South Coast AQMD so any progress on emission reduction benefits toward the final ~~goal~~emission reduction targets can be calculated and validated by the public.

### **G. Public disclosure**

The South Coast AQMD will provide public access to all information related to the emission reductions associated with implementation of the ~~AQIP's~~AQIPs/AQIM's eligible SIP creditable measures in the MOUs. Also, the public will have access to the annual reports submitted by the airports to the South Coast AQMD, as described in the previous sections, ~~to~~independently verify emission calculations. The South Coast AQMD plans to post the annual reports within 30 days of ~~the~~ receipt for access by the public.

In order to ensure easy accessibility to the information, the South Coast AQMD will post the emission related documents on the South Coast AQMD website. ~~A new~~ under the existing "Airports MOU" topic page ~~will be created once the MOUs have been adopted by the airport authorities and the South Coast AQMD Governing Board and subsequently submitted to CARB for submittal to EPA. Also, there will be contact.~~ Contact information to address any further inquiries from the public regarding the posted information is also available on the page.

## H. Reporting to U.S. EPA

By June 1<sup>st</sup> of each year beginning in 2021 and through the MOU term ending in ~~2031~~2032, the airports will provide annual reports to South Coast AQMD on implementation of the eligible SIP creditable AQIP/AQIM measures identified in the MOUs. The annual reports will include detailed equipment/vehicle data and emission calculations to demonstrate progress toward meeting the performance targets in these measures. Based on information in the annual reports provided by the airports, South Coast AQMD will quantify the corresponding SIP creditable actual emission benefits achieved from implementation of the MOU measures and provide reports to U.S. EPA to document these reductions. South Coast AQMD's detailed reporting commitments to U.S. EPA are specified in Section A of this chapter.

~~For the 2023 emission reduction commitment (0.52 tpd), South Coast AQMD will report to EPA by December 31<sup>st</sup> of 2023 and 2024. For the 2031 emission reduction commitment (0.38), South Coast AQMD will report to EPA by December 31<sup>st</sup> of 2031 and 2032. The reports to EPA will identify the emission reductions achieved each year, document actions by the airports on implementation of the eligible SIP creditable AQIP/AQIM measures, and determine whether the implementation of the MOU measures will achieve the full NO<sub>x</sub> reductions in 2023 and 2031. Each demonstration report will be publicly available or available by request.~~

~~In the event of any potential shortfalls of emission reduction benefits, a process will be triggered to remediate the shortfall with the airports as described above. By December 31<sup>st</sup> of 2024 and 2032, South Coast AQMD will adopt and submit substitute measures to EPA in the event of any shortfall in 2023 and 2031 reductions, respectively.~~

## **Chapter 5: California Environmental Quality Act (CEQA) and Socioeconomic Assessment**

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CEQA Analysis

Socioeconomic Assessment

### **California Environmental Quality Act Analysis**

Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, has reviewed the proposed project 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 proposed project is comprised of voluntary agreements related to activities the airports have already agreed to implement as specified in five MOUs between the South Coast AQMD and five commercial airports, and South Coast AQMD’s enforceable commitment to U.S. EPA to backstop any emission reductions shortfall. The MOUs outline each airport’s AQIP or AQIM measures that are capable of achieving SIP creditable emission reductions from non-aircraft mobile sources related to airport operations. The act of voluntarily agreeing to enter into MOUs with the five airports, as well as quantifying emissions for the purpose of establishing an enforceable commitment and crediting the emission reductions into the SIP are administrative and procedural in nature. As explained in the next section “Summary of CEQA Analyses Conducted by Each Airport,” the MOUs will have no new physical impacts beyond the potential environmental impacts that were previously analyzed under CEQA for each of the five commercial airports AQIP or AQIM, as applicable. Thus, South Coast AQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed project 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) – Common Sense Exemption.

Further, as provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Additionally, because the proposed project is designed to further protect or enhance the environment by supporting the reduction of non-aircraft mobile source emissions at five commercial airports within South Coast AQMD’s jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment.

Finally, South Coast AQMD staff has determined that there is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA. A Notice of Exemption for each airport MOU has been prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption and is included in Attachment C of this Governing Board package. If the proposed project is approved, the Notices of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

### **Summary of CEQA Analyses Conducted by Each Airport**

Each airport conducted a CEQA analysis of the potential environmental impacts of incorporating selected measures from their AQIP or AQIM, as applicable, into their respective MOUs. The following background summary of each airport’s CEQA analysis has been provided for informational purposes.

### **Los Angeles International Airport**

The LAX AQIM consists of 11 measures and the LAX MOU incorporates the following three measures: 1) the ground support equipment emissions reduction policy; 2) the LAX alternative fuel vehicle incentive program; and 3) the zero emission bus program. The CEQA analysis conducted by the City of Los Angeles Department of Airports, as presented in the following ~~pending~~ record of adoption, concluded that the LAX MOU is exempt from CEQA<sup>15</sup>:

- “1. DETERMINE that this action is administratively exempt from the California Environmental Quality Act (CEQA) pursuant to Article II, Section 2.n of the Los Angeles City CEQA Guidelines.
2. General policy procedure making is administratively exempt from California Environmental Quality Act (CEQA) requirements pursuant to Article II, Section 2.n of the Los Angeles City CEQA Guidelines.”

The ~~proposed adoption of the~~ LAX MOU and the corresponding CEQA exemption determination ~~will be considered~~ was approved by the City of Los Angeles Department of Airports at the November 7, 2019 regular meeting of the Board of Airport Commissioners.

### **John Wayne Airport**

The JWA AQIP consists of 13 measures and initiatives and the JWA MOU incorporates the following three measures: 1) ground support equipment emission reduction policy; 2) jet fuel pipeline to replace delivery trucks; and 3) parking shuttle bus electrification. The County of Orange conducted multiple CEQA analyses for its various components of the JWA AQIP, as follows:

1. AQIP Measure “Jet Fuel Delivery Trucks” was previously analyzed in the Initial Study (No. CPP 2013-00087) and Mitigated Negative Declaration for the John Wayne Airport New Jet Fuel Pipeline and Tank Farm, which was adopted by the Director of Orange County Planning on May 8, 2014. Mitigation measures were made a condition of project approval and a Mitigation Monitoring and Reporting Program was also adopted for the project in May 2014<sup>16</sup>.
2. The remaining AQIP measures and initiatives were previously analyzed in the Final Environmental Impact Report (EIR) No. 617 for the John Wayne Airport Settlement Agreement Amendment which was certified by the Orange County Board of Supervisors on September 30, 2014. Mitigation measures were made a condition of project approval and a Mitigation Monitoring and Reporting Program was also adopted for the project. In particular, Mitigation Measure AQ/GHG-4 required the development of a Climate Action Plan and the JWA MOU includes emission

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<sup>15</sup> City of Los Angeles Department of Airports, Regular Meeting of the Board of Airport Commissioners, November 7, 2019. [https://lawa.granicus.com/GeneratedAgendaViewer.php?view\\_id=4&clip\\_id=557](https://lawa.granicus.com/GeneratedAgendaViewer.php?view_id=4&clip_id=557)

<sup>16</sup> County of Orange, Initial Study (No. CPP 2013-00087) and Mitigated Negative Declaration for the John Wayne Airport New Jet Fuel Pipeline and Tank Farm; [http://www.ocpublicworks.com/ds/planning/projects/2nd\\_district/2nd\\_district\\_archived/is\\_mnd\\_john\\_wayne\\_airport\\_new\\_jet\\_fuel\\_pipeline\\_and\\_tank\\_farm\\_and\\_appendices](http://www.ocpublicworks.com/ds/planning/projects/2nd_district/2nd_district_archived/is_mnd_john_wayne_airport_new_jet_fuel_pipeline_and_tank_farm_and_appendices).

reduction strategies that are consistent with and incorporated into this mitigation measure<sup>17</sup>.

The Orange County Board of Supervisors also noted that no substantial changes have been made to the projects previously analyzed in the Initial Study and Mitigated Negative Declaration for the John Wayne Airport New Jet Fuel Pipeline and Tank Farm, the Final EIR No. 617 for the John Wayne Airport Settlement Agreement Amendment, or to Mitigation Measure AQ/GHG-4. Further, no substantial changes have occurred in the circumstances under which the JWA MOU is being undertaken, and no new information of substantial importance to the projects previously analyzed in the Initial Study and Mitigated Negative Declaration for the John Wayne Airport New Jet Fuel Pipeline and Tank Farm, the Final Environmental Impact Report No. 617 for the John Wayne Airport Settlement Agreement Amendment, or Mitigation Measure AQ/GHG-4, which was not known, or could not have been known, when the Initial Study and Mitigated Negative Declaration for the John Wayne Airport New Jet Fuel Pipeline and Tank Farm was adopted, and when the Final EIR No. 617 for the John Wayne Airport Settlement Agreement Amendment was certified. Therefore, no further environmental review of these project components is required.

The Orange County Board of Supervisors also conducted a CEQA analysis for incorporating the three measures of JWA AQIP into the JWA MOU and determined that the JWA MOU is exempt from CEQA because the JWA MOU: 1) will not have a significant effect on the environment because it is an action taken by a regulatory agency to assure the maintenance, restoration, enhancement, or protection of the environment per CEQA Guidelines Section 15308; and 2) includes basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource per CEQA Guidelines Section 15306.

The ~~proposed adoption of the~~ JWA MOU and the corresponding CEQA exemption determination ~~will be considered~~ was approved by the Orange County Board of Supervisors at the November 19, 2019 Meeting<sup>18</sup>.

### **Long Beach Airport**

The LGB AQIP consists of seven measures and initiatives and the LGB MOU incorporates one measure that pertains to ground support equipment. The CEQA analysis conducted by the City of

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<sup>17</sup> County of Orange, Mitigation Monitoring and Reporting Program for Final Environmental Impact Report No. 617 for the John Wayne Airport Settlement Agreement Amendment, SCH No. 2001111135; <https://www.ocair.com/communityrelations/settlementagreement/docs/MitigationMonitoringAndReportingProgramForEIR617.pdf>; and [http://cams.ocgov.com/Web\\_Publisher/Agenda05\\_07\\_2019\\_files/images/O00119-000429A.PDF](http://cams.ocgov.com/Web_Publisher/Agenda05_07_2019_files/images/O00119-000429A.PDF).

<sup>18</sup> Orange County Board of Supervisors Meeting, ~~scheduled for~~ November 19, 2019. [http://cams.ocgov.com/Web\\_Publisher/agenda.pdf](http://cams.ocgov.com/Web_Publisher/agenda.pdf)



Long Beach as presented in the following ~~pending~~ record of adoption, concluded that the LGB MOU is exempt from CEQA<sup>19</sup>:

*“This MOU is a project that has been determined to not have a significant effect on the environment and which, is therefore, exempt from the provisions of CEQA because it is an action taken by a regulatory agency to assure the maintenance, restoration, enhancement, or protection of the environment (CEQA Guidelines Section 15308) and includes basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource (CEQA Guidelines Section 15306).”*

The ~~proposed~~ adoption of the LGB MOU and the corresponding CEQA exemption determination ~~will be considered~~ by the Long Beach City Council at the November 19, 2019 meeting.

### **Ontario International Airport**

The ONT AQIP consists of nine measures and initiatives and the ONT MOU incorporates one measure that pertains to the ground support equipment emission reductions policy. The CEQA analysis conducted by the Ontario International Airport Authority, as presented in the following record of adoption, concluded that the ONT MOU is exempt from CEQA<sup>20</sup>:

*“The ONT MOU is a project that has been determined to not have a significant effect on the environment and which, is therefore, exempt from the provisions of CEQA because it is an action taken by a regulatory agency to assure the maintenance, restoration, enhancement, or protection of the environment (CEQA Guidelines Section 15308) and includes basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource (CEQA Guidelines Section 15306).”*

The ONT MOU and the corresponding CEQA exemption determination was considered and approved by the Ontario International Airport Authority Commission at the October 29, 2019 meeting.

### **Burbank Airport**

The BUR AQIP consists of nine measures and initiatives and the BUR MOU incorporates the following two measures: 1) ground support equipment emission reduction policy; and 2) the zero-emission shuttle bus program. The CEQA analysis conducted by the Burbank-Glendale-

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<sup>19</sup> City of Long Beach, Approve Memorandum of Understanding Between the South Coast Air Quality Management District and City of Long Beach (acting in its capacity as the owner and operator of Long Beach Airport), November 19, 2019. <https://longbeach.legistar.com/View.ashx?M=A&ID=738240&GUID=6E70C945-6A16-482F-BBF5-623B80512713> (Pending)

<sup>20</sup> Ontario International Airport Authority, Agenda Item 10 10 (administrative discussion/action/report): Approve Memorandum of Understanding Between the South Coast Air Quality Management District and Ontario International Airport Authority, October 29, 2019. [https://www.flyontario.com/sites/default/files/agenda\\_packet\\_-\\_20191029\\_-\\_public.pdf](https://www.flyontario.com/sites/default/files/agenda_packet_-_20191029_-_public.pdf)

Pasadena Airport Authority, as presented in the following record of adoption, concluded that the BUR MOU is exempt from CEQA<sup>21</sup>:

*“This MOU is a project that has been determined to not have a significant effect on the environment and which, is therefore, exempt from the provisions of the California Environmental Quality Act (CEQA) because it is an action taken by a regulatory agency, as authorized by state of local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment (CEQA Guidelines Section 15308) and includes basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource (CEQA Guidelines Section 15306).”*

The BUR MOU and the corresponding CEQA exemption determination was considered and approved by the Burbank-Glendale-Pasadena Airport Authority Commission at the November 4, 2019 meeting.

In addition, BUR AQIP measures pertaining to the sustainable design and construction program as well as the trip reduction measures were previously analyzed in the Final Environmental Impact Report for a Replacement Airline Passenger Terminal at Burbank Bob Hope Airport, which was previously certified on July 11, 2016. BUR representatives also provided the following statement regarding the details about their CEQA analysis for the sustainable design and construction program as well as the trip reduction measures<sup>22</sup>:

*In addition, the Final Environmental Impact Report for a Replacement Airline Passenger Terminal at Burbank Bob Hope Airport (State Clearinghouse Number 2015121095) is previously certified by the Authority on July 11, 2016 and reflects the independent judgment of the Authority and satisfies the requirements of CEQA for the sustainable design and construction program and trip reduction measures in the BUR AQIP.”*

## **Socioeconomic Assessment**

The Facility-Based Mobile Source Measure for Commercial Airports will be implemented through voluntary Memorandum of Understandings (MOUs) with the five commercial airports based on each airports’ implementation of Air Quality Improvement Plans/Measures (AQIPs/AQIMS) measures specified in the MOUs. No socioeconomic impacts beyond the impacts from the airports’ implementation of the AQIP/AQIM measures ~~for these measures already proposed by the airports~~ are expected from implementing the ~~MOUs~~ voluntary programs.

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<sup>21</sup> Burbank-Glendale-Pasadena Airport Authority, Special Commission Meeting. November 4, 2019. <http://hollywoodburbankairport.com/wp-content/uploads/2019/11/11-4-19-BGPAA-Commission-Agenda.pdf>

<sup>22</sup> Hollywood Burbank Airport, Final Environmental Impact Report for a Replacement Airline Passenger Terminal at Burbank Bob Hope Airport, SCH No. 2015121095; <https://elevatebur.com/documents/>.

## **Chapter 6: Response to Public Comments**

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Delta Airlines  
Sierra Club



**Delta Air Lines, Inc.**  
1020 Delta Blvd  
Bldg A2, Floor 5, Dept 885  
Atlanta, GA 30354

October 21, 2019

Sang-Mi Lee, Ph.D.  
Program Supervisor  
South Coast AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: Commercial Airports Memoranda of Understanding

Delta Air Lines, Inc (Delta) is submitting this comment letter regarding the Facility-Based Mobile Source Measure for Commercial Airports and related Memoranda of Understanding (MOUs) with each commercial airport in the South Coast Basin. Delta understands that the MOUs represent voluntary agreements between South Coast AQMD and each commercial airport with each party having specific responsibilities and commitments.

Air Quality Improvement Plans (AQIPs) and/or Air Quality Improvement Measures (AQIMs) with specific measures and initiatives to reduce emissions from non-aircraft mobile sources related to each participating airport's operations have been drafted by each participating airport. The purpose of the MOUs with commercial airports is to set forth the procedures by which the South Coast AQMD will quantify the emission reduction benefits associated with the implementation of specified components of the airports' respective AQIP or/ AQIM strategies that are eligible for State Implementation Plan (SIP) credit.

Even though Delta and other airlines are not parties to the MOUs, the airlines will be asked to help the airports and the South Coast AQMD achieve the emission reduction benefits. This will require substantial capital investment by Delta and other participating equipment owners. Despite this significant cost, Delta looks forward to working with the airports, the South Coast AQMD and other stakeholders as part of Delta's overall commitment to environmental sustainability.

1-1

Delta would like to comment on five specific items we feel are critical to successful implementation, and ask that they be taken into consideration in the drafting of the MOU and associated goals:

1. Charging infrastructure at an airport must be sufficient to meet the demand for electric replacements;
2. Tracking individual unit activity is not feasible;
3. Emission factors need to be standardized and commonly applied at each airport;
4. Redevelopment initiatives must coincide with infrastructure upgrades;
5. Any decision to retire an asset is at the owner's discretion.

Delta provides the following additional commentary related to these five concerns:

1. Charging infrastructure at an airport must be sufficient to meet the demand for electric replacements

Delta's ground support equipment (GSE) fleet is a critical part of our overall operation. GSE must be readily available and operational in order to ensure we fulfill our commitments to passengers and other customers. There must be one charging station for every 2-3 electric GSE units to perform adequately and avoid out of service time. The chargers must fit the required physical specifications and electrical requirements in order for the GSE and batteries to have a prolonged life cycle. Furthermore, charging stations must be located such that they are readily accessible and do not require long travel times to be utilized. In order to ensure these operational requirements are met, each airport authority must achieve this minimum for charging capacity in advance of equipment owners exchanging additional equipment for electric powered GSE. Delta stands ready to invest in a cleaner GSE fleet, but it will be critical for each airport to coordinate with Delta and other airlines in order to ensure that the aggressive GSE emission reduction targets included in the MOUs can be achieved on schedule.

1-2

2. Tracking individual unit activity is not feasible

Delta does not currently have data for all GSE that would allow us to accurately account for usage to be reported on an individual piece-of-equipment by piece-of-equipment basis<sup>1</sup>. It would be an extreme burden to routinely collect usage data for all GSE due to the hundreds of pieces of equipment in active service. Further certain units do not have working hour meters and/or odometers. Particularly given the extraordinary investment that Delta is prepared to make to help the airports and South Coast AQMD achieve the emissions reductions targets set forth in the MOUs, it is vital that the MOUs not impose unnecessarily burdensome, and ultimately infeasible, requirements on the airlines. If the MOUs were to include unrealistic and unachievable methodologies—including without limitation a requirement to track individual unit activities—this would ultimately prevent the South Coast AQMD and the airports from fulfilling the MOUs' procedural requirements, and inhibit the South Coast AQMD's and airports' shared goals of achieving SIP-creditable emission reductions. Accordingly, Delta strongly urges that the MOUs allow the airports to identify GSE fleet emission reductions based on a per-piece utilization average. Final methodologies should be mutually determined following adoption of the MOU in cooperation with Delta and the other airlines, based on confirmation that the proposed methodology is feasible and not unnecessarily burdensome. Please remove the annual activity data requirement from the MOU.

1-3

3. Emission factors need to be standardized and commonly applied at each airport

Each airport must clearly define how emission factors will be assessed for each type of GSE and engine. These must correspond with the target units. Certain CARB standards, specifically those that apply to on-road equivalents, will evidently not be used by individual airports and when new standards are applied equipment owners need to understand how to identify the impact of each engine in their fleet.

1-4

4. Redevelopment initiatives must coincide with infrastructure upgrades

In light of the various redevelopment projects planned and underway at the commercial airports within the South Coast Basin, it is necessary to use good judgment with the timing of infrastructure changes so as not to create a burden with respect to existing construction timeframes. If unavoidable construction delays occur during redevelopment in particular, we urge that investments in electric charging infrastructure be (i) timed to coincide with the timeframes established in the MOUs; and (ii) properly coordinated to avoid the need to install and then promptly replace charging infrastructure as a result of a planned redevelopment project. In addition, because upgrades in electric charging infrastructure are

1-5

1. In cases where we wish to claim a low usage exemption then hour meter readings are collected monthly, but this is an extremely small portion of our fleet.



often timed to coincide with redevelopment projects, we caution that delays in the redevelopment process could impact an operators' ability to increase electric engines in their GSE fleets. Accordingly, coordination, regular communication, and advance planning between the airports and each airline and GSE fleet operator will be required. By way of example, but not limitation, increases in electric engines in Delta's GSE fleet at LAX is dependent on the timely completion of Terminals 2 and 3 because those upgrades will include the expanded charging infrastructure necessary to support additional electric GSE equipment. Similar coordination of redevelopment activities, new electric charging infrastructure, and purchases of electric GSE equipment will be needed at other South Coast Basin airports.

1-5

5. Any decision to retire an asset is at the owner's discretion

Within the past 72 hours, comments have been documented during public meetings that equipment removed from service in the South Coast basin must be scrapped. This last-minute change — made despite the fact that this issue was never raised at any of the public meetings held over the prior sixteen (16) months — is unacceptable. This idea does not take into account the fact that an asset removed from LAX, for instance, may very well be newer, be in better condition or have lower emissions levels than another asset it could replace in another area of Delta's operation outside of the South Coast basin. The owner should have full discretion as to whether or not an asset has met the end of its useful life, and if they will choose to retire it or relocate it out of the South Coast basin. In short, this last-minute change:

- would not reduce emissions within the South Coast basin;
- would impede efforts to reduce emissions outside the South Coast basin;
- violates basic principles of transparency in decision-making and the public process;
- would impose a heavy burden on equipment owners who will bear the burden of implementing measures contemplated by the MOU; and
- would put at risk the ability to implement other measures contemplated by the MOU.

1-6

For all these reasons, we strongly and respectfully urge the AQMD and airports to refrain from accepting this last-minute change to the MOUs and AQIPs / AQIMs.

Thank you for this opportunity to comment, and Delta looks forward to working with South Coast AQMD and each airport authority to ensure success in achieving the important goals of the MOUs.

Sincerely,



Cheryl Meyers  
Program Manager – Air Quality, Delta

CC:

Los Angeles World Airports  
John Wayne Airport, Orange County  
Ontario International Airport Authority

**Responses to Comment Letter from Delta Airlines, Inc.**  
**(Comment Letter 1)**

**Response to Comment 1-1:**

Staff acknowledges the comments by Delta Airlines and appreciates Delta's commitment to environmental sustainability.

**Response to Comment 1-2:**

The airport-specific performance targets account for the unique circumstances and operational capabilities of each airport. The airports have agreed to the airport-wide fleet average performance targets while taking into account the necessary infrastructure to achieve these performance targets. The airports are expected to coordinate with all their tenants to ensure the infrastructure needs are met.

**Response to Comment 1-3:**

South Coast AQMD appreciates the concerns raised by Delta regarding the reporting of equipment-specific activity data. Annual activity data is critical for calculating GSE emissions reductions and satisfying U.S. EPA's integrity elements necessary for SIP credit. Given the upcoming attainment deadlines for meeting the ozone standard and the substantial amount of NOx reductions needed, it is critical that we obtain as many SIP-creditable reductions as possible.

The MOU schedules for GSE measures have been revised to allow for flexibility in reporting annual activity data. Specifically, airlines and operators may choose from the following three options:

1. Actual operating hours from hour meter readings/maintenance records
2. Average operating hours representative of equipment type and airport
3. Average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable

Staff believes that these options offer significant flexibility to airlines and operators for reporting annual activity data. However, it is imperative that activity data be reported as such data is necessary for South Coast AQMD and the public to independently verify emission reductions.

**Response to Comment 1-4:**

The emission factors can be obtained from CARB's OFFROAD Model for each piece of equipment based on fuel type, engine size, and model year. If airports use other data sources, they will need to substantiate the applicability of these factors.

**Response to Comment 1-5:**

Staff acknowledges the need to coordinate redevelopment projects with airlines and operators. It will be the airports' responsibilities to coordinate with their tenants on these efforts to achieve the performance targets.

**Response to Comment 1-6:**

There are no requirements in the MOUs for scrapping old equipment. However, for tracking purposes, airports are required to report information on the retirement and sale of equipment reported in CARB's DOORS system and identify any pre-Tier 4 diesel and pre-2010 gasoline/LPG GSE relocated to other airports within the Basin.



October 24, 2019

Zorik Pirveysian  
Planning and Rules Manager  
South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765  
zpirveysian@aqmd.gov

Dear Mr. Pirveysian:

Sierra Club is writing to comment on the Facility-Based Mobile Source Measures (FBMSM) for Commercial Airports Memorandum of Understanding (MOU) process, with a specific focus on the Ontario Airport, due to its proximity to several front line communities suffering from freight-related air quality impacts in the South Coast region.

Sierra Club is the nation's oldest and largest grassroots environmental organization with nearly 800,000 members nationwide and 170,000 in California. Sierra Club is dedicated to the protection of public health and the environment and has long been a leading voice for reducing our air pollution and greenhouse gas emissions by reducing the use of fossil fuels.

While Sierra Club is pleased that the airports and South Coast Air Quality Management District (SCAQMD) are working to reduce airport emissions, much work remains. Sierra Club offers the following comments on the MOU process.

**I. NOx Emissions Reductions**

**A. Overall NOx reductions are fairly modest and could be more significant**

The FBMSM for Commercial Airports is expected to achieve 0.52 and 0.38 tons per day of NOx emission reductions in 2023 and 2031, respectively, based on the airports' implementation of AQIP/AQIM measures in the MOUs. Even SCAQMD admits that "these emission reductions are modest" but claims that "there are other AQIP/AQIM measures that

2-1

2-2

airports are implementing that will result in emission reductions that may not be easily quantifiable or SIP creditable.”<sup>1</sup> Sierra Club would like to see more ambitious targets embodied at the Ontario Airport in particular, similar to LAX.

2-2

### **B. Reported NOx reductions figures are inconsistent for Ontario Airport**

The NOx reduction figures for the Ontario airport are not consistent. By way of a few examples:

1. SCAQMD public presentation notes that for Ontario, they expect to achieve 7.83 NOX tpy 2023 reductions, 9.93 tpy reductions in 2031.<sup>2</sup>
2. Preliminary Draft Staff Report at Table 4.1 notes that the GSE Policy alone at Ontario achieves 7.83 NOX tpy reduction by 2023 and 9.93 tpy reduction by 2031.<sup>3</sup>
3. In the Preliminary Draft Staff Report at Table 2.8, it also states that the GSE policy alone at Ontario would achieve 22.66 NOX tpy 2023 reductions, and 46.03 tpy reductions in 2031.<sup>4</sup>
4. In the Draft Ontario AQIP, Table 13 also notes the approximate 22.66 NOX tpy 2023 reduction and 46.03 Tpy reduction by 2031.<sup>5</sup>

2-3

It is thus unclear what NOx reductions the Ontario airport MOU plans to achieve. Is it 7.83 tpy or 22.66 tpy by 2023, and 9.93 tpy or 46.03 tpy by 2031? This is a major discrepancy and Sierra Club hopes to clarify the planned scope of emissions reductions. If the lower figure is

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<sup>1</sup> Preliminary Draft Staff Report, Facility-Based Mobile Source Measure for Commercial Airports, September 2019, at p. 7, accessed: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/facility-based-mobile-source-measures/preliminary-draft-staff-report.pdf?sfvrsn=6> [hereinafter “Preliminary Draft Staff Report”].

<sup>2</sup> Presentation, Public Consultation Meeting, Oct 10, 2019, at p. 21, accessed: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/facility-based-mobile-source-measures/presentation.pdf?sfvrsn=11>.

<sup>3</sup> Preliminary Draft Staff Report, Table 4.1 List of SIP Creditable AQIP/AQIM Measures and Estimated Emission Reduction Benefits, at p. 41.

<sup>4</sup> Preliminary Draft Staff Report, Table 2.8 Summary of AQIP Measures and Initiatives for Ontario Airport, at p. 27.

<sup>5</sup> Draft Air Quality Improvement Plan, Ontario International Airport, September 17, 2019, at p. 20, accessed: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/facility-based-mobile-source-measures/draft-aqip-ont.pdf?sfvrsn=7> [hereinafter “Draft Ontario AQIP”].

correct, it seems that the Ontario documents would all need to be recalculated, in addition to the overall planned scope of reductions in the south coast area. If the difference is just in what is creditable under the SIP, that should also be stated.

2-3

**II. Ground Support Equipment Replacements Should be Clarified as Permanent**

The Ground Support Equipment (GSE) provisions in the AQIP for Ontario Airport indicate that GSE equipment will be replaced.<sup>6</sup> However, the language about how such equipment will be retired is vague and lacks clarity. The Los Angeles World Airports (LAWA)'s Alternative-Fuel Vehicle Incentive Program, on the other hand, has explicit language discussing equipment scrappage and verifying that equipment is replaced.

The emission reductions associated with these vehicle replacements are expected to be permanent as these new trucks continue their operation at LAWA as specified under the MOU. LAWA commits to submit annual reports to South Coast AQMD with specific operational activity data for these funded trucks. LAWA is also responsible for providing documentation on how the retired vehicles are scrapped or relocated outside of California. The annual reports will thus ensure the permanency of the emission reductions.<sup>7</sup>

2-4

Sierra Club suggests that Ontario use the LAWA's Alternative-Fuel Vehicle Incentive program language, noted above, in its MOU and accompanying documents to ensure permanent emissions reductions.

Moreover, there are generally weak goals for GSE for most of the airport MOUs, with the exception of LAX. This stands in stark contrast to other airports, like SFO, that pledge electric

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<sup>6</sup> Draft Ontario AQIP at p. 7-8.

<sup>7</sup> Preliminary Draft Staff Report at p. 47.

GSE vehicles by 2021.<sup>8</sup> The current goals are based on fleetwide averages, which will likely result in near zero technologies and not zero emissions equipment. Sierra Club suggests that the Ontario airport and others adopt and implement a GSE fleet emission reduction program and similarly ensure that GSE vehicles are electric by 2021 like SFO.

2-4

III. **Responsibility for Shortfalls in MOU Emissions Reductions Lacks Clear Public Process Requirement**

The MOU language notes that in the event of any shortfall in emissions reductions that the SCAQMD will make up this shortfall with other measures:

Responsibility for Shortfall. The South Coast AQMD shall be solely responsible to make up any emissions reduction shortfalls that may occur in the event that the actual voluntary airport AQIP emissions reduction benefits do not achieve the projected emissions reduction benefits resulting from implementation of the voluntary airport AQIP measures specified in Attachment A. South Coast AQMD will also commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A. The Airport shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A, unless otherwise mutually agreed on by both parties.<sup>9</sup>

2-5

In essence there is no ramification for the Ontario Airport failing to meet its commitments, and the SCAQMD can just decide to substitute other measures in another geographical area or industry for any potential shortfall. While the Preliminary Staff Report

<sup>8</sup> See e.g., SFO Transit First Strategic Initiatives, accessed: <https://www.flysfo.com/environment/transit-first>.

<sup>9</sup> Draft Memorandum of Understanding between the South Coast Air Quality Management District and Ontario International Airport Regarding Ontario International Airport's Air Quality Improvement Plan, September 20, 2019, Section 3 at p. 6, accessed: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/facility-based-mobile-source-measures/draft-mou-ont.pdf?sfvrsn=7> [hereinafter "Draft MOU"].

indicates that in the case of a shortfall, the SCAQMD would adopt a public process to discuss potential measures that the agency would undertake, this language is missing from the MOU itself:

*In the event that the actual emission reductions from the implementation of the AQIP/AQIM measures specified in the MOUs are less than the projected emission reduction benefits, South Coast AQMD will be responsible for achieving the reduction shortfall. In such instances, South Coast AQMD also commits to adopt and submit substitute measures to EPA working with the airports and other stakeholders. A public process will be initiated to facilitate the consideration of potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD meet any shortfall. (emphasis added.)<sup>10</sup>*

2-5

Sierra Club recommends adding the above language to the draft MOU itself, either in Section 3 on page 6-7 discussing responsibility for shortfalls, or in Section 2 on the MOU public process on page 4. A public process would be important in that scenario to ensure that emissions reductions would occur in a similar location, either at the airport or in another sector in order to be assured that local residents see a benefit to this MOU program.

#### **IV. Third Party Enforcement Provisions in MOUs are Lacking**

Section C1(e) of the Draft MOU notes that “[t]he Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.”<sup>11</sup> Yet, at the same time, the Draft MOU also highlights:

2-6

4. Responsibility to Community. The MOU supports and is made in recognition of the importance of ONT to the economic health and well-being of the communities surrounding ONT and the importance of balancing the needs of the City of Ontario, County of San Bernardino and other surrounding

<sup>10</sup> Preliminary Draft Staff Report, at p. 6.

<sup>11</sup> Draft MOU at p.4, Section C(1)e.

communities for adequate commercial air transportation facilities with environmentally responsible air transportation operations at ONT.”<sup>12</sup>

Sierra Club expresses its disappointment that an agreement intended to protect the well-being of the community is not enforceable by that same community and therefore recommends striking this provision from the MOU.

2-6

Sierra Club thanks you for consideration of its comments and is available to answer any questions.

Sincerely,

/s/ Jessica Yarnall Loarie

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<sup>12</sup> Draft MOU at p. 2.



**Responses to Comment Letter from the Sierra Club**  
**(Comment Letter 2)**

**Response to Comment 2-1:**

Staff appreciates the comment letter received from the Sierra Club and its participation at public meetings related to the FBMSM for Commercial Airports.

**Response to Comment 2-2:**

The AQIPs/AQIM represent the airports' best efforts to develop measures for reducing non-aircraft mobile source emissions and the measures that are eligible for SIP credit will be implemented through the voluntary MOUs with South Coast AQMD. During the MOU development process, staff repeatedly requested that airports consider the most stringent performance targets that were technically feasible and cost-effective.

Although the overall projected NO<sub>x</sub> reductions from the MOUs are modest (i.e., 0.52 tpd in 2023 and 0.37 tpd in 2031), they represent about 53% and 66% reductions from the GSE category, which are significant. The AQIPs/AQIM include other measures that the airports are implementing that will result in emission reductions but those measures are not included in the MOUs because they are not easily quantifiable or do not meet U.S. EPA's stringent requirements for SIP credit. Thus, the implementation of the AQIPs/AQIM is expected to yield additional reductions beyond 0.52 and 0.37 tons per day in 2023 and 2031, respectively, and we encourage the airports to continue to evaluate their programs and seek additional feasible and cost-effective emission reductions.

**Response to Comment 2-3:**

The presentations made by the airports, draft AQIPs/AQIM, and Chapter 2 of the staff report all reference emission reductions that were estimated by the airports. The apparent discrepancy arises when comparing the estimated emission reductions by the airport to the corresponding SIP credit calculated by South Coast AQMD in Chapter 4 of the staff report. It should be noted that the projected emission reductions in Chapter 4 account for the portion of the reductions that are considered SIP creditable based on the 2016 AQMP emissions inventory currency. To further clarify, 22.66 tpy is based on calculations performed by Ontario Airport, while 7.83 tpy is calculated by South Coast AQMD as SIP credit (based on SIP inventory) and is included in our enforceable commitment. Please refer to Appendix B of the staff report for an explanation of the SIP credit calculations for all MOU measures.

**Response to Comment 2-4:**

The revised MOU Schedule for GSE includes additional reporting requirements to document the sale or retirement of equipment. Additionally, any relocation of pre-Tier 4 diesel and pre-2010 gasoline/LPG GSE to another airport within the South Coast Air Basin is required to be reported including the name of the airport, date of relocation, and estimated projected usage hours. The performance target for the GSE measure represents the existing mix of GSE fleet at the airport

and represents what the airport deems feasible to achieve by 2023 and 2031. Staff will review the annual reports and emissions inventory submitted by the airport to track progress in implementation of this measure, including the reported information on the replaced equipment, and make all the information publicly available. South Coast AQMD will continue to encourage the airports to improve their programs by seeking additional feasible and cost-effective strategies.

**Response to Comment 2-5:**

Although the performance targets in the MOU measures and the corresponding emissions reductions associated with implementation of these measures are expected to be achieved, South Coast is fully committed to address any potential emission reduction shortfall through a public process, and develop substitute measures as required by U.S. EPA, as specified in the Resolution. We encourage Sierra Club to continue to participate during development of any potential future substitute measures.

**Response to Comment 2-6:**

While the MOU is not enforceable by the community, South Coast AQMD's enforceable commitment to achieve the projected emission reductions will be incorporated into the SIP and thus that commitment is enforceable by the community.



## **Appendix A: Draft Memoranda of Understanding**

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Los Angeles International Airport

Burbank Airport

John Wayne Airport

Long Beach Airport

Ontario Airport

**MEMORANDUM OF  
UNDERSTANDING BETWEEN  
THE SOUTH COAST AIR QUALITY MANAGEMENT  
DISTRICT AND  
THE CITY OF LOS ANGELES DEPARTMENT OF AIRPORTS**

This Memorandum of Understanding (MOU) is entered into this      day of      2019, by and between the City of Los Angeles Department of Airports (Los Angeles World Airports or LAWA) acting by and through its Board of Airport Commissioners, and the South Coast Air Quality Management District (South Coast AQMD), acting by and through its Governing Board. LAWA and South Coast AQMD shall be referred to collectively as Parties (each a Party) to this MOU.

I.      RECITALS

A.      RECITALS BY SOUTH COAST AQMD.

1.      Air Regulatory Agencies. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (Basin). The South Coast AQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) are the regional, state, and federal regulatory agencies, respectively, with jurisdiction over air quality in the Basin. The Basin consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino.
2.      South Coast AQMD. The South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin. Los Angeles International Airport (LAX or Airport) is located within the Basin.
3.      Need for Emission Reductions. The USEPA designated the Basin as an extreme non-attainment area for the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS) with statutory deadlines to reach attainment by 2023 and 2031, respectively. Despite significant air quality improvements achieved over the last several decades, to meet the ozone NAAQS, emissions of oxides of nitrogen (NOx) need to be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 Air Quality Management Plan (AQMP). The 2016 AQMP includes Control Measure MOB-04 – Emissions Reductions at Commercial Airports, with the goal of achieving emission reductions from commercial airports. On March 3, 2017, the South Coast AQMD Governing Board adopted the 2016 Air AQMP. On March 23, 2017, CARB approved the 2016 AQMP and the 2016 State Strategy for the State Implementation Plan (SIP) for Federal Ozone and PM2.5 Standards. ~~\_, and submitted them to~~ On October 1, 2019, USEPA for-approved the 2016 AQMP and SIP.

4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin; these emissions are primarily due to airport-related mobile source activities. These sources include aircraft, cargo trucks, ground support equipment (GSE), off-road vehicles, shuttle buses, and passenger vehicles. NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY LAWA.

1. LAWA. LAWA is a proprietary department of the City of Los Angeles. The City of Los Angeles is a Charter City and is subject to city, county, state, and federal law. The City of Los Angeles is the proprietor and certificated operator of LAX.
2. Authority. The City of Los Angeles acting by and through its proprietary department LAWA has the authority to enter into this MOU pursuant to the City of Los Angeles Charter. Obligations hereunder, are, however, limited to the extent in conflict with any Federal Aviation Authority (FAA) rules or regulations.
3. LAWA's History of Leadership in Successfully Implementing Air Quality Improvement Programs. LAWA has a long history of leadership in successfully implementing air quality improvement programs at LAX and is committed to improving air quality in and around its airports to the extent consistent with operating an airport.
4. LAX Air Quality Improvement Measures (LAX AQIM). LAWA has identified its existing non-aircraft related air quality improvement measures and proposed new initiatives for reducing NOx emissions from non-aircraft related mobile sources at the airport and included both into the LAX AQIM, which supports the South Coast AQMD's efforts to meet its obligations under the 2016 ~~AQMD~~AQMP. LAWA's LAX AQIM represents its best efforts to develop strategies for reducing NOx emissions from non-aircraft mobile source operations at LAX based on its existing authority over airport emission sources and includes specific voluntarily-created airport measures and new initiatives for certain non-aircraft emission sources operating at LAX.
5. Emissions Inventory. The LAX AQIM includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecasts as well as the 2023 and 2031 emissions forecasts that include the estimated emissions benefits from LAX AQIM measures and new initiatives with quantifiable emission reductions. The LAX AQIM provides an emissions inventory only for non-aircraft airport sources (i.e., ground support equipment, on-road and off-road airport fleet vehicles, trucks, shuttle buses, and passenger transportation) for which the LAX AQIM includes specific measures and initiatives and LAWA has

provided the LAX AQIM and related LAX AQIM Emissions Inventory and Forecasts with supporting calculations to the South Coast AQMD.

C. JOINT RECITALS.

1. Purpose of MOU.

- a. The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the anticipated emission reduction benefits in the Basin through implementation of the three (3) voluntary LAX measures from LAWA's LAX AQIM set forth in Attachment A (hereinafter the "MOU Measures"). This MOU does not create SIP creditable reductions; rather, it identifies specific voluntary measures and provides the means for the South Coast AQMD to quantify the emission reductions from the MOU Measures to obtain SIP credits.
- b. The MOU is not intended to limit Airport growth. The central objective of the LAX AQIM and this MOU is to reduce NOx emissions and achieve corresponding reductions of associated pollutants from non-aircraft airport mobile sources.
- c. The MOU Measures set forth in Attachment A, Schedules-MOU Measures 1 through 3, set forth metrics for quantification of estimated emission benefits associated with implementation of those MOU Measures.
- d. The emission reduction benefits from the MOU Measures may be used by South Coast AQMD to obtain SIP credit to the extent the emission reduction benefits quantified by South Coast AQMD for these measures satisfy USEPA's integrity elements (i.e., the emission reductions are quantifiable, surplus, permanent, and enforceable). South Coast AQMD may seek SIP credit for the quantified emission reductions through a separate SIP submittal.
- e. The Parties agree that the South Coast AQMD, and not LAWA, will be responsible for any difference between the estimated prospective emission reductions and actual emissions reductions achieved from the MOU Measures.
- f. The Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.
- g. The Parties will continue to work together in developing inventories of airport emission sources to support the development of future AQMPs outside of the MOU process.

- h. LAWA and South Coast AQMD have a long history of successfully working together on air quality emission reduction projects; and LAWA and the South Coast AQMD desire to continue this successful collaboration through this voluntary MOU.

2. MOU Public Process.

- a. Following the adoption of the 2016 AQMP, South Coast AQMD staff held a series of public working group meetings to solicit comments on implementing Control Measure MOB-04 for commercial airports. Based on input received during the public process, South Coast AQMD staff developed a recommendation for the South Coast AQMD Governing Board for the development of an MOU with the commercial airports. In the event that the MOU approach with the airports was not successful, staff also recommended consideration of a regulatory approach for reducing emissions from commercial airports.
- b. On May 4, 2018, the South Coast AQMD Governing Board directed staff to pursue the approach for developing facility-based emission reduction strategies for commercial airports through voluntary measures only.
- c. South Coast AQMD staff established an MOU Working Group, consisting of representatives from the South Coast AQMD, commercial airports (LAX, John Wayne Airport, Ontario International Airport, Hollywood Burbank Airport, and Long Beach Airport), CARB, USEPA, environmental organizations, labor, freight industry, airlines, other stakeholders, and the public to solicit comments on the MOU development, and to monitor the implementation of this MOU and provide reports to USEPA. In addition, South Coast AQMD may utilize other well-established means of communication, including the South Coast AQMD website, Subscribers lists, and Governing Board and Committee meetings, for disseminating information concerning the status of MOU implementation.
- d. The MOU has been developed through the public process, discussed above, for consideration by the South Coast AQMD Governing Board and the LAWA Board of Airport Commissioners.

3. MOU Applicability. The MOU (1) does not apply to all measures and new initiatives identified in the LAX AQIM, (2) addresses only the MOU Measures identified in Attachment A, and (3) does not supersede conflicting rules that are established by the USEPA or CARB, or legal obligations that LAWA is subject to such as U.S. Department of Transportation (USDOT) or FAA regulations; federal statutes, including the Anti-Head Tax Act (AHTA), the Federal Aviation Act, and the Airline

Deregulation Act; international treaties; or the doctrines of federal preemption, the dormant Commerce Clause, and the Supremacy Clause.

a. Excluded Sources.

Nothing in this MOU is intended or shall be interpreted to apply to: (1) any source that is not specifically identified in the MOU Measures, or (2) the operation of any source that is not specifically identified in the MOU Measures

II. NOW THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO<sub>x</sub>, and corresponding anticipated reductions to other pollutants, including VOC and PM, resulting from the implementation of the MOU Measures, the Parties agree as follows:

A. AGREEMENTS.

1. The Parties agree the MOU does not: (i) establish an emissions cap or any other facility-wide limit for NO<sub>x</sub>, or any other pollutant; (ii) constitute any new regulatory authority imposed on LAWA, its operations, or its tenants; (iii) obligate LAWA to provide a comprehensive, facility-wide inventory of NO<sub>x</sub> emissions; or (iv) limit LAWA's ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary Aviation Low Emissions (VALE) program and other similar programs, which require emissions reductions achieved through such programs to be voluntary in nature and exceed existing obligations to achieve emissions reductions.
2. The Parties agree to coordinate to identify general conformity budgets in the next AQMP for LAWA's general conformity purposes.

B. LAWA'S RESPONSIBILITIES.

LAWA agrees to take the following actions:

1. Implementation of MOU Measures. LAWA voluntarily agrees to implement the MOU Measures.
2. Monitoring and Reporting. LAWA will monitor the implementation of the MOU Measures and provide data and annual emissions inventory reports to South Coast AQMD as specified in Attachment A, ~~Schedules~~ MOU Measures 1 – 3.

C. SOUTH COAST AQMD'S RESPONSIBILITIES.

South Coast AQMD commits to take the following actions:

1. Technical Analysis for SIP Credit from MOU Measures emission

reductions. The South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of estimated emission reductions benefits attributable to the MOU Measures. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through the MOU Measures, and an estimation of emissions reductions benefits and corresponding SIP credits. Factors to be considered for purposes of calculating the emission reductions benefits attributable to the MOU Measures shall include, but not be limited to: growth forecasts from LAWA, implementation schedules for the MOU Measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific MOU Measures

2. Federal Enforceability. To the extent necessary to obtain SIP approval, the South Coast AQMD will provide its own federally enforceable commitments to USEPA in a SIP update document that is separate from this MOU after approval by the South Coast AQMD and CARB Boards. South Coast AQMD will monitor, assess, and report the emission reductions benefits from the voluntary MOU Measures as identified in Attachment A to the USEPA.
3. Responsibility for Shortfall. LAWA's emissions estimates will be reliant on performance-based targets and LAWA will not provide emissions reduction guarantees. In the event of any shortfall in estimated emission reductions from the MOU Measures, the Parties agree that the South Coast AQMD shall be solely responsible to make up the shortfall, and LAWA shall not be responsible for making up the shortfall. South Coast AQMD will commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the MOU Measures. The Airport shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the MOU Measures, unless otherwise mutually agreed on by both parties. Notwithstanding the above, LAWA and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of MOU Measures are less than the estimated emissions reduction benefits projected for implementation of these measures, LAWA and South Coast AQMD will work together to consider potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD address any shortfalls.
4. Funding. The South Coast AQMD, at its Governing Board's discretion, will support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIM measures.

5. Monitoring. The South Coast AQMD will monitor and assess the implementation of the MOU Measures- based on information provided by LAWA as outlined in Attachment A, Schedules-MOU Measures 1 through 3.
6. Information Sharing. The South Coast AQMD will provide the means for ensuring that emission reduction data and other pertinent information related to the implementation of the MOU Measures are accessible to the public and the USEPA.

D. MOU MEASURES (ATTACHMENT “A”).

The MOU Measures for which the South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal are identified in Attachment A and are incorporated as part of this MOU:

- MOU MEASURE NO. 1 – GROUND SUPPORT EQUIPMENT EMISSIONS REDUCTION POLICY
- MOU MEASURE NO. 2 – LAX ALTERNATIVE FUEL VEHICLE INCENTIVE PROGRAM
- MOU MEASURE NO. 3 – ZERO-EMISSION BUS PROGRAM

Each MOU Measure focuses on the specific MOU Measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023, 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation
- Annual reporting by LAWA to South Coast AQMD

- E. TERM OF MOU. The term of this MOU shall be effective as of the day and year indicated on the first page of this MOU (“Effective Date”) through December 31, ~~2031~~2032, unless terminated earlier pursuant to subsection F, below. Prior to expiration of this MOU, all Parties agree to meet to evaluate the need for continuing participation. If all Parties agree that continuing participation is desirable, they shall negotiate for their respective Boards’ approval, a written extension of the term of this MOU, and any applicable additional MOU SchedulesMeasures.

- F. WITHDRAWAL AND EARLY TERMINATION. Any Party may terminate this MOU for any reason by providing ninety (90) days written notice to the other Party. The Parties commit to work together to resolve any issues and negotiate an updated MOU at least thirty (30) days in advance of the specified date of termination of the MOU. If the Parties are unable to reach agreement, the MOU shall terminate on the date specified in the notification. Termination of this MOU shall not terminate any grants or funds entered into prior to the termination.



G. IMPLEMENTATION. The Parties agree to implement the provisions under their respective commitments specified in the MOU. LAWA and the South Coast AQMD agree that LAWA's implementation of the MOU Measures is not to be construed as a regulation, rule, or requirement of the South Coast AQMD. In the event that any party fails to meet its commitment(s) or anticipates an inability to meet its commitment(s), the Party shall provide notice to the other Party within sixty (60) days of such determination and seek to negotiate a mutually agreeable solution within ninety (90) days of the date of the Notice. The Parties shall continue to comply with all other commitments under this MOU during the negotiations. Nothing contained in this paragraph is intended to limit any rights or remedies that the Parties may have under law. The Parties shall attempt to resolve any controversy that may arise out of or relating to this MOU. If a controversy or claim should arise that cannot be resolved informally by the respective staffs, executive level representatives of the Parties will meet at least once in person and, in addition, at least once in person or by telephone to attempt to resolve the matter. The Representatives will make every effort to meet as soon as reasonably possible at a mutually agreed time and place.

H. NOTICES. All notices that are required under this MOU shall be provided in the manner set forth herein, unless specified otherwise. Notice to a Party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that party in writing. Notice shall be in writing sent by U.S. Certified Mail, Return Receipt Requested, or a nationally recognized overnight courier service. Notice shall be deemed to be received when delivered (written receipt of delivery).

South Coast AQMD: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: Assistant Deputy Executive Officer Planning,  
Rule Development & Area Sources

LAWA: Los Angeles World Airports  
Attn: Tamara McCrossen-Orr  
7301 World Way West, 7<sup>th</sup> Floor  
Los Angeles, CA 90045

With a copy to: General Counsel  
Los Angeles City Attorney Airport Division  
1 World Way  
Los Angeles, CA 90045

I. COSTS. Each Party shall be responsible for its respective costs associated with this MOU. No Party will submit a claim for compensation to any other Party, or otherwise seek reimbursement of costs from any other Party, for activities carried out pursuant to this MOU.

- J. FUTURE AGREEMENTS. This MOU does not restrict any future agreements between the Parties with respect to the subject matter stated herein or any other subject matter.
- K. JOINT WORK PRODUCT. This MOU shall not be construed against the Party preparing the same, shall be construed without regard to the identity of the person who drafted such and shall be construed as if all Parties had jointly prepared this MOU and it shall be deemed their joint work product.
- L. ENTIRE UNDERSTANDING. This MOU, including all attachments, constitutes the entire understanding between the Parties and supersedes all other agreements, oral or written, with respect to the subject matter herein.
- M. VENUE. Venue for resolution of any disputes under this MOU shall be Los Angeles County, California, USA.
- N. ATTORNEYS' FEES. In the event any action is filed in connection with the enforcement or interpretation of this MOU, each Party shall bear its own attorneys' fees and costs.
- O. AUTHORITY. Except as expressly stated herein, nothing in this MOU shall be construed as a waiver of any Party's discretionary authority or deemed to restrict authority granted to any Party under law in any way with respect to future legislative, administrative, or other actions.
- P. COUNTERPARTS. This MOU may be executed in one or more counterparts, each of which shall be deemed to be an original.
- Q. MODIFICATIONS. This MOU may be subsequently modified at any time but no modification shall be valid or binding unless made in writing and signed by authorized representatives of both Parties.
- R. AUTHORIZED SIGNATURES. Each signatory of this MOU represents that s/he is authorized to execute on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.
- S. NO ENFORCEMENT AGAINST THIRD PARTIES. The South Coast AQMD shall not seek to enforce the MOU Measures or any of the measures or initiatives in the LAX AQIM or any of its terms against LAWA's tenants, concessionaries, third party licensees, vendors, or other relevant operators doing business at LAWA facilities.
- T. AMENDMENTS AND CONSULTATION. LAWA may update or modify its

LAX AQIM at any time at its discretion. However, amendments to the MOU Measures must be made by the mutual agreement of both Parties and in writing signed by the Parties.

- U. RELATIONSHIP TO LAWS. LAWA will not implement any MOU Measures or measures in the LAX AQIM or any provision or provisions thereof that would violate Federal law, federal regulations, international treaty obligations, FAA policy, or FAA instructions, or compromise the safety of the traveling public.

**IN WITNESS WHEREOF**, the Parties have executed this MOU as of the day and year indicated on the first page of this MOU.

APPROVED AS TO FORM:  
MICHAEL N. FEUER, City Attorney

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

By: \_\_\_\_\_  
Deputy City Attorney

**CITY OF LOS ANGELES**

By: \_\_\_\_\_  
Chief Executive Officer  
Department of Airports

By: \_\_\_\_\_  
Chief Financial Officer  
Department of Airports

APPROVED AS TO FORM:

\_\_\_\_\_  
Bayron T. Gilchrist

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

**SOUTH COAST AIR QUALITY  
MANAGEMENT DISTRICT**

By: \_\_\_\_\_  
Dr. William Burke  
Its: Chairman, South Coast Governing

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

## ATTACHMENT A - LAX MOU Measures

### MOU MEASURE NO. 1 – GROUND SUPPORT EQUIPMENT EMISSIONS REDUCTION POLICY

This MOU Measure No. 1 is based on LAWA’s LAX AQIM measure, the Ground Support Emissions Reduction Policy for ground support equipment (GSE) at LAX and is attached to and a part of the MOU between LAWA and South Coast AQMD.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment operators at LAX achieve fleet average NOx + Hydrocarbon emission factors of 1.8 and 1.0 grams per brake horsepower-hour ~~in by January 1, 2023~~ and January 1, 2031, respectively.
- II. PROGRAM TIMEFRAME – ~~Upon~~ Upon execution through ~~2031~~2032.
- III. LAWA OBLIGATIONS – LAWA shall:
  - A. Airport shall implement the measure by working with airport tenants to achieve the above performance targets. Airport shall have complete discretion as to mechanisms used to implement this measure.
  - B. Beginning in 2021, and every year thereafter through ~~2031~~2032, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of ground support equipment operating at LAX subject to this GSE measure with the following information:
      - a. Equipment ID
      - b. Equipment type
      - c. Fuel type
      - d. Engine model year
      - e. Power rating (hp or kW)
      - f. Engine tier level (for diesel engines)
      - g. [Annual Activity Data for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB’s OFFROAD model, if applicable).to be determined]<sup>‡</sup>
    2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB’s DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from LAX to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.

<sup>‡</sup> [Activity Data to be determined]

- ~~2.3.~~ An annual emission inventory for ground support equipment operating at LAX, following the methodology and calculations used to generate the 2017 baseline inventory report for the LAX AQIM.

V.IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD shall:

- A. Verify emission reductions from the implementation of this measure by LAWA to determine actual emission reductions.
- ~~B.~~ Ensure that the data set forth in Section III.B related to this measure is accessible to the public and the USEPA.

~~B.~~

VI.V. JOINT OBLIGATIONS – The Airport and the South Coast AQMD shall:

- A. Work to identify and demonstrate clean technologies for ground support equipment in collaboration with technology providers, airport tenants, CARB, USEPA, and stakeholders.
- B. Collaborate to identify additional sources of funding to accelerate turnover of existing ground support equipment to cleaner equipment.

## MOU MEASURE NO. 2 – LAX ALTERNATIVE FUEL VEHICLE INCENTIVE PROGRAM

This MOU Measure No. 2 is based on LAWA’s LAX AQIM measure, the LAX Zero and Near-Zero Emission Heavy-Duty Vehicle Incentive Program and is attached to and a part of the MOU between LAWA and South Coast AQMD.

- I. PROGRAM DESCRIPTION – Implement an incentive program that will distribute up to \$500,000 dollars in funding to applicants based on the “incremental cost” differential of the zero or near-zero emission vehicles as compared to conventionally-fueled equivalents with a Gross Vehicle Weight Rating (GVWR) of 14,001 pounds or greater by December 31, 2021.
- II. PROGRAM TIMEFRAME – ~~Upon~~ ~~Upon~~ execution through ~~2031~~2032.
- III. LAWA OBLIGATIONS – LAWA shall:
  - A. Ensure full subscription of incentive program funding, to the maximum extent feasible, to encourage the deployment of zero or near-zero emission vehicles at LAX.
  - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. Zero or near-zero vehicle VIN number
    2. Zero or near-zero vehicle model year
    3. Zero or near-zero vehicle GVWR
    4. Zero or near-zero vehicle engine model year
    5. Zero or near-zero vehicle engine power rating
    6. Zero or near-zero vehicle fuel type
    7. Executive Order Number for the zero or near-zero vehicle engine
    8. Zero or near-zero vehicle annual VMT (estimated)<sup>2</sup>
    9. List of, and information on, replaced vehicle s (e.g., scrapped, moved out of state)
    10. An emission inventory for the new near-zero or zero-emission vehicles acquired by LAX operators under the Alternative Fuel Vehicle Incentive Program, following the methodology and calculations used to generate the 2017 baseline inventory report for the LAX AQIM.

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<sup>2</sup> Vehicle miles traveled (VMT) will be estimated from EMFAC2017 VMT for applicable vehicle size and technology categories in the South Coast Air Basin portion of Los Angeles County, unless CARB updates those activity levels at a future date within the Program.

IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD shall:

- A. Verify emission reductions from the implementation of this measure by LAWA to determine actual emission reductions.
- B. Ensure that the data set forth in Section III.B related to this measure is accessible to the public and the USEPA.

DRAFT

### **MOU MEASURE NO. 3 – ZERO-EMISSION BUS PROGRAM**

This MOU Measure No. 3 is based on LAWA’s LAX AQIM measure, the LAWA Zero- Emission Bus Program to convert LAWA-owned buses at LAX to zero-emission buses and is attached to and a part of the MOU between LAWA and South Coast AQMD.

- I. PROGRAM DESCRIPTION – Replace 20% and 100% of LAWA-owned and operated buses with zero-emission buses by January 1, 2023 and January 1, 2031, respectively.
- II. PROGRAM TIMEFRAME – ~~Upon~~ ~~Upon~~ execution through ~~2031~~2032.
- III. LAWA OBLIGATIONS – LAWA shall:
  - A. Replace LAWA-owned buses to meet the specified targets.
  - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of buses operating at LAWA with the following information:
      - a. Vehicle Identification Number
      - b. Vehicle model year
      - c. Vehicle GVWR
      - d. Bus engine model year
      - e. Power rating (hp or kW)
      - f. Odometer reading
      - g. Vehicle miles traveled<sup>3</sup>
    2. An emission inventory for the LAWA-owned bus fleet, following the methodology and calculations used to generate the 2017 baseline inventory report for the LAX AQIM.
    3. List of buses replaced during the reported year and information specified in III.B.1 above on replaced and replacement buses (i.e., replaced buses scrapped or moved out of state).
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD shall:
  - A. Verify emission reductions from the implementation of this measure by LAWA to determine actual emission reductions.
  - B. Ensure that the data set forth in Section III.B related to this measure is accessible to the public and the USEPA.

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<sup>3</sup> Vehicle miles traveled (VMT) will be based on actual annual mileage traveled by each bus in the LAWA-owned bus fleet.



**MEMORANDUM OF UNDERSTANDING BETWEEN  
SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND  
BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY  
REGARDING HOLLYWOOD BURBANK AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

This Memorandum of Understanding (“MOU”) is entered into by South Coast Air Quality Management District (“South Coast AQMD”), acting by and through its Governing Board, and the Burbank-Glendale-Pasadena Airport Authority (“Authority”), a joint powers agency, in its capacity as the proprietor and certificated operator of the Bob Hope Airport, commonly known as Hollywood Burbank (“BUR” or “Airport”). The Authority and South Coast AQMD shall be referred to collectively as Parties (each a Party) to this MOU.

I. RECITALS

A. RECITALS BY SOUTH COAST AQMD

1. Air Regulatory Agencies. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (Basin). South Coast AQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) are the regional, state, and federal regulatory agencies, respectively, with jurisdiction over air quality in the Basin. South Coast AQMD and CARB have developed and approved the 2016 Air Quality Management Plan (AQMP) for the Basin for incorporation into the California State Implementation Plan (SIP). The 2016 AQMP has been submitted to USEPA and ~~is pending its approval~~ was approved on October 1, 2019.
2. South Coast AQMD. South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin, which consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino. BUR is located within the Basin.
3. Need for Emission Reductions. The Basin is classified as an extreme non-attainment area for the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS) with statutory deadlines to reach attainment by 2023 and 2031, respectively. Despite significant air quality improvements achieved over the last several decades, to meet these standards, emissions of oxides of nitrogen (NOx) must be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 AQMP, adopted by South Coast AQMD Governing Board in March 2017. The 2016 AQMP included Control Measure MOB-04 (Emission Reductions at Commercial Airports), with the goal of achieving emission reductions from commercial airports through implementation of voluntary airport strategies.

4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin, primarily due to airport-related mobile source activities. These sources include aircraft, cargo trucks, ground support equipment (GSE), off-road vehicles, shuttle buses, and passenger vehicles. Therefore, NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY THE AUTHORITY

1. Airport. The Authority is the proprietor and certificated operator of BUR.
2. Airport Obligations. The Authority has entered into this MOU pursuant to its proprietary and governmental powers and authority under the State Aeronautics Act (California Public Utilities Code Sections 21001, et seq.).
3. Management and Operation. The Air Quality Improvement Plan (AQIP) and this MOU reflect the experience of the Authority in the management and operation of the Airport including extensive experience with the federal government, commercial aviation operators, general aviation operators and suppliers, the community, local public entities, and the residents of areas in the general vicinity of BUR.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of BUR to the economic health and well-being of the community surrounding BUR and the importance of balancing the needs of the community for adequate commercial air transportation facilities with environmentally responsible air transportation operations at BUR.
5. Statement of Intent. The Authority's consideration of the matters and issues referred to in this MOU is not intended as a statement that such matters and issues are the only ones considered by the Authority in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by the Authority of all of its state and federal obligations and responsibilities as the proprietor of the Airport and addresses only those emission sources that the Airport believes it can reasonably affect.
6. Air Quality Improvement Plan (AQIP). The Authority has developed its own voluntary AQIP, with technical support provided by South Coast AQMD. The AQIP represents the Authority's best efforts to develop programs and strategies for reducing NOx emissions from airport mobile source operations based on its existing authority over airport emission sources. The AQIP includes specific initiatives and measures for certain non-aircraft emission sources operating at the Airport.

7. Emissions Inventory - The BUR AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecasts as well as the 2023 and 2031 forecasts that include the projected estimates of emissions benefits from voluntary airport AQIP measures with quantifiable emission reductions. The AQIP provides an emissions inventory only for non-aircraft airport sources for which the AQIP includes specific voluntary airport measures and initiatives (i.e., ground support equipment, fuel/delivery trucks, on-road and off-road airport fleet vehicles, shuttle buses, and passenger transportation). The Authority has provided the AQIP with supporting calculations to South Coast AQMD.

### C. JOINT RECITALS

#### 1. Purpose of MOU

The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the emission reduction benefits in the Basin through the implementation of the voluntary airport strategies developed by the Authority under the AQIP and MOU, and adopted by the Authority on [INSERT DATE]. Attachment A, "MOU Schedules," sets forth the specific voluntary airport AQIP measures that are subject to the MOU. This MOU does not create SIP creditable reductions; rather, it identifies specific voluntary airport AQIP measures and provides the means for South Coast AQMD to quantify the emission reductions from these voluntary airport AQIP measures to obtain SIP credits. The MOU is not intended to limit Airport growth. A central objective of the AQIP and MOU is to generate NOx reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. MOU Schedules 1 and 2, specified in Attachment A, establish metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emission source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: (1) Establish an emissions cap or any other facility-wide limit for NOx, or any other pollutant; (2) Obligate the Airport to provide a facility-wide inventory of NOx or VOC emissions; however, the Parties agree to continue to work together in developing inventories of airport emission sources to support the development of future AQMPs outside of the AQIP/MOU process; or (3) Limit the Authority's ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary

Airport Low Emissions (VALE) program and other similar programs, which require emissions reductions achieved through such programs to be voluntary in nature and exceed existing obligations to achieve emissions reductions.

- c. The emission reduction benefits from the voluntary airport AQIP measures in Attachment A may be used by South Coast AQMD to obtain SIP credit to the extent the emission reduction benefits quantified by South Coast AQMD for these measures satisfy USEPA's integrity elements (i.e., the emission reductions are quantifiable, surplus, permanent, and enforceable). South Coast AQMD may seek SIP credit for the quantified emission reductions through a separate SIP submittal.
- d. The Parties agree that South Coast AQMD, and not the Authority, will rectify any shortfall in prospective emission reductions from the voluntary airport AQIP measures specified in Attachment A.
- e. The Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.

## 2. MOU Public Process

- a. Following the adoption of the 2016 AQMP, South Coast AQMD staff held a series of public working group meetings to solicit comments on implementing Control Measure MOB-04 for commercial airports. Based on input received during the public process, South Coast AQMD staff developed a recommendation for South Coast AQMD Governing Board for the development of an MOU with the commercial airports. In the event that the MOU approach with the airports was not successful, staff also recommended consideration of a regulatory approach for reducing emissions from commercial airports.
- b. In May 2018, South Coast AQMD Governing Board approved staff's recommendation and directed staff to pursue an MOU approach with the commercial airports to implement 2016 AQMP Control Measure MOB-04.
- c. South Coast AQMD staff has established an MOU Working Group (WG), consisting of representatives from South Coast AQMD, commercial airports (Los Angeles International Airport, John Wayne Airport, Ontario International Airport, Hollywood Burbank Airport, and Long Beach Airport), CARB, USEPA, environmental organizations, labor, freight industry, airlines, other stakeholders, and the public to solicit comments on the MOU development. South Coast AQMD staff will also monitor the

implementation of this MOU and provide reports to USEPA. In addition, South Coast AQMD may utilize other well-established means of communication, including South Coast AQMD website, Subscribers lists, and Governing Board and Committee meetings, for disseminating information concerning the status of MOU implementation.

d. The MOU is developed through the public process outlined above for consideration by South Coast AQMD Governing Board and the Authority Commission.

3. MOU Applicability. The MOU (1) addresses only those initiatives and measures included in the BUR AQIP identified in Attachment A, and (2) does not supersede rules that are established by USEPA or CARB, or legal, regulatory, or contractual obligations that the Airport is subject to such as U.S. Department of Transportation (USDOT) or Federal Aviation Administration (FAA) regulations; federal statutes, including the Anti-Head Tax Act (AHTA), the Federal Aviation Act, and the Airline Deregulation Act; international treaties; or the doctrines of federal preemption, the dormant Commerce Clause, and the Supremacy Clause.

a. Excluded Sources. Nothing in the AQIP or this MOU is intended or shall be interpreted to regulate or otherwise apply to (1) any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of Auxiliary Power Units (APUs), aircraft engines or any other aircraft parts or systems, or (2) the operation of any source that is not specifically identified as a AQIP Source in Attachment A, namely aircraft, inclusive of APUs, aircraft engines, or any other aircraft parts or systems, either in flight or on the ground, including while taxiing or parked at an aircraft gate, remain-overnight (RON) position, maintenance facility, or any other airport location, or (3) any and all activities associated with General Aviation (GA) operations including aircraft, GA related GSE and vehicles and equipment. For purposes of the AQIP and this MOU, GA is defined as all civil aviation operations *except*: operations by 14 C.F.R Part 121 commercial carriers and regularly scheduled air services.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all Parties to be derived from emissions reductions of NO<sub>x</sub>, and corresponding anticipated reductions to other pollutants, including VOC and PM, resulting from the implementation of the strategies identified in the voluntary AQIP, the Parties hereto agree as follows:

A. AUTHORITY'S RESPONSIBILITIES

The Authority agrees to take the following actions:

1. AQIP Implementation. Implement AQIP voluntary airport measures identified in Attachment A, Schedules 1 and 2.
  2. Monitoring and Reporting. Monitor the implementation of voluntary airport AQIP measures and provide data and annual emissions inventory reports to South Coast AQMD as described in Attachment A, Schedules 1 and 2.
  3. Incentives. Provide monetary or non-monetary incentives for non-aircraft airport mobile sources to the extent possible and as included in the AQIP. Nothing in this MOU requires the Airport to provide incentives.
  4. Funding. Support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures, at the Authority's discretion.
- B. SOUTH COAST AQMD'S RESPONSIBILITIES
- South Coast AQMD agrees to take the following actions:
1. Technical Analyses for SIP Credit from AQIP emission reductions. South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of the emission reductions benefits attributable to the voluntary airport AQIP measures identified in Attachment A. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through AQIP measures in Attachment A based on the AQIP inventories, and an estimation of emissions reductions benefits and corresponding SIP credits. Factors to be considered for purposes of calculating the emission reductions benefits attributable to the voluntary airport AQIP measures in Attachment A shall include, but not be limited to: growth forecasts from the airports, implementation schedules for voluntary airport AQIP measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific voluntary airport AQIP measures.
  2. Federal Enforceability. To the extent necessary to obtain SIP approval, South Coast AQMD will provide federally enforceable commitments in a SIP update document that is separate from this MOU to USEPA after approval by the South Coast AQMD and the CARB Boards. South Coast AQMD will monitor, assess, and report emission reductions benefits from the voluntary airport AQIP measures identified in Attachment A to USEPA.
  3. Responsibility for Shortfall. South Coast AQMD shall be solely responsible to make up any emissions reduction shortfalls that may occur in the event that the actual voluntary airport AQIP emissions reduction benefits do not achieve the estimated emissions reduction benefits projected for implementation of

the voluntary airport AQIP measures specified in Attachment A. South Coast AQMD will also commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A. The Authority shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A, unless otherwise mutually agreed on by both Parties. Notwithstanding the above, the Authority and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of voluntary AQIP measures in Attachment A are less than the emissions reduction benefits projected for implementation of these voluntary AQIP measures, the Authority and South Coast AQMD will work together to consider potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD address any shortfalls.

4. Funding. South Coast AQMD, at its Governing Board's discretion, will support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures.
5. Monitoring. South Coast AQMD will monitor and assess the implementation of SIP creditable AQIP measures based on information provided by the Authority as outlined in Schedules 1 and 2 in Attachment A.
6. Information Sharing. South Coast AQMD will provide the means for ensuring that emission reduction data and other pertinent information related to the implementation of SIP creditable AQIP measures are fully accessible to the public and USEPA.

C. MOU SCHEDULES

*The voluntary airport AQIP measures for which South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal are identified in Schedules 1 and 2 in Attachment A and are incorporated as part of this MOU:*

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT
2. MOU SCHEDULE NO. 2 – ZERO-EMISSION SHUTTLE BUS PROGRAM

Each Schedule focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023 and 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets



- Schedule for program implementation
- Annual reporting by the Authority to South Coast AQMD

Variations in the nature of information and data needed for each of the source measures may be addressed with focused and adaptive revisions to the individual equipment category schedules and may be revised by mutual agreement of the Parties without modifying this MOU.

- D. TERM OF MOU. This MOU shall be in full force and in effect when signed by all Parties following their respective required authorization processes. The initial term of this MOU shall expire on December 31, 203~~1~~<sup>2</sup> unless terminated earlier pursuant to Section II.E, below. Prior to expiration of this MOU, all Parties agree to meet to evaluate the need for continuing participation. If all Parties agree that continuing participation is desirable, they shall negotiate for their respective Boards' approval, a written extension of the term of this MOU, and any applicable additional MOU Schedules.
- E. WITHDRAWAL AND EARLY TERMINATION. If any Party to this MOU determines that it wishes to no longer be a party to this MOU, then the Party shall provide notice to the other Party at least ninety (90) days in advance of the specified date of termination of the MOU. The Parties commit to work together to resolve any issues and to negotiate an updated MOU at least thirty (30) days in advance of the specified date of termination of the MOU. If the Parties are unable to reach agreement, the MOU shall terminate on the date specified in the notification.
- F. ENFORCEABILITY. The Parties agree to implement the provisions in the MOU. The Parties agree that implementation of the measures specified in Attachment A is not to be construed as a regulation or requirement of South Coast AQMD. In the event that any party fails to meet its commitment(s) or anticipates an inability to meet its commitment(s), the Party shall provide notice to the other Party within sixty (60) days of such determination and seek to negotiate a mutually agreeable solution within ninety (90) days of the date of the Notice. The Parties shall continue to comply with all other commitments under this MOU during the negotiations. Nothing contained in this paragraph is intended to limit any rights or remedies that the Parties may have under law. The Parties shall attempt in good faith to resolve any controversy that may arise out of or relating to this MOU. If a controversy or claim should arise that cannot be resolved informally by the respective staffs, executive level representatives of the Parties will meet at least once in person and, in addition, at least once in person or by telephone to attempt to resolve the matter. The Representatives will make every effort to meet as soon as reasonably possible at a mutually agreed time and place.





California. Venue for resolution of any disputes under this MOU shall be Los Angeles County, California, USA.

- N. SEVERABILITY. If a court of competent jurisdiction holds any provision of this MOU 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.
- O. ATTORNEYS' FEES. In the event any action is filed in connection with the enforcement or interpretation of this MOU, each Party shall bear its own attorneys' fees and costs.
- P. AUTHORITY. Except as expressly stated herein, nothing in this MOU shall be construed as a waiver of any Party's discretionary authority or deemed to restrict authority granted to any Party under law in any way with respect to future legislative, administrative, or other actions.
- Q. VOLUNTARY AQIP. The Parties agree that the Airport's AQIP measures in Attachment A are voluntary and are not to be construed as a regulation or requirement of South Coast AQMD.
- R. MOU Modification. This MOU may be subsequently modified at any time but no modification shall be valid or binding unless made in writing and signed by authorized representatives of both Parties.
- S. COUNTERPARTS. The signature pages of this MOU are being executed in counterparts by authorized signatories of the Parties following the approvals by their respective public agency governing boards. When both Parties have signed, all executed counterparts taken together shall constitute one and the same instrument.
- T. AUTHORIZED SIGNATURES. Each signatory of this MOU represents that s/he is authorized to execute on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.
- U. NO ENFORCEMENT AGAINST THIRD PARTIES. South Coast AQMD shall not seek to enforce the measures and new initiatives specified in Attachment A or any of the measures or new initiatives in the AQIP or any of its terms against BUR's tenants, concessionaries, third party licensees, vendor, or other relevant operators doing business at BUR facilities.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Memorandum of Understanding to be executed by their authorized representatives.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

~~[INCLUDE AIRPORT SIGNATORIES]~~HOLLYWOOD BURBANK AIRPORT SIGNATORIES

By \_\_\_\_\_  
Name: Dr. William Burke  
Title: Chairman, South Coast Governing Board

~~By \_\_\_\_\_~~  
Name: John Hatanaka  
Title: Senior Deputy Executive Director,  
Hollywood Burbank Airport

Date: \_\_\_\_\_, 20\_\_

~~\_\_\_\_\_~~  
Date: \_\_\_\_\_, 20\_\_

Attest \_\_\_\_\_  
Name:  
Title:

APPROVED AS TO FORM:

Date: \_\_\_\_\_, 20\_\_  
BAYRON T. GILCHRIST,  
General Counsel

By \_\_\_\_\_  
Name:  
Title:

# ATTACHMENT A

## MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on the Authority's AQIP measure for ground support equipment<sup>1</sup>.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve fleet average ~~hydrocarbon plus of~~ NOx combined emission factors of ~~1.6692~~ and ~~0.7482~~ g/bhp-hr ~~in by January 1 of~~ 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through ~~2031~~2.
- III. AIRPORT OBLIGATIONS – The Authority agrees to:
  - A. Implement the measure by working with airport tenants to achieve the above performance targets by the specified dates through accelerated turnover to cleaner equipment. Airport shall have complete discretion as to mechanisms used to implement this measure. Such mechanisms may include leases, licenses, operational requirements, or other agreements.
  - B. Beginning in 2021, and every year thereafter through ~~2031~~2, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of ground support equipment as provided by airlines operating at BUR with the following information:
      - a. Equipment ID
      - b. Equipment type
      - c. Fuel type
      - d. Engine model year
      - e. Power rating (hp or kW)
      - f. Engine tier level (for diesel engines)
      - g. Annual activity data for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable)
    2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from BUR to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation,

and c) estimated projected usage hours.

~~2.~~

3. An annual emission inventory for all ground support equipment associated with commercial operations at BUR, including methodology and calculations.

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<sup>1</sup> Ground Support Equipment or "GSE" is any vehicle or equipment used to support aircraft operations that is subject to, or included in compliance plans to meet, the requirements of the California Air Resources Board (CARB) In-Use Off-Road Diesel (ORD) Vehicle Regulation Program, CARB Off-Road Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation Program, or CARB Portable Equipment Registration Program and associated Portable Diesel Engine Airborne Toxic Control Measure. Furthermore, GSE as defined here only includes equipment that is not subject to compliance with SCAQMD Rule XX – RECLAIM, or included in a mobile source emission reduction credit program under SCAQMD Rule XVI.

- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
- A. Verify emission reductions from the implementation of this AQIP measure in order to determine actual emission reductions.
  - B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and USEPA.

## MOU SCHEDULE NO. 2 –ZERO-EMISSION SHUTTLE BUS PROGRAM

This MOU Schedule No. 2 is based on the Authority's AQIP SIP creditable measure for zero-emission buses at BUR.

- I. PROGRAM DESCRIPTION –Replace 50% and 100% of BUR-owned and operated or BUR airport contracted buses with electric buses by January 1 of 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2032.
- III. AIRPORT OBLIGATIONS – The Authority agrees to:
  - A. Replace or require shuttle buses to meet the specified targets.
  - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of shuttle buses operating at BUR with the following information:
      - a. Vehicle Identification Number
      - b. Vehicle model year
      - c. Gross Vehicle Weight Rating
      - d. Fuel type
      - e. Odometer reading
      - f. Annual vehicle miles travelled
    2. An emission inventory for shuttle buses, including methodology and calculations.
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
  - A. Verify emission reductions from the implementation of this SIP creditable AQIP measure by the Authority in order to determine actual emission reductions.
  - B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and USEPA.

**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND  
JOHN WAYNE AIRPORT, ORANGE COUNTY  
REGARDING JOHN WAYNE AIRPORT’S AIR QUALITY IMPROVEMENT PLAN**

This Memorandum of Understanding (“MOU”) is entered into by the South Coast Air Quality Management District (“South Coast AQMD”), [acting by and through its Governing Board](#), and John Wayne Airport, Orange County (SNA) (“JWA” or “Airport”), acting by and through the County of Orange, California (“County”) in its capacity as the proprietor and certificated operator of JWA. The Airport and South Coast AQMD shall be referred to collectively as Parties (each a “Party”) to this MOU.

I. RECITALS

A. RECITALS BY SOUTH COAST AQMD

1. Air Regulatory Agencies. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (Basin). The South Coast AQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) are the regional, state, and federal regulatory agencies, respectively, with jurisdiction over air quality in the Basin. South Coast AQMD and CARB have developed and approved the 2016 Air Quality Management Plan (AQMP) for the Basin for incorporation into the California State Implementation Plan (SIP). [The USEPA approved the 2016 AQMP on October 1, 2019. The 2016 AQMP has been submitted to USEPA and is pending its approval.](#)
2. South Coast AQMD. The South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin, which consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino. JWA is located within the Basin.
3. Need for Emission Reductions. The Basin is classified as an extreme non-attainment area for the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS) with statutory deadlines to reach attainment by 2023 and 2031, respectively. Despite significant air quality improvements achieved over the last several decades, to meet these standards, emissions of oxides of nitrogen (NOx) must be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 AQMP, adopted by the South Coast AQMD Governing Board in March 2017. The 2016 AQMP included Control Measure MOB-04 (Emission Reductions at Commercial Airports), with the goal of achieving emission reductions from commercial airports through implementation of voluntary airport strategies.



4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin, primarily due to airport-related mobile source activities. These sources include aircraft, cargo trucks, ground support equipment (GSE), off-road vehicles, shuttle buses, and passenger vehicles. Therefore, NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY JWA

1. Airport. The County of Orange is the proprietor and certificated operator of JWA.
2. Airport Obligations. JWA enters into this MOU pursuant to its proprietary and governmental powers and authority under the State Aeronautics Act (California Public Utilities Code Sections 21001, et seq.).
3. Management and Operation. The Air Quality Improvement Plan (AQIP) and this MOU reflect the experience of JWA in the management and operation of the Airport including extensive experience with the federal government, commercial aviation operators, general aviation operators and suppliers, the community, local public entities, and the residents of areas in the general vicinity of JWA.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of JWA to the economic health and well-being of the community surrounding JWA and the importance of balancing the needs of the Orange County community for adequate commercial air transportation facilities with environmentally responsible air transportation operations at JWA.
5. Statement of Intent. JWA's consideration of the matters and issues referred to in this MOU is not intended as a statement that such matters and issues are the only ones considered by the Airport in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by JWA of all of its state and federal obligations and responsibilities as the proprietor of the Airport and addresses only those emission sources that the Airport believes it can reasonably affect.
6. Air Quality Improvement Plan (AQIP). JWA has developed its own voluntary AQIP, with technical support provided by the South Coast AQMD. The AQIP represents the Airport's best efforts to develop programs and strategies for reducing NOx emissions from airport mobile source operations based on its existing authority over airport emission sources. The AQIP includes specific initiatives and measures for certain non-aircraft emission sources operating at the Airport.

7. Emissions Inventory. The AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecast as well as the 2023 and 2031 forecasts that include the projected estimates of emissions benefits from voluntary airport AQIP measures with quantifiable emission reductions. The AQIP provides an emissions inventory only for non-aircraft airport sources for which the AQIP includes specific voluntary airport measures and initiatives (i.e., ground support equipment, fuel/delivery trucks, on-road and off-road airport fleet vehicles, shuttle buses, and passenger transportation). JWA has provided the AQIP with supporting calculations to the South Coast AQMD.

C. JOINT RECITALS

1. Purpose of MOU

The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the emission reduction benefits in the Basin through the implementation of the voluntary airport strategies developed by JWA under the AQIP and MOU, and ~~adopted~~approved by the County on [INSERT DATE]. Attachment A, "MOU Schedules," sets forth the specific voluntary airport AQIP measures that are subject to the MOU. This MOU does not create SIP creditable reductions; rather, it identifies specific voluntary airport AQIP measures and provides the means for the South Coast AQMD to quantify the emission reductions from these voluntary airport AQIP measures to obtain SIP credits. The MOU is not intended to limit Airport growth. A central objective of the AQIP and MOU is to generate NO<sub>x</sub> reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. The MOU Schedules 1 through 3, specified in Attachment A, establish metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emissions source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: i) Establish an emissions cap or any other facility-wide limit for NO<sub>x</sub>, or any other pollutant; ii) Obligate the Airport to provide a facility-wide inventory of NO<sub>x</sub> or VOC emissions; however, the parties agree to continue to work together in developing inventories of airport emission sources to support the development of future AQMPs outside of the AQIP/MOU process; or iii) Limit the Airport's ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary Aviation Low Emissions (VALE) program and other similar programs, which require

emissions reductions achieved through such programs to be voluntary in nature and exceed existing obligations to achieve emissions reductions.

- c. The emission reduction benefits from the voluntary airport AQIP measures in Attachment A may be used by South Coast AQMD to obtain SIP credit to the extent the emission reduction benefits quantified by South Coast AQMD for these measures satisfy USEPA's integrity elements (i.e., the emission reductions are quantifiable, surplus, permanent, and enforceable). South Coast AQMD may seek SIP credit for the quantified emission reductions through a separate SIP submittal.
- d. The Parties agree that the South Coast AQMD, and not the Airport, will rectify any shortfall in prospective emission reductions from the voluntary airport AQIP measures specified in Attachment A.
- e. The Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.

## 2. MOU Public Process

- a. Following the adoption of the 2016 AQMP, South Coast AQMD staff held a series of public working group meetings to solicit comments on implementing Control Measure MOB-04 for commercial airports. Based on input received during the public process, South Coast AQMD staff developed a recommendation for the South Coast AQMD Governing Board for the development of an MOU with the commercial airports. In the event that the MOU approach with the airports was not successful, staff also recommended consideration of a regulatory approach for reducing emissions from commercial airports.
- b. In May 2018, the South Coast AQMD Governing Board approved staff's recommendation and directed staff to pursue an MOU approach with the commercial airports to implement 2016 AQMP Control Measure MOB-04.
- c. South Coast AQMD staff has established an MOU Working Group (WG), consisting of representatives from the South Coast AQMD, commercial airports (Los Angeles International Airport, John Wayne Airport, Ontario International Airport, Hollywood Burbank Airport, and Long Beach Airport), CARB, USEPA, environmental organizations, labor, freight industry, airlines, other stakeholders, and the public to solicit comments on the MOU development. South Coast AQMD staff will also monitor the implementation of this MOU and provide reports to USEPA. In addition, South Coast AQMD may utilize other well-established means of communication, including the South Coast AQMD website, Subscribers lists, and Governing Board and Committee meetings, for disseminating information concerning the status of MOU implementation.

- d. The MOU is developed through the public process outlined above for consideration by the South Coast AQMD Governing Board and the Board of Supervisors for the County of Orange.

3. MOU Applicability

~~h.a.~~ The MOU (1) addresses only the voluntary airport AQIP measures identified in Attachment A, and (2) does not supersede rules that are established by the USEPA or CARB, or legal, regulatory, or contractual obligations that the Airport is subject to such as U.S. Department of Transportation (USDOT) or Federal Aviation Administration (FAA) regulations; federal statutes, including the Anti-Head Tax Act (AHTA), the Federal Aviation Act, and the Airline Deregulation Act; international treaties; or the doctrines of federal preemption, the dormant Commerce Clause, and the Supremacy Clause.

~~h.b.~~ Excluded Sources. Nothing in the AQIP or this MOU is intended or shall be interpreted to regulate or otherwise apply to (1) any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of Auxiliary Power Units (APUs), aircraft engines or any other aircraft parts or systems, (2) the operation of any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of APUs, aircraft engines, or any other aircraft parts or systems, either in flight or on the ground, including while taxiing or parked at an aircraft gate, remain-overnight (RON) position, maintenance facility, or any other airport location, or (3) any and all activities associated with General Aviation (GA) operations including aircraft, GA related GSE and vehicles and equipment. For purposes of the AQIP and this MOU, GA is defined as all civil aviation operations *except*: operations by 14 C.F.R. Part 121 commercial carriers, and regularly scheduled air services, defined as: (i) operated in support of, advertised, or otherwise made available to members of the public by any means for commercial air transportation purposes, and members of the public may travel or ship commercial cargo on the flights; (ii) the flights are scheduled to occur, or are represented as occurring (or available) at specified times and days; and (iii) the operator conducts, or proposes to operate, departures at JWA at a frequency greater than two (2) times per week during any consecutive three (3) week period.

- II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO<sub>x</sub>, and corresponding anticipated reductions of other pollutants, including VOC and PM, resulting from the implementation of the strategies identified in the voluntary AQIP, the Parties hereto agree as follows:

A. AIRPORT'S RESPONSIBILITIES

The County or Airport agrees to take the following actions:

1. AQIP Implementation. Implement voluntary airport AQIP measures identified in Attachment A, Schedules 1 through 3.
2. Monitoring and Reporting. Monitor the implementation of voluntary airport AQIP measures and provide data and annual emissions inventory reports to South Coast AQMD as described in Attachment A, Schedules 1 through 3.
3. Incentives. Provide monetary or non-monetary incentives for non-aircraft airport mobile sources to the extent possible and as included in the AQIP. Nothing in this MOU requires the Airport to provide incentives.
4. Funding. Support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures, at JWA's discretion.

B. SOUTH COAST AQMD'S RESPONSIBILITIES

South Coast AQMD agrees to take the following actions:

1. Technical Analyses for SIP Credit from AQIP emission reductions. The South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of the emission reductions benefits attributable to the voluntary airport AQIP measures identified in Attachment A. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through AQIP measures in Attachment A based on the AQIP inventories, and an estimation of emissions reductions benefits and corresponding SIP credits. Factors to be considered for purposes of calculating the emission reductions benefits attributable to the voluntary airport AQIP measures in Attachment A shall include, but not be limited to: growth forecasts from the airports, implementation schedules for voluntary airport AQIP measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific voluntary airport AQIP measures.
2. Federal Enforceability. To the extent necessary to obtain SIP approval, the South Coast AQMD will provide federally enforceable commitments in a SIP update document that is separate from this MOU to the USEPA after approval by the South Coast AQMD and the CARB Boards. South Coast AQMD will monitor, assess, and report emission reductions benefits from the voluntary airport AQIP measures identified in Attachment A to the USEPA.
3. Responsibility for Shortfall. The South Coast AQMD shall be solely responsible to make up any emissions reduction shortfalls that may occur in the event that the actual voluntary airport AQIP emissions reduction benefits do not achieve

the projected emissions reduction benefits resulting from implementation of the voluntary airport AQIP measures specified in Attachment A. South Coast AQMD will also commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A. The Airport shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A, unless otherwise mutually agreed on by both parties. Notwithstanding the above, JWA and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of voluntary AQIP measures in Attachment A are less than the estimated emissions reduction benefits projected for implementation of these voluntary AQIP measures, JWA and South Coast AQMD will work together to consider potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD address any shortfalls.

4. Funding. The South Coast AQMD, at its Governing Board's discretion, will support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures.
5. Monitoring. The South Coast AQMD will monitor and assess the implementation of SIP creditable AQIP measures based on information provided by JWA as outlined in Schedules 1 through 3 in Attachment A.
6. Information Sharing. The South Coast AQMD will provide the means for ensuring that emission reduction data and other pertinent information related to the implementation of SIP creditable AQIP measures are fully accessible to the public and the USEPA.

C. MOU SCHEDULES

The voluntary airport AQIP measures for which the South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal are identified in the following Schedules 1 through 3 in Attachment A and are incorporated as part of this MOU:

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT
2. MOU SCHEDULE NO. 2 – JET FUEL DELIVERY TRUCKS
3. MOU SCHEDULE NO. 3 – PARKING SHUTTLE BUS ELECTRIFICATION

Each Schedule focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023, 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation

- Annual reporting by the Airport to South Coast AQMD

Variations in the nature of information and data needed for each of the source measures may be addressed with focused and adaptive revisions to the individual equipment category schedules and may be revised by mutual agreement of the Parties without modifying this MOU.

- D. TERM OF MOU. This MOU shall be in full force and in effect when signed by all Parties following their respective required authorization processes. The initial term of this MOU shall expire on December 31, ~~2031~~–2032 unless terminated earlier pursuant to Section II.E, below. Prior to expiration of this MOU, all Parties agree to meet to evaluate the need for continuing participation. If all Parties agree that continuing participation is desirable, they shall negotiate for their respective Boards' approval, a written extension of the term of this MOU, and any applicable additional MOU Schedules.
- E. WITHDRAWAL AND EARLY TERMINATION. If any Party to this MOU determines that it wishes to no longer be a party to this MOU, then the Party shall provide notice to the other Party at least ninety (90) days in advance of the specified date of termination of the MOU. The Parties commit to work together to resolve any issues and negotiate an updated MOU at least thirty (30) days in advance of the specified date of termination of the MOU. If the Parties are unable to reach agreement, the MOU shall terminate on the date specified in the notification.
- F. ENFORCEABILITY. The Parties agree to implement the provisions in the MOU. The parties agree that implementation of the measures specified in Attachment A is not to be construed as a regulation or requirement of the South Coast AQMD. In the event that any Party fails to meet its commitment(s) or anticipates an inability to meet its commitment(s), the Party shall provide notice to the other Party within sixty (60) days of such determination and seek to negotiate a mutually agreeable solution within ninety (90) days of the date of the notice. The Parties shall continue to comply with all other commitments under this MOU during the negotiations. Nothing contained in this paragraph is intended to limit any rights or remedies that the Parties may have under law. The Parties shall attempt in good faith to resolve any controversy that may arise out of or relating to this MOU. If a controversy or claim should arise that cannot be resolved informally by the respective staffs, executive level representatives of the Parties will meet at least once in person and, in addition, at least once in person or by telephone to attempt to resolve the matter. The representatives will make every effort to meet as soon as reasonably possible at a mutually agreed time and place.
- G. NOTICES. All notices that are required under this MOU shall be provided in the manner set forth herein, unless specified otherwise. Notice to a Party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that Party in writing. Notice shall be in writing sent by U.S. Certified Mail, Return Receipt Requested, or a nationally



recognized overnight courier service. Notice shall be deemed to be received when delivered (written receipt of delivery).

South Coast AQMD: South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: Assistant Deputy Executive Officer - Planning,  
Rule Development & Area Sources

JOHN WAYNE AIRPORT: Mr. Barry Rondinella  
Airport Director  
3160 Airway Avenue  
Costa Mesa, CA 92626  
Attn: Airport Environmental Manager

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the agreements contained herein by ~~any the Parties other Party~~ are subject to the availability of appropriated funds. No Party will submit a claim for compensation to ~~any the~~ other Party, or otherwise seek reimbursement of costs from ~~any the~~ other Party, for activities carried out pursuant to this MOU.
- I. FUTURE AGREEMENTS. This MOU does not restrict any future agreements between the Parties with respect to the subject matter stated herein or any other subject matter.
- J. JOINT WORK PRODUCT. This MOU shall not be construed against the Party preparing the same, shall be construed without regard to the identity of the person who drafted such and shall be construed as if all Parties had jointly prepared this MOU and it shall be deemed their joint work product.
- K. RECITALS. Each of the Recitals is incorporated into this MOU.
- L. ENTIRE UNDERSTANDING. This MOU, including all attachments, constitutes the entire understanding between the Parties and supersedes all other agreements, oral or written, with respect to the subject matter herein. This MOU shall not be amended except in writing, signed by the Parties which expressly refers to this ~~contract~~MOU.
- M. VENUE. This MOU shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this MOU shall be Orange County, California, USA.
- N. SEVERABILITY. If a court of competent jurisdiction holds any provision of this MOU 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.

- O. ATTORNEYS' FEES. In the event any action is filed in connection with the enforcement or interpretation of this MOU, each Party shall bear its own attorneys' fees and costs.
- P. AUTHORITY. Except as expressly stated herein, nothing in this MOU shall be construed as a waiver of any Party's discretionary authority or deemed to restrict authority granted to any Party under law in any way with respect to future legislative, administrative, or other actions.
- Q. VOLUNTARY AQIP. The Parties agree that the Airport's AQIP measures set forth in Attachment A are voluntary and are not to be construed as a regulation or requirement of South Coast AQMD.
- R. MOU Modification. This MOU may be subsequently modified at any time but no modification shall be valid or binding unless made in writing and signed by authorized representatives of both Parties.
- S. COUNTERPARTS. The signature pages of this MOU are being executed in counterparts by authorized signatories of the Parties following the approvals by their respective public agency governing boards. When both Parties have signed, all executed counterparts taken together shall constitute one and the same instrument.
- T. AUTHORIZED SIGNATURES. Each signatory of this MOU represents that s/he is authorized to execute on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.
- U. NO ENFORCEMENT AGAINST THIRD PARTIES. The South Coast AQMD shall not seek to enforce the measures specified in Attachment A or any of the measures or new initiatives in the AQIP or any of its terms against JWA's tenants, concessionaries, third party licensees, vendors, or other relevant operators doing business at JWA facilities.

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**IN WITNESS WHEREOF**, the Parties hereto have caused this Memorandum of Understanding to be executed by their authorized representatives.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**JOHN WAYNE AIRPORT, ORANGE COUNTY**

By \_\_\_\_\_  
Name: Dr. William Burke  
Title: Chairman, South Coast Governing Board

By \_\_\_\_\_  
Name: Mr. Barry Rondinella  
Title: Airport Director

Date: \_\_\_\_\_, 20\_\_

Date: \_\_\_\_\_, 20\_\_

Attest \_\_\_\_\_  
Name:  
Title:

Attest \_\_\_\_\_  
Name:  
Title:

**APPROVED AS TO FORM:**

**APPROVED AS TO FORM:**

By \_\_\_\_\_  
BAYRON T. GILCHRIST,  
General Counsel

By \_\_\_\_\_  
Deputy County Counsel  
County of Orange

Date: \_\_\_\_\_, 20\_\_

Date: \_\_\_\_\_, 20\_\_

## ATTACHMENT A

### MOU Schedules

#### MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on JWA’s AQIP measure for ground support equipment<sup>1</sup>.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 1.7 and 0.9 grams per brake horsepower hour (g/bhp-hr) by January 1, 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through 2031-2032.
- III. AIRPORT OBLIGATIONS – JWA agrees to:
  - A. Implement the measure by working with Airport tenants to achieve the above performance targets by specified dates through accelerated turnover to cleaner equipment. JWA shall have complete discretion as to mechanisms used to implement this measure. Such mechanisms may include leases, licenses, operational requirements, or other agreements.
  - B. Beginning in 2021, and every year thereafter through 2032, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of ground support equipment subject to GSE measure with the following information:
      - a. Equipment ID
      - b. Equipment type
      - c. Fuel type
      - d. Engine model year
      - e. Power rating (hp or kW)
      - f. Engine tier level (for diesel engines)
      - g. Annual activity data for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB’s OFFROAD

<sup>1</sup> Ground Support Equipment or “GSE” is any vehicle or equipment used to support aircraft operations that is subject to, or included in compliance plans to meet, the requirements of the California Air Resources Board (CARB) In-Use Off-Road Diesel (ORD) Vehicle Regulation Program, CARB Off-Road Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation Program, or CARB Portable Equipment Registration Program and associated Portable Diesel Engine Airborne Toxic Control Measure. Furthermore, GSE as defined here only includes equipment that is not subject to compliance with South Coast AQMD Rule XX – RECLAIM, or included in a mobile source emission reduction credit program under South Coast AQMD Rule XVI.

model, if applicable)

2. For non-zero emission GSE subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from JWA~~the AIRPORT~~ to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) -estimated projected usage hours.

1.3. An annual emission inventory for all ground support equipment associated with commercial operations at JWA, including methodology and calculations.

IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:

- A. Verify emission reductions from the implementation of this AQIP measure in order to determine actual emission reductions.
- B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and the USEPA.

**MOU SCHEDULE NO. 2 – JET FUEL DELIVERY TRUCKS**

This MOU Schedule No. 2 is based on JWA’s AQIP measure for jet fuel delivery trucks.

- I. PROGRAM DESCRIPTION – Install a jet fuel pipeline by the end of 2019 and eliminate routine commercial passenger jet fuel delivery trucks by [January 1, 2023](#).
- II. PROGRAM TIMEFRAME - Upon execution through ~~2031~~[2032](#).
- III. AIRPORT OBLIGATIONS – JWA agrees to:
  - A. Work with third parties to complete the jet fuel pipeline installation and work with tenants to eliminate routine commercial passenger jet fuel truck deliveries.
  - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. Total number of routine and non-routine truck trips delivering jet fuel for commercial passenger aviation, and truck model years, if available.
    2. Total amount of jet fuel delivered.
    3. An estimate of total vehicle miles travelled.
    4. An emission inventory for commercial passenger jet fuel delivery trucks, including methodology and calculations.
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
  - A. Verify emission reductions from the implementation of this AQIP measure by JWA in order to determine actual emission reductions.
  - B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and the USEPA.

**MOU SCHEDULE NO. 3 – PARKING SHUTTLE BUS ELECTRIFICATION**

This MOU Schedule No. 3 is based on JWA’s AQIP measure for shuttle bus (off airport employee and passenger parking lots) electrification.

- I. PROGRAM DESCRIPTION Replace a minimum of 50% and 80% of Airport employee and passenger remote parking compressed natural gas (CNG) shuttle buses with battery-electric shuttle buses by January 1, 2023 and 2031, respectively. The Airport may continue to reserve non-battery-electric shuttle buses for standby and emergency use.
- II. PROGRAM TIMEFRAME - Upon execution through ~~2031~~2032.
- III. AIRPORT OBLIGATIONS – JWA agrees to:
  - A. Replace existing CNG shuttle buses, with zero-emission buses as described above.
  - B. Beginning in 2021, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of shuttle buses operating at JWA with the following information:
      - a. Vehicle Identification Number
      - b. Vehicle model year
      - c. Vehicle GVWR
      - d. Bus engine model year
      - e. Power rating (hp or kW)
      - f. Fuel type
      - g. Odometer reading
      - h. Vehicle miles travelled
    2. An emission inventory for shuttle buses, including methodology and calculations.
    3. List of shuttle buses replaced during the reported year and information specified in III.B.1 above on replaced and replacement buses.
- IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:
  - A. Verify emission reductions from the implementation of this AQIP measure by JWA in order to determine actual emission reductions.
  - B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and the USEPA.

**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND  
THE CITY OF LONG BEACH  
REGARDING LONG BEACH AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

This Memorandum of Understanding ("MOU") is entered into by the South Coast Air Quality Management District ("South Coast AQMD"), acting by and through its Governing Board, and the City of Long Beach ("City"), in its capacity as the proprietor and certificated operator of the Long Beach Airport ("LGB" or "Airport"). The City and South Coast AQMD shall be referred to collectively as Parties (each a Party) to this MOU.

I. RECITALS

A. RECITALS BY SOUTH COAST AQMD

1. Air Regulatory Agencies. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (Basin). The South Coast AQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) are the regional, state, and federal regulatory agencies, respectively, with jurisdiction over air quality in the Basin. South Coast AQMD and CARB have developed and approved the 2016 Air Quality Management Plan (AQMP) for the Basin for incorporation into the California State Implementation Plan (SIP). The 2016 AQMP ~~has been submitted to~~ was approved by USEPA ~~and is pending its approval~~ on October 1, 2019.
2. South Coast AQMD. The South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin, which consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino. LGB is located within the Basin.
3. Need for Emission Reductions. The Basin is classified as an extreme non-attainment area for the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS) with statutory deadlines to reach attainment by 2023 and 2031, respectively. Despite significant air quality improvements achieved over the last several decades, to meet these standards, emissions of oxides of nitrogen (NOx) must be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 AQMP, adopted by the South Coast AQMD Governing Board in March 2017. The 2016 AQMP included Control Measure MOB-04 (Emission Reductions at Commercial Airports), with the goal of achieving

emission reductions from commercial airports through implementation of voluntary airport strategies.

4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin, primarily due to airport-related mobile source activities. These sources include aircraft, cargo trucks, ground support equipment (GSE), off-road vehicles, shuttle buses, and passenger vehicles. The emissions from commercial airports are expected to increase in future years based on the latest airport growth forecasts. Therefore, NO<sub>x</sub> emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

#### B. RECITALS BY THE CITY

1. Airport. The City is the proprietor and certificated operator of LGB.
2. Airport Obligations. The City has entered into this MOU pursuant to its proprietary and governmental powers and authority under the State Aeronautics Act (California Public Utilities Code Sections 21001, et seq.).
3. Management and Operation. The Air Quality Improvement Plan (AQIP) and this MOU reflect the experience of the City in the management and operation of the Airport including extensive experience with the federal government, commercial aviation operators, general aviation operators and suppliers, the community, local public entities, and the residents of areas in the general vicinity of LGB.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of LGB to the economic health and well-being of the community surrounding LGB and the importance of balancing the needs of the community for adequate commercial air transportation facilities with environmentally responsible air transportation operations at LGB.
5. Statement of Intent. The City's consideration of the matters and issues referred to in this MOU is not intended as a statement that such matters and issues are the only ones considered by the City in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by the City of all of its state and federal obligations and responsibilities as the proprietor of the Airport and addresses only those emission sources that the Airport believes it can reasonably affect.
6. Air Quality Improvement Plan (AQIP). The City has developed its own voluntary AQIP, with technical support provided by the South Coast AQMD. The AQIP represents the Airport's best efforts to develop programs and



strategies for reducing NOx emissions from airport mobile source operations based on its existing authority over airport emission sources. The AQIP includes specific initiatives and measures for certain non-aircraft emission sources operating at the Airport.

7. Emissions Inventory - The LGB AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecasts as well as the 2023 and 2031 forecasts that include the projected estimates of emissions benefits from voluntary airport AQIP measures with quantifiable emission reductions. The AQIP provides an emissions inventory only for non-aircraft airport sources for which the AQIP includes specific voluntary airport measures and initiatives (i.e., ground support equipment, fuel/delivery trucks, on-road and off-road airport fleet vehicles, shuttle buses, and passenger transportation). The City has provided the AQIP with supporting calculations to the South Coast AQMD.

C. JOINT RECITALS

1. Purpose of MOU

The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the emission reduction benefits in the Basin through the implementation of the voluntary airport strategies developed by the City under the AQIP and MOU, and adopted by the City on [INSERT DATE]. Attachment A, "MOU Schedules" sets forth the specific voluntary airport AQIP measures that are the subject to the MOU. This MOU does not create SIP creditable reductions; rather, it identifies specific voluntary airport AQIP measures and provides the means for the South Coast AQMD to quantify the emission reductions from these voluntary airport AQIP measures to obtain SIP credits. The MOU is not intended to limit Airport growth. A central objective of the AQIP and MOU is to generate NOx reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. MOU Schedule 1, specified in Attachment A, establishes metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emission source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: (1) Establish an emissions cap or any other facility-wide limit for NOx, or any other pollutant; (2) Obligate the Airport to provide a facility-wide inventory of NOx or VOC emissions; however, the parties agree to continue to work together in developing

inventories of airport emission sources to support the development of future AQMPs outside of the AQIP/MOU process; or (3) Limit the City's ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary Aviation Low Emissions (VALE) program and other similar programs, which require emissions reductions achieved through such programs to be voluntary in nature and exceed existing obligations to achieve emissions reductions.

- c. The emission reduction benefits from the voluntary airport AQIP measures in Attachment A may be used by South Coast AQMD to obtain SIP credit to the extent the emission reduction benefits quantified by South Coast AQMD for these measures satisfy USEPA's integrity elements (i.e., the emission reductions are quantifiable, surplus, permanent, and enforceable). South Coast AQMD may seek SIP credit for the quantified emission reductions through a separate SIP submittal.
- d. The Parties agree that the South Coast AQMD, and not the City, will rectify any shortfall in prospective emission reductions from the voluntary airport AQIP measures specified in Attachment A.
- e. The Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.

## 2. MOU Public Process

- a. Following the adoption of the 2016 AQMP, South Coast AQMD staff held a series of public working group meetings to solicit comments on implementing Control Measure MOB-04 for commercial airports. Based on input received during the public process, South Coast AQMD staff developed a recommendation for the South Coast AQMD Governing Board for the development of an MOU with the commercial airports. In the event that the MOU approach with the airports was not successful, staff also recommended consideration of a regulatory approach for reducing emissions from commercial airports.
- b. In May 2018, the South Coast AQMD Governing Board approved staff's recommendation and directed staff to pursue an MOU approach with the commercial airports to implement 2016 AQMP Control Measure MOB-04.
- c. South Coast AQMD staff has established an MOU Working Group (WG), consisting of representatives from the South Coast AQMD, commercial airports (Los Angeles International Airport, John Wayne Airport, Ontario International Airport, Hollywood Burbank Airport, and Long Beach Airport),

CARB, USEPA, environmental organizations, labor, freight industry, airlines, other stakeholders, and the public to solicit comments on the MOU development. South Coast AQMD staff will also monitor the implementation of this MOU and provide reports to USEPA. In addition, South Coast AQMD may utilize other well-established means of communication, including the South Coast AQMD website, Subscribers lists, and Governing Board and Committee meetings, for disseminating information concerning the status of MOU implementation.

d. The MOU is developed through the public process outlined above for consideration by the South Coast AQMD Governing Board and the City Council.

3. MOU Applicability. The MOU (1) addresses only the voluntary Airport AQIP measure identified in Attachment A, and (2) does not supersede rules that are established by the USEPA or CARB, or legal, regulatory, or contractual obligations that the Airport is subject to such as U.S. Department of Transportation (USDOT) or Federal Aviation Administration (FAA) regulations; federal statutes, including the Anti-Head Tax Act (AHTA), the Federal Aviation Act, and the Airline Deregulation Act; international treaties; or the doctrines of federal preemption, the dormant Commerce Clause, and the Supremacy Clause.

a. Excluded Sources. Nothing in the AQIP or this MOU is intended or shall be interpreted to regulate or otherwise apply to (1) any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of Auxiliary Power Units (APUs), aircraft engines or any other aircraft parts or systems, (2) the operation of any source that is not specifically identified as a AQIP Source in Attachment A, namely aircraft, inclusive of APUs, aircraft engines, or any other aircraft parts or systems, either in flight or on the ground, including while taxiing or parked at an aircraft gate, remain-overnight (RON) position, maintenance facility, or any other airport location, or (3) any and all activities associated with General Aviation (GA) operations including aircraft, GA related GSE and vehicles and equipment.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NO<sub>x</sub>, and corresponding anticipated reductions to other pollutants, including VOC and PM, resulting from the implementation of the strategies identified in the voluntary AQIP, the Parties hereto agree as follows:

A. CITY'S RESPONSIBILITIES

The City agrees to take the following actions:

1. AQIP Implementation. Implement AQIP voluntary airport measures identified in Attachment A, Schedule 1.
2. Monitoring and Reporting. Monitor the implementation of voluntary airport AQIP measures and provide data and annual emissions inventory reports to South Coast AQMD as described in Attachment A, Schedule 1.
3. Incentives. Provide monetary or non-monetary incentives for non-aircraft airport mobile sources to the extent possible and as included in the AQIP. Nothing in this MOU requires the Airport to provide incentives.
4. Funding. Support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures, at the City's discretion.

B. SOUTH COAST AQMD'S RESPONSIBILITIES

South Coast AQMD agrees to take the following actions:

1. Technical Analyses for SIP Credit from AQIP emission reductions. The South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of the emission reductions benefits attributable to the voluntary airport AQIP measures identified in Attachment A. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through AQIP measures in Attachment A based on the AQIP inventories, and an estimation of emissions reductions benefits and corresponding SIP credits. Factors to be considered for purposes of calculating the emission reductions benefits attributable to the voluntary airport AQIP measures in Attachment A shall include, but not be limited to: growth forecasts from the airports, implementation schedules for voluntary airport AQIP measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific voluntary airport AQIP measures.
2. Federal Enforceability. To the extent necessary to obtain SIP approval, the South Coast AQMD will provide federally enforceable commitments in a SIP update document that is separate from this MOU to the USEPA after approval by the South Coast AQMD and the CARB Boards. South Coast AQMD will monitor, assess, and report emission reductions benefits from the voluntary airport AQIP measures identified in Attachment A to the USEPA.
3. Responsibility for Shortfall. The South Coast AQMD shall be solely responsible to make up any emissions reduction shortfalls that may occur in the event that

the actual voluntary airport AQIP emissions reduction benefits do not achieve the projected emissions reduction benefits resulting from implementation of the voluntary airport AQIP measures specified in Attachment A. South Coast AQMD will also commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A. The City shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A, unless otherwise mutually agreed on by both parties. Notwithstanding the above, the City and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of voluntary AQIP measures in Attachment A are less than the estimated emissions reduction benefits from implementation of these voluntary AQIP measures, the City and South Coast AQMD will work together to consider potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD address any shortfalls.

4. Funding. The South Coast AQMD, at its Governing Board's discretion, will support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures.
5. Monitoring. The South Coast AQMD will monitor and assess the implementation of SIP creditable AQIP measures based on information provided by the City as outlined in Schedule 1 in Attachment A.
6. Information Sharing. The South Coast AQMD will provide the means for ensuring that emission reduction data and other pertinent information related to the implementation of SIP creditable AQIP measures are fully accessible to the public and the USEPA.

C. MOU SCHEDULES

The voluntary airport AQIP measures for which the South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal are identified in Schedule 1 in Attachment A and are incorporated as part of this MOU:

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT

Schedule No. 1 focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023 and 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation
- Annual reporting by the City to South Coast AQMD

Variations in the nature of information and data needed for each of the source measures may be addressed with focused and adaptive revisions to the individual equipment category schedules and may be revised by mutual agreement of the Parties without modifying this MOU.

- D. TERM OF MOU. This MOU shall be in full force and in effect when signed by all Parties following their respective required authorization processes. The initial term of this MOU shall expire on December 31, ~~2031~~2032 unless terminated earlier pursuant to Section II.E, below. Prior to expiration of this MOU, all Parties agree to meet to evaluate the need for continuing participation. If all Parties agree that continuing participation is desirable, they shall negotiate for their respective Boards' approval, a written extension of the term of this MOU, and any applicable additional MOU Schedules.
- E. WITHDRAWAL AND EARLY TERMINATION. If any Party to this MOU determines that it wishes to no longer be a party to this MOU, then the Party shall provide notice to the other Party at least ninety (90) days in advance of the specified date of termination of the MOU. The Parties commit to work together to resolve any issues and to negotiate an updated MOU at least thirty (30) days in advance of the specified date of termination of the MOU. If the Parties are unable to reach agreement, the MOU shall terminate on the date specified in the notification.
- F. ENFORCEABILITY. The Parties commit to implement the provisions in the MOU. The parties agree that implementation of the measures specified in Attachment A is not to be construed as a regulation or requirement of the South Coast AQMD. In the event that any party fails to meet its commitment(s) or anticipates an inability to meet its commitment(s), the Party shall provide notice to the other Party within sixty (60) days of such determination and seek to negotiate a mutually agreeable solution within ninety (90) days of the date of the Notice. The Parties shall continue to comply with all other commitments under this MOU during the negotiations. Nothing contained in this paragraph is intended to limit any rights or remedies that the Parties may have under law. The Parties shall attempt in good faith to resolve any controversy that may arise out of or relating to this MOU. If a controversy or claim should arise that cannot be resolved informally by the respective staffs, executive level representatives of the Parties will meet at least once in person and, in addition, at least once in person or by telephone to attempt to resolve the matter. The Representatives will make every effort to meet as soon as reasonably possible at a mutually agreed time and place.

- G. NOTICES. All notices that are required under this MOU shall be provided in the manner set forth herein, unless specified otherwise. Notice to a Party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that Party in writing. Notice shall be in writing sent by U.S. Certified Mail, Return Receipt Requested, or a nationally recognized overnight courier service. Notice shall be deemed to be received when delivered (written receipt of delivery).

South Coast AQMD:                      South Coast Air Quality Management District  
21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: Assistant Deputy Executive Officer - Planning,  
Rule Development & Area Sources

City:    Long Beach Airport  
4100 E. Donald Douglas Drive, Floor 2  
Long Beach, CA 90808  
Attn: Cynthia Guidry – Director, Long Beach Airport

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the agreements commitments contained ~~herein~~ by ~~any the other Parties~~ are subject to the availability of appropriated funds. No Party will submit a claim for compensation to ~~any the~~ other Party, or otherwise seek reimbursement of costs from ~~any the~~ other Party, for activities carried out pursuant to this MOU.
- I. FUTURE AGREEMENTS. This MOU does not restrict any future agreements between the Parties with respect to the subject matter stated herein or any other subject matter.
- J. JOINT WORK PRODUCT. This MOU shall not be construed against the Party preparing the same, shall be construed without regard to the identity of the person who drafted such and shall be construed as if all Parties had jointly prepared this MOU and it shall be deemed their joint work product.
- K. RECITALS. Each of the Recitals is incorporated into this MOU.
- L. ENTIRE UNDERSTANDING. This MOU, including all attachments, constitutes the entire understanding between the Parties and supersedes all other agreements, oral or written, with respect to the subject matter herein. This MOU shall not be amended except in writing, signed by the Parties which expressly refers to this MOU.

- M. VENUE. This MOU shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this MOU shall be Los Angeles County, California, USA.
- N. SEVERABILITY. If a court of competent jurisdiction holds any provision of this MOU 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.
- O. ATTORNEYS' FEES. In the event any action is filed in connection with the enforcement or interpretation of this MOU, each Party shall bear its own attorneys' fees and costs.
- P. AUTHORITY. Except as expressly stated herein, nothing in this MOU shall be construed as a waiver of any Party's discretionary authority or deemed to restrict authority granted to any Party under law in any way with respect to future legislative, administrative, or other actions.
- Q. VOLUNTARY AQIP. The Parties agree that the Airport's AQIP measures in Attachment A are voluntary and are not to be construed as a regulation or requirement of South Coast AQMD.
- R. MOU Modification. This MOU may be subsequently modified at any time but no modification shall be valid or binding unless made in writing and signed by authorized representatives of both Parties.
- S. COUNTERPARTS. The signature pages of this MOU are being executed in counterparts by authorized signatories of the Parties following the approvals by their respective public agency governing boards. When both Parties have signed, all executed counterparts taken together shall constitute one and the same instrument.
- T. AUTHORIZED SIGNATURES. Each signatory of this MOU represents that s/he is authorized to execute on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.
- U. NO ENFORCEMENT AGAINST THIRD PARTIES. The South Coast AQMD shall not seek to enforce the measure specified in Attachment A or any of the measures or initiatives in the AQIP or any of its terms against the Airport's tenants, concessionaires, third party licensees, vendor(s), or other relevant operators doing business at Airport or City facilities.



**IN WITNESS WHEREOF**, the Parties hereto have caused this Memorandum of Understanding to be executed by their authorized representatives.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**LONG BEACH AIRPORT**

By \_\_\_\_\_  
Name: Dr. William Burke  
Title: Chairman, South Coast Governing Board

By \_\_\_\_\_  
Name: Thomas B. Modica  
Title: Acting City Manager, City of Long Beach

Date: \_\_\_\_\_, 20\_\_

Date: \_\_\_\_\_, 20\_\_

Attest \_\_\_\_\_  
Name:  
Title:

Attest \_\_\_\_\_  
Name:  
Title:

APPROVED AS TO FORM:

APPROVED AS TO FORM:

Date: \_\_\_\_\_, 20\_\_  
BAYRON T. GILCHRIST,  
General Counsel

Date: \_\_\_\_\_, 20\_\_  
MICHAEL J. MAIS,  
Assistant City Attorney, City of Long Beach

By \_\_\_\_\_  
Name:  
Title:

By \_\_\_\_\_  
Name:  
Title:

# ATTACHMENT A

## MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on the City's AQIP measure for ground support equipment<sup>1</sup>.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 0.93 and 0.44 g/bhp-hr ~~in 2023 and 2031~~ by January 1, 2023 and January 1, 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through ~~2031~~2032.
- III. AIRPORT OBLIGATIONS – The City agrees to:
  - A. Implement the measure by working with airport tenants to achieve the above performance targets by specified dates through accelerated turnover to cleaner equipment. Airport shall have complete discretion as to mechanisms used to implement this measure. Such mechanisms may include leases, licenses, operational requirements, or other agreements.
  - B. Beginning in 2021, and every year thereafter through ~~2031~~2032, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of ground support equipment ~~as provided by airlines operating~~ subject to this GSE measure at LGB with the following information:
      - a. Equipment ID
      - b. Equipment type
      - c. Fuel type
      - d. Engine model year
      - e. Power rating (hp or kW)
      - f. Engine tier level (for diesel engines)
      - g. Annual activity data for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average

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<sup>1</sup> Ground Support Equipment or "GSE" is any vehicle or equipment used to support aircraft operations that is subject to, or included in compliance plans to meet, the requirements of the California Air Resources Board (CARB) In-Use Off-Road Diesel (ORD) Vehicle Regulation Program, CARB Off-Road Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation Program, or CARB Portable Equipment Registration Program and associated Portable Diesel Engine Airborne Toxic Control Measure. Furthermore, GSE as defined here only includes equipment that is not subject to compliance with SCAQMD Rule XX – RECLAIM, or included in a mobile source emission reduction credit program under SCAQMD Rule XVI.

operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable)

2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from LGB to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.

2.3. An annual emission inventory for all ground support equipment associated with commercial operations at LGB, including methodology and calculations.

IV. SOUTH COAST AQMD OBLIGATIONS – South Coast AQMD agrees to:

- A. Verify emission reductions from the implementation of this AQIP measure in order to determine actual emission reductions.
- B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and the USEPA.

**MEMORANDUM OF UNDERSTANDING BETWEEN  
THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND  
ONTARIO INTERNATIONAL AIRPORT  
REGARDING ONTARIO INTERNATIONAL AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

This Memorandum of Understanding (MOU) is entered into by the South Coast Air Quality Management District (South Coast AQMD), acting by and through its Governing Board, and Ontario International Airport (ONT or Airport), acting by and through the Ontario International Airport Authority (OIAA) in its capacity as the proprietor and certificated operator of ONT. The Airport and South Coast AQMD shall be referred to collectively as Parties (each a Party) to this MOU.

I. RECITALS

A. RECITALS BY SOUTH COAST AQMD

1. Air Regulatory Agencies. Air pollution remains a significant public health concern in many parts of California, and specifically in the South Coast Air Basin (Basin). The South Coast AQMD, California Air Resources Board (CARB), and the United States Environmental Protection Agency (USEPA) are the regional, state, and federal regulatory agencies, respectively, with jurisdiction over air quality in the Basin. South Coast AQMD and CARB have developed and approved the 2016 Air Quality Management Plan (AQMP) for the Basin for incorporation into the California State Implementation Plan (SIP). The 2016 AQMP ~~has been submitted to USEPA and is pending its approval~~received approval by USEPA on October 1, 2019.
2. South Coast AQMD. The South Coast AQMD is the regional air pollution control agency primarily responsible for reducing air pollution in the Basin, which consists of the County of Orange, and the non-desert portions of the Counties of Los Angeles, Riverside, and San Bernardino. The ONT is located within the Basin.
3. Need for Emission Reductions. The Basin is classified as an extreme non-attainment area for the 1997 and 2008 8-hour ozone national ambient air quality standards (NAAQS) with statutory deadlines to reach attainment by 2023 and 2031, respectively. Despite significant air quality improvements achieved over the last several decades, to meet these standards, emissions of oxides of nitrogen (NOx) must be reduced by 45% in 2023 and 55% in 2031 as outlined in the 2016 AQMP, adopted by the South Coast AQMD Governing Board in March 2017. The 2016 AQMP included Control Measure MOB-04 (Emission Reductions at Commercial Airports), with the goal of achieving emission reductions from commercial airports through implementation of voluntary airport strategies.

4. Emissions from Sources at Commercial Airports. Emissions associated with operations at commercial airports contribute to adverse air quality in the Basin, primarily due to airport-related mobile source activities. These sources include aircraft, cargo trucks, ground support equipment (GSE), off-road vehicles, shuttle buses, and passenger vehicles. Therefore, NOx emission reductions from commercial airports can assist with the effort to attain the ozone standards in 2023 and 2031.

B. RECITALS BY ONT

1. Airport. The Ontario International Airport Authority is the proprietor and certificated operator of ONT.
2. Airport Obligations. ONT enters into this MOU pursuant to its proprietary and governmental powers and authority under the State Aeronautics Act (California Public Utilities Code Sections 21001, et seq.).
3. Management and Operation. The Air Quality Improvement Plan (AQIP) and this MOU reflect the experience of ONT in the management and operation of the Airport including extensive experience with the federal government, commercial aviation operators, general aviation operators and suppliers, the community, local public entities, and the residents of areas in the general vicinity of ONT.
4. Responsibility to Community. The MOU supports and is made in recognition of the importance of ONT to the economic health and well-being of the communities surrounding ONT and the importance of balancing the needs of the City of Ontario, County of San Bernardino and other surrounding communities for adequate commercial air transportation facilities with environmentally responsible air transportation operations at ONT.
5. Statement of Intent. ONT's consideration of the matters and issues referred to in this MOU is not intended as a statement that such matters and issues are the only ones considered by the Airport in connection with the formulation of the AQIP and this MOU. Rather this MOU reflects consideration by ONT of all of its state and federal obligations and responsibilities as the proprietor of the Airport and addresses only those emission sources that the Airport believes it can reasonably affect.
6. Air Quality Improvement Plan (AQIP). ONT has developed its own voluntary AQIP, with technical support provided by the South Coast AQMD. The AQIP represents the Airport's best efforts to develop programs and strategies for reducing NOx emissions from airport mobile source operations based on its existing authority over airport emission sources. The AQIP includes specific initiatives and measures for certain non-aircraft emission sources operating at the Airport.

7. Emissions Inventory. The AQIP includes the 2017 base year emissions inventory and 2023 and 2031 business as usual emissions forecast as well as the 2023 and 2031 forecasts that include the projected estimates of emissions benefits from voluntary airport AQIP measures with quantifiable emission reductions. The AQIP provides an emissions inventory only for non-aircraft airport sources for which the AQIP includes specific voluntary airport measures and initiatives (i.e., ground support equipment, fuel/delivery trucks, on-road and off-road airport fleet vehicles, shuttle buses, and passenger transportation). ONT has provided the AQIP with supporting calculations to the South Coast AQMD.

C. JOINT RECITALS

1. Purpose of MOU

The purpose of this MOU is to set forth how the Parties, consistent with their respective legal authorities, intend to quantify the emission reduction benefits in the Basin through the implementation of the voluntary airport strategies developed by ONT under the AQIP and MOU, and adopted by the OIAA on [INSERT DATE]. Attachment A, "MOU Schedule," sets forth the specific voluntary airport AQIP measures that are subject to the MOU. This MOU does not create SIP creditable reductions; rather, it identifies specific voluntary airport AQIP measures and provides the means for the South Coast AQMD to quantify the emission reductions from these voluntary airport AQIP measures to obtain SIP credits. The MOU is not intended to limit Airport growth. A central objective of the AQIP and MOU is to generate NO<sub>x</sub> reductions, and corresponding reductions of associated pollutants from non-aircraft airport mobile sources.

- a. The MOU Schedule 1, specified in Attachment A, establish metrics for quantification of emission benefits associated with implementation of voluntary airport AQIP measures for each emissions source category consistent with the 2023 and 2031 dates for attainment of the ozone standards.
- b. The Parties agree the MOU does not: i) Establish an emissions cap or any other facility-wide limit for NO<sub>x</sub>, or any other pollutant; ii) Obligate the Airport to provide a facility-wide inventory of NO<sub>x</sub> or VOC emissions; however, the parties agree to continue to work together in developing inventories of airport emission sources to support the development of future AQMPs outside of the AQIP/MOU process; or iii) Limit the Airport's ability to seek incentive or grant funding through federal, State and local programs, including but not limited to the FAA Voluntary Aviation Low Emissions (VALE) program and other similar programs, which require

emissions reductions achieved through such programs to be voluntary in nature and exceed existing obligations to achieve emissions reductions.

- c. The emission reduction benefits from the voluntary airport AQIP measures in Attachment A may be used by South Coast AQMD to obtain SIP credit to the extent the emission reduction benefits quantified by South Coast AQMD for these measures satisfy USEPA's integrity elements (i.e., the emission reductions are quantifiable, surplus, permanent, and enforceable). South Coast AQMD may seek SIP credit for the quantified emission reductions through a separate SIP submittal.
- d. The Parties agree that the South Coast AQMD, and not the Airport, will rectify any shortfall in prospective emission reductions from the voluntary airport AQIP measures specified in Attachment A.
- e. The Parties specifically disavow any desire or intention to create any third-party beneficiary under this MOU, and specifically declare that no person or entity shall have any remedy or right of enforcement.

## 2. MOU Public Process

- a. Following the adoption of the 2016 AQMP, South Coast AQMD staff held a series of public working group meetings to solicit comments on implementing Control Measure MOB-04 for commercial airports. Based on input received during the public process, South Coast AQMD staff developed a recommendation for the South Coast AQMD Governing Board for the development of an MOU with the commercial airports. In the event that the MOU approach with the airports was not successful, staff also recommended consideration of a regulatory approach for reducing emissions from commercial airports.
- b. In May 2018, the South Coast AQMD Governing Board approved staff's recommendation and directed staff to pursue an MOU approach with the commercial airports to implement 2016 AQMP Control Measure MOB-04.
- c. South Coast AQMD staff has established an MOU Working Group (WG), consisting of representatives from the South Coast AQMD, commercial airports (Los Angeles International Airport, John Wayne Airport, Ontario International Airport, Hollywood Burbank Airport, and Long Beach Airport), CARB, USEPA, environmental organizations, labor, freight industry, airlines, other stakeholders, and the public to solicit comments on the MOU development. South Coast AQMD staff will also monitor the implementation of this MOU and provide reports to USEPA. In addition, South Coast AQMD may utilize other well-established means of communication, including the South Coast AQMD website, Subscribers lists, and Governing Board and Committee meetings, for disseminating information concerning the status of MOU implementation.

- d. The MOU is developed through the public process outlined above for consideration by the South Coast AQMD Governing Board and the Airport's Board.

3. MOU Applicability

- a. The MOU (1) addresses only the voluntary Airport AQIP measures identified in Attachment A, and (2) does not supersede rules that are established by the USEPA or CARB, or legal, regulatory, or contractual obligations that the Airport is subject to such as U.S. Department of Transportation (USDOT) or Federal Aviation Administration (FAA) regulations; federal statutes, including the Anti-Head Tax Act (AHTA), the Federal Aviation Act, and the Airline Deregulation Act; international treaties; or the doctrines of federal preemption, the dormant Commerce Clause, and the Supremacy Clause.
- b. Excluded Sources. Nothing in the AQIP or this MOU is intended or shall be interpreted to regulate or otherwise apply to (1) any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of Auxiliary Power Units (APUs), aircraft engines or any other aircraft parts or systems, (2) the operation of any source that is not specifically identified as a AQIP Source in Attachment A, including aircraft, inclusive of APUs, aircraft engines, or any other aircraft parts or systems, either in flight or on the ground, including while taxiing or parked at an aircraft gate, remain-overnight (RON) position, maintenance facility, or any other airport location, or (3) any and all activities associated with General Aviation (GA) operations including aircraft, GA related GSE and vehicles and equipment. For purposes of the AQIP and this MOU, GA is defined as all civil aviation operations *except*: operations by 14 C.F.R. Part 121 commercial carriers, and regularly scheduled air services, defined as: (i) operated in support of, advertised, or otherwise made available to members of the public by any means for commercial air transportation purposes, and members of the public may travel or ship commercial cargo on the flights; (ii) the flights are scheduled to occur, or are represented as occurring (or available) at specified times and days; and (iii) the operator conducts, or proposes to operate, departures at ONT at a frequency greater than two (2) times per week during any consecutive three (3) week period.

II. NOW, THEREFORE, in consideration of the mutual interests and benefits of all parties to be derived from emissions reductions of NOx, and corresponding anticipated reductions of other pollutants, including VOC and PM, resulting from the implementation of the strategies identified in the voluntary AQIP, the Parties hereto agree as follows:

A. AIRPORT'S RESPONSIBILITIES



The OIAA or Airport agrees to take the following actions:

1. AQIP Implementation. Implement voluntary airport AQIP measures identified in Attachment A, Schedule 1.
2. Monitoring and Reporting. Monitor the implementation of voluntary airport AQIP measures and provide data and annual emissions inventory reports to South Coast AQMD as described in Attachment A, Schedule 1.
3. Incentives. Provide monetary or non-monetary incentives for non-aircraft airport mobile sources to the extent possible and as included in the AQIP. Nothing in this MOU requires the Airport to provide incentives.
4. Funding. Support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures, at ONT's discretion.

B. SOUTH COAST AQMD'S RESPONSIBILITIES

South Coast AQMD agrees to take the following actions:

1. Technical Analyses for SIP Credit from AQIP emission reductions. The South Coast AQMD will provide the necessary documentation and technical analysis with respect to the calculation of the emission reductions benefits attributable to the voluntary airport AQIP measures identified in Attachment A. This would include, but not be limited to, an analysis of the AQMP/SIP baseline for affected airport sources, emission reductions achieved through AQIP measures in Attachment A based on the AQIP inventories, and an estimation of emissions reductions benefits and corresponding SIP credits. Factors to be considered for purposes of calculating the emission reductions benefits attributable to the voluntary airport AQIP measures in Attachment A shall include, but not be limited to: growth forecasts from the airports, an implementation schedule for voluntary airport AQIP measures, the availability of funding for relevant incentives programs, and the technical and economic feasibility of specific voluntary airport AQIP measures.
2. Federal Enforceability. To the extent necessary to obtain SIP approval, the South Coast AQMD will provide federally enforceable commitments in a SIP update document that is separate from this MOU to the USEPA after approval by the South Coast AQMD and the CARB Boards. South Coast AQMD will monitor, assess, and report emission reductions benefits from the voluntary airport AQIP measures identified in Attachment A to the USEPA.
3. Responsibility for Shortfall. The South Coast AQMD shall be solely responsible to make up any emissions reduction shortfalls that may occur in the event that the actual voluntary airport AQIP emissions reduction benefits do not achieve the projected emissions reduction benefits resulting from implementation of the voluntary airport AQIP measures specified in Attachment A. South Coast

AQMD will also commit to adopt and submit substitute measures to USEPA to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A. The Airport shall have no obligation(s) and/or requirement(s) to implement any substitute measures to remedy any potential emission reduction shortfall associated with implementation of the AQIP measures identified in Attachment A, unless otherwise mutually agreed on by both parties. Notwithstanding the above, ONT and South Coast AQMD agree that, in the event that the actual emission reductions associated with implementation of voluntary AQIP measures in Attachment A are less than the estimated emissions reduction benefits projected for implementation of these voluntary AQIP measures, ONT and South Coast AQMD will work together to consider potential new or enhanced programs, or better efforts to quantify existing programs, to help South Coast AQMD address any shortfalls.

4. Funding. The South Coast AQMD, at its Governing Board's discretion, will support grant funding efforts with potential funding sources that may provide funding for the voluntary airport AQIP measures.
5. Monitoring. The South Coast AQMD will monitor and assess the implementation of SIP creditable AQIP measures based on information provided by ONT as outlined in Schedule 1 in Attachment A.
6. Information Sharing. The South Coast AQMD will provide the means for ensuring that emission reduction data and other pertinent information related to the implementation of SIP creditable AQIP measures are fully accessible to the public and the USEPA.

C. MOU SCHEDULE

The voluntary airport AQIP measures for which the South Coast AQMD may quantify emission reductions and seek SIP credit through a separate SIP submittal is identified in Schedule 1 of Attachment A and is incorporated as part of this MOU:

1. MOU SCHEDULE NO. 1 - GROUND SUPPORT EQUIPMENT

The Schedule focuses on the voluntary airport AQIP measure and time frame aligned with the AQMP and SIP emission reduction target dates (i.e., 2023, 2031), and includes technical details pertinent to the equipment category such as:

- Metrics or performance targets
- Schedule for program implementation
- Annual reporting by the Airport to South Coast AQMD

Variations in the nature of information and data needed for each of the source measures may be addressed with focused and adaptive revisions to the individual

equipment category schedule and may be revised by mutual agreement of the Parties without modifying this MOU.

- D. TERM OF MOU. This MOU shall be in full force and in effect when signed by all Parties following their respective required authorization processes. The initial term of this MOU shall expire on December 31, ~~2031~~2032 unless terminated earlier pursuant to Section II.E, below. Prior to expiration of this MOU, all Parties agree to meet to evaluate the need for continuing participation. If all Parties agree that continuing participation is desirable, they shall negotiate for their respective Boards' approval, a written extension of the term of this MOU, and any applicable additional MOU Schedules.
- E. WITHDRAWAL AND EARLY TERMINATION. If any Party to this MOU determines that it wishes to no longer be a party to this MOU, then the Party shall provide notice to the other Party at least ninety (90) days in advance of the specified date of termination of the MOU. The Parties commit to work together to resolve any issues and negotiate an updated MOU at least thirty (30) days in advance of the specified date of termination of the MOU. If the Parties are unable to reach agreement, the MOU shall terminate on the date specified in the notification.
- F. ENFORCEABILITY. The Parties agree to implement the provisions in the MOU. The parties agree that implementation of the measures specified in Attachment A is not to be construed as a regulation or requirement of the South Coast AQMD. In the event that any party fails to meet its commitment(s) or anticipates an inability to meet its commitment(s), the Party shall provide notice to the other Party within sixty (60) days of such determination and seek to negotiate a mutually agreeable solution within ninety (90) days of the date of the Notice. The Parties shall continue to comply with all other commitments under this MOU during the negotiations. Nothing contained in this paragraph is intended to limit any rights or remedies that the Parties may have under law. The Parties shall attempt in good faith to resolve any controversy that may arise out of or relating to this MOU. If a controversy or claim should arise that cannot be resolved informally by the respective staffs, executive level representatives of the Parties will meet at least once in person and, in addition, at least once in person or by telephone to attempt to resolve the matter. The Representatives will make every effort to meet as soon as reasonably possible at a mutually agreed time and place.
- G. NOTICES. All notices that are required under this MOU shall be provided in the manner set forth herein, unless specified otherwise. Notice to a Party shall be delivered to the attention of the person listed below, or to such other person or persons as may hereafter be designated by that party in writing. Notice shall be in writing sent by U.S. Certified Mail, Return Receipt Requested, or a nationally recognized overnight courier service. Notice shall be deemed to be received when delivered (written receipt of delivery).

South Coast AQMD:

South Coast Air Quality Management District

21865 Copley Drive  
Diamond Bar, CA 91765-4178  
Attn: Assistant Deputy Executive Officer -  
Planning, Rule Development & Area Sources

ONTARIO INTERNATIONAL AIRPORT: Mr. Mark Thorpe  
Chief Executive Officer  
1923 E. Avion Street  
Ontario, CA 91761

- H. AVAILABLE FUNDING. Each Party shall be responsible for its respective costs associated with this MOU and acknowledges that the agreements contained herein by ~~any other Party~~ the Parties are subject to the availability of appropriated funds. No Party will submit a claim for compensation to ~~any the~~ other Party, or otherwise seek reimbursement of costs from ~~any the~~ other Party, for activities carried out pursuant to this MOU.
- I. FUTURE AGREEMENTS. This MOU does not restrict any future agreements between the Parties with respect to the subject matter stated herein or any other subject matter.
- J. JOINT WORK PRODUCT. This MOU shall not be construed against the Party preparing the same, shall be construed without regard to the identity of the person who drafted such and shall be construed as if all Parties had jointly prepared this MOU and it shall be deemed their joint work product.
- K. RECITALS. Each of the Recitals is incorporated into this MOU.
- L. ENTIRE UNDERSTANDING. This MOU, including all attachments, constitutes the entire understanding between the Parties and supersedes all other agreements, oral or written, with respect to the subject matter herein. This MOU shall not be amended except in writing, signed by the Parties which expressly refers to this ~~contract~~ MOU.
- M. VENUE. This MOU shall be construed and interpreted and the legal relations created thereby shall be determined in accordance with the laws of the State of California. Venue for resolution of any disputes under this MOU shall be County of San Bernardino, California, USA.
- N. SEVERABILITY. If a court of competent jurisdiction holds any provision of this MOU 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.
- O. ATTORNEYS' FEES. In the event any action is filed in connection with the enforcement or interpretation of this MOU, each Party shall bear its own attorneys' fees and costs.

- P. AUTHORITY. Except as expressly stated herein, nothing in this MOU shall be construed as a waiver of any Party's discretionary authority or deemed to restrict authority granted to any Party under law in any way with respect to future legislative, administrative, or other actions.
- Q. VOLUNTARY AQIP. The Parties agree that the Airport's AQIP measures in Attachment A are voluntary and are not to be construed as a regulation or requirement of South Coast AQMD.
- R. MOU Modification. This MOU may be subsequently modified at any time but no modification shall be valid or binding unless made in writing and signed by authorized representatives of both Parties.
- S. COUNTERPARTS. The signature pages of this MOU are being executed in counterparts by authorized signatories of the Parties following the approvals by their respective public agency governing boards. When both Parties have signed, all executed counterparts taken together shall constitute one and the same instrument.
- T. AUTHORIZED SIGNATURES. Each signatory of this MOU represents that s/he is authorized to execute on behalf of the Party for which s/he signs. Each Party represents that it has legal authority to enter into this MOU and to perform all obligations under this MOU.
- U. NO ENFORCEMENT AGAINST THIRD PARTIES. The South Coast AQMD shall not seek to enforce the measures specified in Attachment A or any of the measures or new initiatives in the AQIP or any of its terms against ONT's tenants, concessionaries, third party licensees, vendor, or other relevant operators doing business at ONT facilities.

**IN WITNESS WHEREOF**, the Parties hereto have caused this Memorandum of Understanding to be executed by their authorized representatives.

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT**

**ONTARIO INTERNATIONAL AIRPORT**

By \_\_\_\_\_  
 Name: Dr. William Burke  
 Title: Chairman, South Coast Governing Board

By \_\_\_\_\_  
 Name: Mr. Mark Thorpe  
 Title: Airport Director

Date: \_\_\_\_\_, 20\_\_

Date: \_\_\_\_\_, 20\_\_

Attest \_\_\_\_\_  
 Name:  
 Title:

Attest \_\_\_\_\_  
 Name:  
 Title:

APPROVED AS TO FORM:

APPROVED AS TO FORM:

Date: \_\_\_\_\_, 20\_\_\_\_  
BAYRON T. GILCHRIST,  
General Counsel

By \_\_\_\_\_  
Name:  
Title:

Date: \_\_\_\_\_, 20\_\_\_\_  
Lori D. Ballance  
General Counsel

By \_\_\_\_\_  
Name:  
Title:

## ATTACHMENT A

### MOU Schedule

#### MOU SCHEDULE NO. 1 – GROUND SUPPORT EQUIPMENT

This MOU Schedule No. 1 is based on ONT's AQIP measure for ground support equipment<sup>1</sup>.

- I. PROGRAM DESCRIPTION – Require that all ground support equipment associated with commercial operations achieve a fleet average NOx emission factors of 2.2 and 1.0 g/bhp-hr ~~in by January 1 of~~ 2023 and 2031, respectively.
- II. PROGRAM TIMEFRAME - Upon execution through ~~2031~~2032.
- III. AIRPORT AGREEMENTS – ONT agrees to the following:
  - A. Implement the measure by working with airport tenants to achieve the above performance targets by specified dates through accelerated turnover to cleaner equipment. ONT shall have complete discretion as to mechanisms used to implement this measure. Such mechanisms may include leases, licenses, operational requirements, or other agreements.
  - B. Beginning in 2021, and every year thereafter through ~~2031~~2032, provide the following information to South Coast AQMD on an annual basis by June 1 for each preceding calendar year:
    1. List of ground support equipment ~~as provided by airlines operating at ONT~~subject to GSE measure with the following information:
      - a. Equipment ID
      - b. Equipment type
      - c. Fuel type
      - d. Engine model year
      - e. Power rating (hp or kW)
      - f. Engine tier level (for diesel engines)
      - g. Annual activity data for non-zero emission equipment that is sufficient to determine emission reductions at a reasonable level of accuracy (i.e., actual operating hours from hour meter readings/maintenance records, average operating hours representative of equipment type and airport, or average operating hours by equipment/fuel type from CARB's OFFROAD model, if applicable)

<sup>1</sup> Ground Support Equipment or "GSE" is any vehicle or equipment used to support aircraft operations that is subject to, or included in compliance plans to meet, the requirements of the California Air Resources Board (CARB) In-Use Off-Road Diesel (ORD) Vehicle Regulation Program, CARB Off-Road Large Spark-Ignition (LSI) Engine Fleet Requirements Regulation Program, or CARB Portable Equipment Registration Program and associated Portable Diesel Engine Airborne Toxic Control Measure. Furthermore, GSE as defined here only includes equipment that is not subject to compliance with SCAQMD Rule XX – RECLAIM, or included in a mobile source emission reduction credit program under SCAQMD Rule XVI.

2. For non-zero emission ground support equipment subject to this GSE measure, information regarding the sale or retirement of equipment available through CARB's DOORS system and, for pre-Tier 4 diesel, pre-2010 gasoline, or pre-2010 LPG ground support equipment relocated from ONT to another airport within the South Coast Air Basin, identify: a) the airport to which equipment is relocated, b) date of relocation, and c) estimated projected usage hours.

2.3. An annual emission inventory for all ground support equipment associated with commercial operations at ONT, including methodology and calculations.

IV. SOUTH COAST AQMD AGREEMENTS – South Coast AQMD agrees to the following:

- A. Verify emission reductions from the implementation of this AQIP measure in order to determine actual emission reductions.
- B. Ensure that any emission reduction data related to this AQIP measure and other pertinent information are accessible to the public and the USEPA.



## **Appendix BC: SIP Credit Calculations**

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**Introduction**

**Ground Support Equipment Measures**

**LAWA Alternative Fuel Vehicle Incentive Measure**

**LAWA Zero Emission Bus Measure**

**JWA Parking Shuttle Bus Electrification Measure**

**JWA Jet Fuel Delivery Trucks Measure**

**Burbank Shuttle Bus Electrification**

## 1. Introduction

Commercial airports are a major part of transportation and economic infrastructure in the South Coast Basin (Basin) but they also contribute to the adverse air quality in the Basin. Non-aircraft mobile source emissions associated with airport operations are covered under the MOUs between the South Coast and the commercial airports. These sources include airport ground support equipment (GSE), shuttles buses, trucks, on-road and off-road airport fleet vehicles, and passenger vehicles. The emissions from these sources are included in their respective aggregate categories in the AQMP's emissions inventories and they are not explicitly identified as airport specific emissions.

For the purpose of the MOUs with South Coast AQMD, the five commercial airports (i.e., LAX, John Wayne Airport, Burbank Airport, Ontario Airport, and Long beach Airport) developed their own Air Quality Improvement Programs (AQIPs) or Air Quality Improvement Measures (AQIM). A suite of measures and initiatives are presented in the airports AQIPs or AQIM aimed at reducing emissions from non-aircraft airport operations. The specific AQIP or AQIM measures that are potentially eligible for SIP credit are identified in the MOUs with the five commercial airports, as indicated in Chapter 4. These measures cover GSE, heavy-duty vehicles and trucks, and shuttle buses. This appendix describes how SIP creditable emissions reductions are estimated from the specific AQIP or AQIM measures covered under the MOUs, as indicated in the following sections.

## 2. Ground Support Equipment Measures

The GSE emissions inventory included in the 2016 AQMP reflects regulations adopted as of November 2015. Specific regulations affecting GSE are described in Chapter 1, Regulatory Background section. The CARB's OFFROAD emissions model (and corresponding emission factors), which the AQMP's GSE emissions are based on, reflect the full implementation of CARB's existing regulations.

CARB began efforts in reducing emissions from GSE with an MOU with commercial airlines operating in the five commercial airports in the South Coast AQMD in 2002 (GSE MOU, <https://ww3.arb.ca.gov/msprog/offroad/gse/gse-mou-final.pdf>). The GSE MOU included provisions for the early introduction of clean units, with requirements for a 2.65 grams per brake-horsepower hour HC+NOx fleet average in the Basin by December 31, 2010. Other major provisions included the introduction of electric or zero-emission vehicles into the fleet and the use of diesel oxidation catalysts and diesel particulate filters to significantly reduce particulate matter emissions from the diesel portion of the fleet. Although the GSE MOU expired on January 1, 2006, its adoption resulted in an earlier start in reducing GSE emissions in the Basin than the rest of the state and generally cleaner GSE fleets in the South Coast AQMD airports compared to the statewide averages. Currently, GSE emissions are covered under several regulations administered by CARB targeting in-use GSE fleets. Those programs include in-use off-road diesel vehicle rule (<https://ww2.arb.ca.gov/our-work/topics/construction-earthmoving->

[equipment](#) ), off-road large spark-ignition (gasoline and LPG) equipment (<https://ww3.arb.ca.gov/msprog/offroad/orspark/orspark.htm>) and new off-road compression-ignition (diesel) engines and equipment (<https://ww3.arb.ca.gov/msprog/offroad/orcomp/orcomp.htm>)

The OFFROAD model used in developing the GSE emissions in the 2016 AQMP utilizes equipment registration data from the CARB off-road in-use regulations. Statewide equipment population, model year distributions, fuel types, horse-power rating combined with equipment use characteristics, such as annual operating hours and load factors were used to estimate statewide emissions. The statewide emissions are allocated to each county in the state based on the commercial aircraft operations in each county. Future year emissions were projected with growth factors combined with fleet averaged emissions factor requirements in the regulations. Table C-1 presents the GSE NO<sub>x</sub> emissions in the Basin in the 2016 AQMP in tons per year (tpy). The emissions are shown for the base year (2017) and future milestone years (2023 and 2031) consistent with the airports AQIP/AQIM base year and future years emissions inventories. Table C-2 presents the 2016 AQMP GSE emissions in the Basin by fuel type (i.e., diesel, gasoline, natural gas, and LPG). As shown in Table C-2, NO<sub>x</sub> emissions are mostly from diesel powered equipment.

The 2016 AQMP emissions inventory did not assign the GSE emissions to specific airports but, for the purpose of MOUs, assumptions were made to allocate the county level emissions to each commercial airport. Since there is only one commercial airport each in the Orange and San Bernardino Counties, the county level GSE emissions were assigned to the respective airports. For the three airports in the Los Angeles County (LAX, Burbank, Long Beach airports), the Federal Aviation Administration (FAA) terminal area forecast data (<https://taf.faa.gov/>) for the commercial aircraft operations was used to split the Los Angeles (LA) County GSE emissions among these three airports. Table C-3 presents the percentages of commercial aircraft operations among the three airports in LA County. The resulting airport specific GSE emissions by fuel type are presented in Table C-4. The future emissions inventories show a significant declining trend due to the impact of existing regulations.

**Table C-1. 2016 AQMP GSE NOx Emissions in the Basin (TPY)**

Category	2017	2023	2031
Air Conditioner	6.05	1.85	1.11
Air Stand	32.04	16.62	6.49
Aircraft Tug	50.45	27.78	15.46
Baggage	51.84	24.98	19.80
Belt Loader	13.04	8.93	7.77
Bobtail	3.89	2.69	2.09
Cargo Loader	18.08	9.14	7.44
Cargo Truck	88.27	39.61	28.84
Cart	0.02	0.02	0.03
Catering Truck	20.48	9.32	4.42
Deicer	0.06	0.02	0.01
Forklift	14.80	9.82	5.84
Fuel Truck	1.76	0.84	0.32
Generator	136.79	69.52	26.96
Ground Power	93.94	48.93	18.37
Hydrant Truck	20.29	9.84	4.63
Lavatory Cart	0.02	0.02	0.02
Lavatory Truck	3.12	1.64	1.27
Lift	11.74	5.42	3.46
Maintenance. Truck	4.22	1.65	0.99
Other-C4	10.66	10.39	4.56
Other-GSE	44.81	23.75	18.95
Passenger Stand	2.39	1.08	0.53
Service Truck	28.58	13.10	6.28
Sweeper	0.68	0.42	0.28
Water Truck	0.42	0.18	0.07
All GSE	658.41	337.54	185.97

**Table C-2. 2016 AQMP GSE NOx Emissions in the Basin by Fuel Type (TPY)**

Fuel	2017	2023	2031
Natural Gas/LPG	35.31	22.50	10.68
Gasoline	171.97	87.70	59.18
Diesel	451.13	227.34	116.11
All Fuels	658.41	337.54	185.97

**Table C-3. Commercial Aircraft Operations<sup>1</sup> in the Los Angeles County<sup>2</sup> ✽**

Airport	2017		2023		2031	
LAX	681,578	(86.1%)	747,746	(85.7%)	872,191	(86.3%)
BUR	68,806	(8.7%)	83,472	(9.6%)	92,241	(9.1%)
LGB	41,102	(5.2%)	41,203	(4.7%)	45,652	(4.5%)
Total	791,486	(100.0%)	872,424	(100.0%)	1,010,084	(100.0%)

<sup>1</sup> Landing and takeoffs

<sup>2</sup> Based on FAA Terminal Area Forecast, September, 2019. Percentage of each airport shown with respect to county total.

**Table C-4. GSE NOx Emissions by Airport Based on 2016 AQMP (TPY)**

Airport	2017				2023				2031			
	Diesel	Gasoline	NG/LPG	Total	Diesel	Gasoline	NG/LPG	Total	Diesel	Gasoline	NG/LPG	Total
LAX	319.7	126.7	25.9	472.3	160.4	64.2	16.4	241.0	82.6	43.7	7.8	134.1
BUR	32.3	12.8	2.6	47.7	18.0	7.2	1.8	27.0	8.7	4.6	0.8	14.1
LGB	19.3	7.7	1.6	28.5	8.8	3.5	0.9	13.2	4.3	2.3	0.4	7.0
SNA	35.3	10.8	2.3	48.4	17.8	5.6	1.5	24.8	9.1	3.7	0.7	13.5
ONT	44.5	14.0	3.0	61.4	22.4	7.2	1.9	31.5	11.4	4.9	0.9	17.2
Total	451.1	172.0	35.3	658.4	227.3	87.7	22.5	337.5	116.1	59.2	10.7	186.0

During the AQIP/AQIM development process, the airport authorities collected information on GSE equipment operated in their respective airports for 2017 and provided emissions inventories using the methodology employed to develop the 2016 AQMP inventories. The airport specific inventories for the 2017 and future year Business-As-Usual (BAU) scenarios showed lower emissions than the AQMP inventories due to high penetration of electric equipment in the airports located in the Basin (except for Ontario Airport).

All five commercial airports have included a GSE measure in their AQIPs/AQIM and have committed to reduce emissions from GSE by achieving specific GSE performance targets for their GSE fleets. Table C-5 lists the GSE performance targets for the five airports. The performance targets reflect the unique mix of the GSE fleet at each airport. The airports provided their estimates of future BAU emissions before implementation of their GSE measures, emission reductions from implementation of their GSE measures based on their respective performance targets (compared to BAU), and the remaining GSE emissions in 2023 and 2031, as shown in Tables C-6a and C-6b. Since the information on airport specific operating hours of each piece of GSE may not be available, the statewide average operating hours for each class of GSE from the OFFROAD model are used in estimating GSE emissions in all airports.

The potential SIP credits from the GSE measures for all airports except ONT are calculated based on the differences between the AQMP inventory and AQIP/AQIM emissions given in Tables C-6a and C-6b, since the same methodologies were used for calculating emissions in the AQMP and in the AQIP/AQIM. For the Ontario airport, the potential SIP credits are calculated by applying the percent reduction between BAU emissions and AQIP emissions to the AQMP emissions. The Ontario airport is the only exception in that its AQIP specific GSE emissions inventory is higher than the AQMP apportioned emissions from the statewide emissions inventory. The Ontario airport has shown a wide range of growth and decline in aircraft operations in the past decades. From 1990 through 2004, there were about 120,000 commercial aircraft operations annually in ONT. Starting on 2005, operations in ONT steadily decreased for almost a decade. There were 118,345 and 67,123 commercial operations in 2005 and 2014, respectively, and those started increasing in 2015. The number of operations in ONT in 2017 was 78,866. This fluctuation may have led to a larger number of GSE to accommodate its peak level aircraft operations over the last 10 years. The higher number of GSE in combination with the statewide average operating hours might have caused the overestimation of GSE emissions for ONT.

**Table C-5. GSE Performance Targets by Airport  
(NOx or HC + NOx g/bhp-hr)**

Airport	2023	2031
<del>LAX</del> LAX <sup>1</sup>	1.8	1.0
BUR	<del>1.9266</del>	<del>0.8274</del>
LGB	0.93	0.44
SNA	1.7	0.9
ONT	2.2	1.0

<sup>1</sup> LAX uses a hydrocarbons + NOx combined emission factor.

**Table C-6a. 2023 NOx Emissions Benefits for GSE Measures (TPY)**

Airport	BAU Emissions	AQIP Reductions	AQIP Emissions	AQMP Emissions	SIP Credits
LAX	150.69	56.17	94.32	241.03	146.71
BUR	17.46	0.65	16.81	27.00	10.19
LGB	13.23	0.93	12.30	13.22	0.92
SNA	15.07	4.80	10.27	24.80	14.53
ONT	91.10	22.66	68.44	31.49	7.83
Total					180.16

**Table C-6b. 2031 NOx Emissions Benefits for GSE Measures (TPY)**

Airport	BAU Emissions	AQIP Reductions	AQIP Emissions	AQMP Emissions	SIP Credits
LAX	121.31	86.16	35.15	134.09	98.94
BUR	16.72	8.65	8.07	14.14	6.07
LGB	10.54	4.04	6.50	6.99	0.49
SNA	9.98	3.92	6.06	13.52	7.46
ONT	79.84	46.03	33.81	17.22	9.93
Total					122.90

### 3. LAWA Alternative Fuel Vehicle Incentive Measure

Under its AQIM, LAWA has allocated \$500,000 to incentivize replacement of 23 heavy duty vehicles/trucks with near zero emission (0.02 g/bhp-hr NOx standard) vehicles/trucks. The program is scheduled to be completed by 2021. LAWA has already selected 23 vehicles for awarding the incentive funding. The model years for the 23 vehicles range from 1999 to 2016, with GVWR of 14001 pounds or more, fueled with diesel, gasoline and natural gas, and with the combined total VMTs of 588,335 miles annually.

The baseline emissions for the 23 existing vehicles (to be replaced) ~~were~~ ~~was~~ ~~estimated~~ ~~using~~ ~~their~~ ~~assuming~~ ~~they~~ ~~are~~ ~~2020~~ ~~model-~~ ~~year~~ ~~and~~ ~~GVWR~~ ~~-specific~~ ~~emission~~ ~~factors~~ ~~from~~ ~~EMFAC2014~~. ~~By~~ ~~2023~~, ~~older~~ ~~vehicles~~ ~~among~~ ~~-trucks~~ ~~as~~ ~~baseline~~ for the 23 vehicles would need to be replaced with newer model year vehicles to comply with the existing regulations. Assuming 2022 model year replacement vehicles, the purpose of SIP credit calculation. The projected emissions for these vehicles were estimated to be 0.9451 tons per year in 2023 and 1.55077 tons per year in 2031 based on ~~EMFAC~~ EMFAC2104 emission factors for

~~corresponding model years and vehicle classes~~ 2020 model year vehicles/trucks for LA County and the VMTs provided by LAWA.

For each vehicle category, total NOx emissions were divided by total VMTs to obtain g/mile emission factors. These emission factors multiplied by annual VMT for each vehicle would yield annual emissions for each vehicle/truck. Refer to Attachment A for more details. The remaining emissions for the new near-zero emissions were calculated based on ~~the CARB~~ CARB's Carl Moyer program guidelines ([https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017\\_gl\\_appendix\\_d.pdf](https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)), which provide the near-zero vehicles NOx emission factors of 0.10 g/mile and 0.18 g/mile for vehicles with 14,001-33,000 pounds, and over 33,000 pounds GVWR, respectively. Deterioration rates are assumed to be of 0.005 g/mile per 10,000 miles for vehicles 14,001-33,000 pounds of GVWR and 0.004 for vehicles over 33,000 pounds of GVWR, respectively. Applying these emission factors and vehicles' respective annual miles, assuming they are in operation for 3.5 years by 2023 and 11.5 years by 2031, the 23 new vehicles would emit 0.12 and 0.25 tons of NOx annually in total in 2023 and 2031, respectively.

As a result, the potential SIP credit for the NOx emission reductions is expected to be ~~0.78~~ 0.39 tons per year in 2023 and ~~1.30 tons~~ 0.52 tons per year in 2031, with an average emission reduction rate of ~~1.21~~ 0.60 g/mile in 2023 and ~~2.22~~ 0.80 g/mile in 2031. The emission calculations are summarized in Table C-7.

**Table C-7. NOx Emissions Benefits for LAWA Alternative Fuel Vehicle Incentive Measure**

	2023	2031
Total annual VMTs for replaced vehicles (million)	0.59	0.59
Emissions of existing vehicles (TPY)	0.2951	0.4577
Emissions of new near-zero vehicles (TPY)	0.12	0.25
SIP credits (TPY)	0.1739	0.2152



#### 4. LAWA Zero Emission Bus Measure

LAWA’s Clean Fleet Program – Zero-Emission Bus Program targets LAWA’s own bus fleet to be 20% ~~of~~ zero emission vehicles by 2023 and 100% by 2031. LAWA’s bus fleet accumulates 3.25 million miles annually. With the implementation of the program, it will eliminate exhaust emissions equivalent to 0.65 million miles of conventional buses in 2023 and 3.25 million miles in 2031. In the 2016 AQMP inventory, the urban bus emissions from the Basin portion of ~~the~~ Los Angeles County are 5.12 and 1.68~~5~~ tons per day for 2023 and 2031, respectively, and the corresponding VMTs are 514,000 and 431,000, respectively. The fleet average emission factors, defined as bus emissions divided by VMTs, are 8.95 g/mile and 3.49 g/mile, respectively for 2023 and 2031 using EMFAC 2014. Applying the average emission factor to the LAWA’s shuttle bus VMT, the resulting SIP creditable emission reductions are 6.4 and 12.5 TPY for 2023 and 2031, respectively. In June 2019, CARB adopted the Zero-Emission Airport Shuttle Regulation which requires airport shuttle fleets to be 33% ~~zero-emissions~~ zero emissions by December 31, 2027 and 66% ~~zero-emissions~~ zero emissions by December 2031. Taking this regulatory development into account, the SIP creditable emission reductions for 2031 should be adjusted by a factor of 0.67. Table C-8 summarizes this information and the corresponding emission benefits for this measure. The SIP creditable emission reductions are much higher than the estimates in LAWA’s AQIM measure since the AQIM emissions were based on EMFAC 2017, while the 2016 AQMP was based on EMFAC 2014. The EMFAC 2017 introduced significant updates on urban bus emissions which resulted in lower emissions than its ~~precedent~~ predecessor EMFAC2014.

**Table C-8. NO<sub>x</sub> Emissions Benefits for LAWA Zero Emission Bus Program**

	2023	2031
Urban bus emissions for LA County in 2016 AQMP (tons per day)	5.12	1.68
Daily urban bus VMTs in LA County in 2016 AQMP (miles/day)	514,000	431,000
LA County urban bus emission factor in 2016 AQMP (g/mile)	8.95	3.49
Airport’s bus fleet total annual VMT (million miles/year)	3.25	3.25
Annual VMT affected by the AQIM measure (million miles/year)	0.65	3.25
SIP Credits (TPY)	6.40	<del>12.50</del> <u>8.25</u>

#### 5. JWA Parking Shuttle Bus Electrification Measure

JWA is operating a fleet of 12 shuttle buses and is proposing to convert ~~to a minimum of 50%~~ of the buses to electric by 2023 and ~~to a minimum of 80%~~ of the buses to electric by 2031. The

estimated annual mileages for the bus fleet are 0.65 million in 2023 and 0.69 million in 2031. Implementation of this measure will eliminate exhaust emissions equivalent to 0.33 million miles of conventional bus in 2023 and 0.57 million miles in 2031. In the 2016 AQMP inventory, the urban bus emissions from Orange County are 0.52 and 0.23 tons/day in 2023 and 2031, respectively. The corresponding VMTs are 126,000 and 124,000, respectively, which lead to the average NOx emission factor for the urban buses to be 3.74 g/mile and 1.68 g/mile in 2023 and 2031, respectively. Note this is based on EMFAC 2014, which was the platform to estimate on-road mobile source emissions in the 2016 AQMP. The resulting SIP creditable emission reductions are 1.34 and 1.06 TPY for 2023 and 2031, respectively. The SIP creditable emission reductions for 2031 needs to be adjusted due to the zero emission airport shuttle regulation with an adjustment factor of 0.60. Table C-9 summarizes this information and the corresponding emission benefits for this measure. The potential SIP creditable emission reductions are higher than the JWA estimate of the AQIP benefit because the AQIP benefit was developed based on EMFAC 2017, which has lower emission rates for urban buses than EMFAC 2014.

**Table C-9. NOx Emissions Benefits for JWA Parking Shuttle Bus Electrification**

	2023	2031
Urban bus emissions for Orange County in 2016 AQMP (tons per day)	0.52	0.23
Daily urban bus VMTs in Orange County in 2016 AQMP (miles/day)	126,000	124,000
Orange County urban bus emission factor (g/mile)	3.74	1.68
Airport's bus fleet total annual VMT (million miles/year)	0.65	0.69
Annual VMT affected by AQIP measure (million miles/year)	0.33	0.57
SIP Credits (tpy)	1.34	<del>1.06</del> 0.64

## 6. JWA Jet Fuel Delivery Trucks Measure

JWA's Jet Fuel Delivery Trucks measure proposes to eliminate commercial jet fuel delivery trucks by installing a jet fuel pipeline. The construction is expected to be completed by the end of 2019, which will eliminate commercial aviation jet fuel delivery trucks from tank farms near the refineries to the airport. The project is expected to be fully operational by 2023. The eliminated heavy duty diesel truck (HHDT) VMTs are estimated at 633,632 annually for both 2023 and

2031. In the 2016 AQMP inventory, the Orange County HHDT NOx emissions are 2.74 and 2.64 tons per day for 2023 and 2031, respectively, with corresponding VMTs of 1,138,000 and 1,477,000. The SIP creditable emission factors are 2.18 and 1.62 g/mile for 2023 and 2031, respectively, using EMFAC 2014. The resulting potential SIP creditable emission reductions are 1.52 and 1.13 TPY for 2023 and 2031, respectively, as shown in Table C-10.

**Table C-10. NOx Emissions Benefits for JWA Jet Fuel Delivery Truck Measure**

	2023	2031
HHDT NOx in Orange County in 2016 AQMP (tons per day)	2.72	2.64
HHDT daily VMT in Orange County in 2016 AQMP (miles/day)	1,138,000	1,477,000
Orange County HHDT emission factor (g/mile)	2.18	1.62
Airport's Fuel trucks total annual VMT (million miles/year)	0.63	0.63
Annual VMT Affected by AQIP measure (million miles/year)	0.63	0.63
SIP Credits (tpy)	1.52	1.13

## 7. Burbank Shuttle Bus Electrification

The Burbank airport operates a fleet of 13 passenger vans. It's estimated that the fleet accumulates 1.3 million miles annually. The airport is proposing to electrify 50% of its fleet by 2023 and 100 % by 2031. The emissions for this fleet are estimated using medium duty vehicle (MDV) emission factors. The measure would eliminate 0.65 million miles MDV NOx emissions in 2023 and 1.3 million miles in 2031. In the 2016 AQMP, the Los Angeles County MDV emissions are 4.39 and 2.01 tons per day for 2023 and 2031, respectively, with corresponding daily VMTs of 26,730 and 25,308. The SIP creditable emission factors are 0.15 and 0.07 g/mile for 2023 and 2031, respectively, using EMFAC 2014. The resulting potential SIP creditable emission reductions are 0.11 and 0.10 TPY for 2023 and 2031, respectively, as shown in Table C-11. The SIP creditable emission reductions for 2031 needs to be adjusted due to the zero emission airport shuttle regulation, with an adjustment factor of 0.67.

**Table C-11. NOx Emissions Benefits for Burbank Airport Shuttle Electrification**

	2023	2031
MDV NOx in LA County in 2016 AQMP (tons per day)	4.39	2.01
MDV daily VMT in LA County in 2016 AQMP (miles/day)	26,730	25,308
LA County MDV emission factor (g/mile)	0.15	0.07
Airport's shuttle fleet annual VMT (million miles/year)	1.30	1.30
Annual VMT Affected by AQIP measure (million miles/year)	0.65	1.30
SIP Credits (tpy)	0.11	0.1007

## Attachment A

### Methodology for Calculating Emission Reductions Achieved from the AQIP/AQIM Measures Specified in the MOUs with Commercial Airports

Under the MOUs with the five commercial airports, beginning in June 2021, the airports will provide annual reports to the South Coast AQMD on their progress in implementing the SIP creditable AQIP/AQIM measures specified in the MOUs. The annual reports will provide detailed equipment/vehicle data as well as annual emissions inventories for these measures. This attachment provides a description of methodologies for calculating emission reductions achieved based on the reported data from the airports and supplemental information provided by South Coast AQMD to calculate SIP credits.

#### A) GSE Measures

Annually, the airports will provide a list of GSEs subject to the GSE measures to South Coast AQMD. The reported data will include equipment type, fuel type, engine model year, power rating, engine tier level, and activity data (annual operating hours) as specified in the MOUs. From the reported data, annual emissions will be calculated for each piece of equipment using the corresponding emission factors and load factors from the CARB's OFFROAD model. The summation of emissions from all reported GSEs from all airports will represent the emissions associated with the implementation of all GSE measures for all five airports each year. The difference between the 2016 AQMP inventory and the total GSE emissions calculated for all five airports ~~would~~ will show the progress towards meeting the SIP credit associated with the GSE measures for 2023 and 2031. This 2016 AQMP GSE emissions inventory from 2020 to 2031 is shown in Table 1. In this table, the summer planning inventory values are presented. For GSE NOx emissions, the summer planning and annual average inventory values are the same.

Table 1. NOx Emissions from Airport Ground Support Equipment in 2016 AQMP Summer Planning Inventory (tons per day)

<u>Year</u>	<u>NOx Emissions</u>	<u>Year</u>	<u>NOx Emissions</u>
<u>2020</u>	<u>1.287</u>	<u>2026</u>	<u>0.707</u>
<u>2021</u>	<u>1.152</u>	<u>2027</u>	<u>0.653</u>
<u>2022</u>	<u>1.027</u>	<u>2028</u>	<u>0.608</u>
<u>2023</u>	<u>0.925</u>	<u>2029</u>	<u>0.556</u>
<u>2024</u>	<u>0.842</u>	<u>2030</u>	<u>0.536</u>
<u>2025</u>	<u>0.769</u>	<u>2031</u>	<u>0.510</u>

Emissions from an individual piece of GSE can be calculated using the following equation:

$$E_i = EF_i \times HP_i \times LF_i \times A_i \times U$$

Where:

$E_i$  is mass emissions in any desired unit for equipment  $i$

$EF_i$  is emission factor in gram per brake-horse power hour for equipment  $i$

$HP_i$  is the equipment's horse power rating

$LF_i$  is the equipment's load factor (from CARB's OFFROAD model)

$A_i$  is the equipment's annual operating hour

$U$  is a unit conversion factor for the desired mass emission unit

Emission factor can be calculated using the following equation:

$$EF_i := [EF_{zh} + (DR \times Accumulated\ Hours)] \times FCF$$

Where:

$EF_{zh}$  = Zero-hour emission factor in gram per brake-horse power hour for equipment  $i$  (from CARB's OFFROAD model)

$DR$  = Deterioration rate (from CARB's OFFROAD model)

$Accumulated\ Hours$  = Annual Hours x Age of Equipment (capped at 12,000 hours)

$FCF$  = Fuel Correction Factor (from CARB's OFFROAD model)

Detailed information can be found in the following links to CARB's websites:

<https://ww3.arb.ca.gov/regact/2010/offroadlsi10/offroadappd.pdf> and

[https://ww3.arb.ca.gov/msei/ordiesel/ordas\\_ef\\_fcf\\_2017\\_v7.xlsx](https://ww3.arb.ca.gov/msei/ordiesel/ordas_ef_fcf_2017_v7.xlsx)

### **Example:**

Calendar Year: 2022

Equipment Type: Diesel-Powered Aircraft Tug

Model Year: 2003

Engine Size: 265 horsepower (hp)

Annual Operating Hour: 301 hours/year

$NO_x\ EF_{zh} = 5.53\ g/hp-hr$

$DR = 0.0001$

$FCF = 0.93$

$NO_x\ Emission\ Factor\ EF_i = [5.53 + (0.0001 \times 20 \times 301)] \times 0.93 = 5.70\ g/hp-hr$

Load Factor = 0.54

$E_i\ (NO_x\ Emissions) = 5.7\ g/hp-hr \times 0.54 \times 265\ hp \times 301\ hours/year = 245,517\ g/year$

It can be expressed as 0.27 tons/year, or 1.48 pounds/day

### **B) LAWA Alternative Fuel Vehicle Incentive Measure**

LAWA will provide data for replaced trucks/vehicles and replacement trucks/vehicles including vehicle type, model year and annual mileage. The  $NO_x$  emission factors in gram/mile for the replaced vehicles should be obtained from EMFAC2014 for the Los Angeles County. The emission factors of the replacement vehicles with specific engine model year and emission standard can be found from in Tables D-1 and D-2 of the CARB

Carl Moyer Program Guideline at  
([https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017\\_gl\\_appendix\\_d.pdf](https://ww3.arb.ca.gov/msprog/moyer/guidelines/2017gl/2017_gl_appendix_d.pdf)).

For example, for a Medium-Heavy Duty low-NOx replacement truck (14,001 – 33,000 lbs GVWR) meeting the 0.02 g/bhp-hr standard, its emission factor is 0.10 gram/mile with a deterioration rate of 0.005 g/mile per 10,000 miles. For a Heavy-Heavy Duty low-NOx replacement truck with GVWR greater than 33,000 lbs meeting the same standard, its emission factor would be 0.18 g/mile with a deterioration rate of 0.004 g/mile per 10,000 miles. The emission reduction for each replacement truck/vehicle can be calculated based on the following equation:

$$E_i = \Delta EF_i \times VMT_i \times U$$

Where:

- $E_i$  is mass emissions in any desired unit for replacement truck/vehicle  $i$
- $\Delta EF_i$  is the difference between the emission factors for the replaced and replacement vehicles, in gram/mile
- $VMT_i$  is annual VMT of the replacement vehicle (assume the same VMT for both replaced and replacement vehicles)
- $U$  is a unit conversion factor for the desired mass emission unit

**Example:**

Replaced Truck: Medium-Heavy Duty Diesel Truck

Model Year: 2000

Vehicle Type: T6 Instate Heavy, Diesel

Replacement Year: 2020

Annual VMT: 17,255 miles/year

NOx EF: NOx Emissions / VMT

NOx Emissions in Los Angeles County: 22,012 gram (EMFAC 2014 2020 model year, T6 Instate Heavy category)

VMT in Los Angeles County: 27,861 miles (EMFAC2014 2020 model year, T6 Instate Heavy category)

NOx Emission Factor: 22,012/27,861 = 0.79 g/mile

Replacement Truck: Near-Zero CNG truck that meets the 0.02 g/bhp-hr standard

Model Year: 2020

Vehicle Type: T6 Instate Heavy, Diesel

Annual VMT: 17,255 miles/year

NOx Emission Factor: 0.1 g/mile + (0.005 g/mile x 1.0 year x 17,255 mile/year /10,000) = 0.109 g/mile

Emission Factor Difference:  $\Delta EF_i$ : 0.79 – 0.109 = 0.68 g/mile

Emission Reductions: 0.68 g/mile x 17,255 miles/year = 11,750 g/year or 0.013 ton/year

### **C) Shuttle Bus Electrification Measures**

For the MOU measures for shuttle bus electrification, the emission reductions can be calculated as:

$$E = EF \times VMT \times U$$

Where

- E is mass emissions in any desired unit
- EF is EMFAC2014 emission factor in gram/mile. NOx emission factor is calculated by dividing total NOx emissions (County/vehicle specific) by the VMT of the corresponding vehicles (e.g., urban buses)
- VMT is annual vehicle miles impacted by the MOU measures
- U is a unit conversion factor for the desired mass emission unit

#### **Example:**

Replacement Year: 2023, JWA Shuttle Buses  
Fleet Information Base: Orange County, urban bus  
Orange County Urban Bus NOx Emissions from EMFAC2014: 0.52 tons/day  
Orange County Urban Bus VMT from EMFAC2014: 126,000 miles/day  
NOx Emission Factor: 0.52 ton/day / 126,000 miles/day x 907184 g/ton = 3.74 g/mile  
Annual VMT of the JWA Shuttle Bus Fleet: 649,000 miles/year  
Electric Shuttle Bus Fleet VMT: 0.5 x 649,000 miles = 324,500 miles  
Annual Emission Reduction: 3.74 g/mile x 324,500 miles/year = 1,213,630 g/year or 1.34 tons/year

### **D) JWA Jet Fuel Delivery Trucks Measure (Pipeline Installation)**

For the JWA jet fuel delivery trucks measure, the emission reductions can be calculated as:

$$E = EF \times VMT \times U$$

Where

- E is mass emissions in any desired unit
- EF is EMFAC2014 emission factor in gram/mile. NOx emission factor is calculated by dividing total NOx emissions from the Orange County Heavy-Heavy Duty diesel trucks by the corresponding VMT
- VMT is annual vehicle miles impacted by the MOU measure
- U is a unit conversion factor for the desired mass emission unit

#### **Example:**



Benefit Year: 2023

Fleet Information Base: Orange County, Heavy-Heavy Duty Diesel Truck (HHDT)

Orange County HHDT NOx Emissions from EMFAC2014: 2.74 tons/day

Orange County HHDT VMT from EMFAC2014: 1,138,000 miles/day

NOx Emission Factor: 2.74 ton/day / 1,138,000 miles/day x 907184 g/ton = 2.18 g/mile

Annual VMT of the JWA Fuel Delivery Trucks: 633,632 miles/year

Eliminated Fuel Delivery Truck VMT by the Measure: 633,632 miles/year

Annual Emission Reduction: 2.18 g/mile x 633,632 miles/year = 1,381,318 g/year or 1.52 tons/year

## **ATTACHMENT C: CEQA NOTICES OF EXEMPTION**

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Los Angeles International Airport

Burbank Airport

John Wayne Airport

Long Beach Airport

Ontario Airport



# 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: MEMORANDUM OF UNDERSTANDING BETWEEN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND THE CITY OF LOS ANGELES DEPARTMENT OF AIRPORTS**

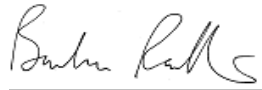
Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

The proposed project is comprised of: 1) a voluntary agreement related to activities the Los Angeles International Airport (LAX) has already agreed to implement as specified in the Memorandum of Understanding (MOU) between the South Coast AQMD and the City of Los Angeles Department of Airports to reduce emissions from non-aircraft mobile sources in accordance with the LAX Air Quality Improvement Measures (AQIM); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NO<sub>x</sub>) emissions, to which the MOU for LAX will contribute. The MOU for LAX specifies the following AQIM measures from the LAX AQIM that are capable of achieving State Implementation Plan (SIP) creditable emission reductions: 1) the ground support equipment emission reduction policy; 2) the LAX alternative fuel vehicle incentive program; and 3) the zero emission bus program. The potential NO<sub>x</sub> emission reductions to be credited into the SIP, to which the MOU for LAX will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

The proposed project has been reviewed 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. Because the acts of South Coast AQMD and the City of Los Angeles Department of Airports voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the City of Los Angeles Department of Airports for the LAX AQIM will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. If the proposed project is approved, this 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 Luke Eisenhardt (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Eisenhardt can also be reached at (909) 396-2324. Dr. Sang-Mi Lee is also available at (909) 396-3169 to answer any questions regarding the proposed project.

**Date:** November 8, 2019

**Signature:**   
\_\_\_\_\_  
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

## NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

**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

**Project Title:** Memorandum of Understanding Between the South Coast Air Quality Management District and the City of Los Angeles Department of Airports

**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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 Memorandum of Understanding (MOU) will be implemented at the Los Angeles International Airport (LAX) which is located at 1 World Way, Los Angeles, CA 90045.

**Description of Nature, Purpose, and Beneficiaries of Project:** The proposed project is comprised of: 1) a voluntary agreement related to activities LAX has already agreed to implement as specified in the MOU between the South Coast AQMD and the City of Los Angeles Department of Airports to reduce emissions from non-aircraft mobile sources in accordance with the LAX Air Quality Improvement Plan (AQIM); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for LAX will contribute. The MOU for LAX specifies the following AQIM measures from the LAX AQIM that are capable of achieving State Implementation Plan (SIP) creditable emission reductions: 1) the ground support equipment emission reduction policy; 2) the LAX alternative fuel vehicle incentive program; and 3) the zero emission bus program. The potential NOx emission reductions to be credited into the SIP, to which the MOU for LAX will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

**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) – Common Sense Exemption

CEQA Guidelines Section 15306 – Information Collection

CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, has reviewed the proposed project 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. Because the acts of South Coast AQMD and the City of Los Angeles Department of Airports voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the City of Los Angeles Department of Airports for the LAX AQIM will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

<b>CEQA Contact Person:</b> Mr. Luke Eisenhardt	<b>Phone Number:</b> (909) 396-2324	<b>Email:</b> <a href="mailto:leisenhardt@aqmd.gov">leisenhardt@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
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<b>Project Contact Person:</b> Dr. Sang-Mi Lee	<b>Phone Number:</b> (909) 396-3169	<b>Email:</b> <a href="mailto:slee@aqmd.gov">slee@aqmd.gov</a>	<b>Fax:</b> (909) 396-3252
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**Date Received for Filing:** \_\_\_\_\_

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

*(Signed Upon Board Approval)*

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources



# 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: MEMORANDUM OF UNDERSTANDING BETWEEN SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND BURBANK-GLENDALE-PASADENA AIRPORT AUTHORITY REGARDING HOLLYWOOD BURBANK AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

The proposed project is comprised of: 1) a voluntary agreement related to activities the Hollywood Burbank Airport (BUR) has already agreed to implement, as specified in the Memorandum of Understanding (MOU) between the South Coast AQMD and Burbank-Glendale-Pasadena Airport Authority, to reduce emissions from non-aircraft mobile sources in accordance with the BUR Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for BUR will contribute. The MOU for BUR specifies the following AQIP measures from the BUR AQIP that are capable of achieving State Implementation Plan (SIP) creditable emission reductions: 1) ground support equipment emission reduction policy; and 2) the zero-emission shuttle bus program. The potential NOx emission reductions to be credited into the SIP, to which the MOU for BUR will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

The proposed project has been reviewed 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. Because the acts of South Coast AQMD and Burbank-Glendale-Pasadena Airport Authority voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the Burbank-Glendale-Pasadena Airport Authority for the BUR AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research, and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. If the proposed project is approved, this 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 Luke Eisenhardt (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Eisenhardt can also be reached at (909) 396-2324. Dr. Sang-Mi Lee is also available at (909) 396-3169 to answer any questions regarding the proposed project.

**Date:** November 8, 2019

**Signature:** 

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

## NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

**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

**Project Title:** Memorandum of Understanding Between South Coast Air Quality Management District and Burbank-Glendale-Pasadena Airport Authority Regarding Hollywood Burbank Airport's Air Quality Improvement Plan

**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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 Memorandum of Understanding (MOU) will be implemented at the Hollywood Burbank Airport (BUR) which is located at 2627 N Hollywood Way, Burbank, CA 91505.

**Description of Nature, Purpose, and Beneficiaries of Project:** The proposed project is comprised of: 1) a voluntary agreement related to activities BUR has already agreed to implement as specified in the MOU between the South Coast AQMD and Burbank-Glendale-Pasadena Airport Authority to reduce emissions from non-aircraft mobile sources in accordance with the BUR Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for BUR will contribute. The MOU for BUR specifies the following AQIP measures from the BUR AQIP that are capable of achieving State Implementation Plan (SIP) creditable emission reductions: 1) ground support equipment emission reduction policy; and 2) the zero-emission shuttle bus program. The potential NOx emission reductions to be credited into the SIP, to which the MOU for BUR will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

**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) – Common Sense Exemption

CEQA Guidelines Section 15306 – Information Collection

CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, has reviewed the proposed project 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. Because the acts of South Coast AQMD and Burbank-Glendale-Pasadena Airport Authority voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the Burbank-Glendale-Pasadena Airport Authority for the BUR AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research, and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

<b>CEQA Contact Person:</b> Mr. Luke Eisenhardt	<b>Phone Number:</b> (909) 396-2324	<b>Email:</b> <a href="mailto:leisenhardt@aqmd.gov">leisenhardt@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
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<b>Project Contact Person:</b> Dr. Sang-Mi Lee	<b>Phone Number:</b> (909) 396-3169	<b>Email:</b> <a href="mailto:slee@aqmd.gov">slee@aqmd.gov</a>	<b>Fax:</b> (909) 396-3252
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**Date Received for Filing:** \_\_\_\_\_

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

*(Signed Upon Board Approval)*

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources





# 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: MEMORANDUM OF UNDERSTANDING BETWEEN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND JOHN WAYNE AIRPORT, ORANGE COUNTY REGARDING JOHN WAYNE AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

The proposed project is comprised of: 1) a voluntary agreement related to activities the John Wayne Airport (JWA) has already agreed to implement as specified in the Memorandum of Understanding (MOU) between the South Coast AQMD and John Wayne Airport, Orange County to reduce emissions from non-aircraft mobile sources in accordance with the JWA Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for JWA will contribute. The MOU for JWA specifies the following AQIP measures from the JWA AQIP that are capable of achieving State Implementation Plan (SIP) creditable emission reductions: 1) ground support equipment emission reduction policy; 2) jet fuel pipeline to replace delivery trucks; and 3) parking shuttle bus electrification. The potential NOx emission reductions to be credited into the SIP, to which the MOU for JWA will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

The proposed project has been reviewed 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. Because the acts of South Coast AQMD and John Wayne Airport, Orange County voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the County of Orange for the JWA AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research, and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. If the proposed project is approved, this 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 Luke Eisenhardt (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Eisenhardt can also be reached at (909) 396-2324. Dr. Sang-Mi Lee is also available at (909) 396-3169 to answer any questions regarding the proposed project.

**Date:** November 8, 2019

**Signature:**

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

## NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

**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

**Project Title:** Memorandum of Understanding Between the South Coast Air Quality Management District and John Wayne Airport, Orange County Regarding John Wayne Airport's Air Quality Improvement Plan

**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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 Memorandum of Understanding (MOU) will be implemented at the John Wayne Airport (JWA) which is located at 18601 Airport Way, Santa Ana, CA 92707.

**Description of Nature, Purpose, and Beneficiaries of Project:** The proposed project is comprised of: 1) a voluntary agreement related to activities JWA has already agreed to implement as specified in the MOU between the South Coast AQMD and John Wayne Airport, Orange County to reduce emissions from non-aircraft mobile sources in accordance with the JWA Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for JWA will contribute. The MOU for JWA specifies the following AQIP measures from the JWA AQIP that are capable of achieving State Implementation Plan (SIP) creditable emission reductions: 1) ground support equipment emission reduction policy; 2) jet fuel pipeline to replace delivery trucks; and 3) parking shuttle bus electrification. The potential NOx emission reductions to be credited into the SIP, to which the MOU for JWA will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

**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) – Common Sense Exemption

CEQA Guidelines Section 15306 – Information Collection

CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, has reviewed the proposed project 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. Because the acts of South Coast AQMD and John Wayne Airport, Orange County voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the County of Orange for the JWA AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research, and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

<b>CEQA Contact Person:</b> Mr. Luke Eisenhardt	<b>Phone Number:</b> (909) 396-2324	<b>Email:</b> <a href="mailto:leisenhardt@aqmd.gov">leisenhardt@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
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<b>Project Contact Person:</b> Dr. Sang-Mi Lee	<b>Phone Number:</b> (909) 396-3169	<b>Email:</b> <a href="mailto:slee@aqmd.gov">slee@aqmd.gov</a>	<b>Fax:</b> (909) 396-3252
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**Date Received for Filing:** \_\_\_\_\_

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

*(Signed Upon Board Approval)*

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources





# 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: MEMORANDUM OF UNDERSTANDING BETWEEN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND THE CITY OF LONG BEACH REGARDING LONG BEACH AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**


Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

The proposed project is comprised of: 1) a voluntary agreement related to activities the Long Beach Airport (LGB) has already agreed to implement as specified in the Memorandum of Understanding (MOU) between the South Coast AQMD and the City of Long Beach to reduce emissions from non-aircraft mobile sources in accordance with the LGB Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for LGB will contribute. The MOU for LGB specifies the ground support equipment emission reduction policy measure from the LGB AQIP that is capable of achieving State Implementation Plan (SIP) creditable emission reductions. The potential NOx emission reductions to be credited into the SIP, to which the MOU for LGB will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

The proposed project has been reviewed 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. Because the acts of South Coast AQMD and the City of Long Beach voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the City of Long Beach for the LGB AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. If the proposed project is approved, this 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 Luke Eisenhardt (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Eisenhardt can also be reached at (909) 396-2324. Dr. Sang-Mi Lee is also available at (909) 396-3169 to answer any questions regarding the proposed project.

**Date:** November 8, 2019

**Signature:**   
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

## NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

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<b>To:</b> County Clerks Counties of Los Angeles, Orange, Riverside and San Bernardino	<b>From:</b> South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765
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**Project Title:** Memorandum of Understanding Between the South Coast Air Quality Management District and the City of Long Beach Regarding Long Beach Airport's Air Quality Improvement Plan

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**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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 Memorandum of Understanding (MOU) will be implemented at the Long Beach Airport (LGB) which is located at 4100 Donald Douglas Drive, Long Beach, CA 90808.

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**Description of Nature, Purpose, and Beneficiaries of Project:** The proposed project is comprised of: 1) a voluntary agreement related to activities LGB has already agreed to implement as specified in the MOU between the South Coast AQMD and the City of Long Beach to reduce emissions from non-aircraft mobile sources in accordance with the LGB Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for LGB will contribute. The MOU for LGB specifies the ground support equipment emission reduction policy measure from the LGB AQIP that is capable of achieving State Implementation Plan (SIP) creditable emission reductions. The potential NOx emission reductions to be credited into the SIP, to which the MOU for LGB will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

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<b>Public Agency Approving Project:</b> South Coast Air Quality Management District	<b>Agency Carrying Out Project:</b> South Coast Air Quality Management District
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**Exempt Status:**

CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption

CEQA Guidelines Section 15306 – Information Collection

CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

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**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, has reviewed the proposed project 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. Because the acts of South Coast AQMD and the City of Long Beach voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the City of Long Beach for the LGB AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

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**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

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<b>CEQA Contact Person:</b> Mr. Luke Eisenhardt	<b>Phone Number:</b> (909) 396-2324	<b>Email:</b> <a href="mailto:leisenhardt@aqmd.gov">leisenhardt@aqmd.gov</a>	<b>Fax:</b> (909) 396-3982
<b>Project Contact Person:</b> Dr. Sang-Mi Lee	<b>Phone Number:</b> (909) 396-3169	<b>Email:</b> <a href="mailto:slee@aqmd.gov">slee@aqmd.gov</a>	<b>Fax:</b> (909) 396-3252

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**Date Received for Filing:** \_\_\_\_\_

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

*(Signed Upon Board Approval)*

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources



# 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: MEMORANDUM OF UNDERSTANDING BETWEEN THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND ONTARIO INTERNATIONAL AIRPORT REGARDING ONTARIO INTERNATIONAL AIRPORT'S AIR QUALITY IMPROVEMENT PLAN**

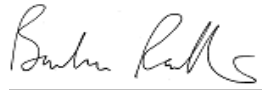
Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (South Coast AQMD), as Lead Agency, has prepared a Notice of Exemption pursuant to CEQA Guidelines Section 15062 – Notice of Exemption for the project identified above.

The proposed project is comprised of: 1) a voluntary agreement related to activities the Ontario International Airport (ONT) has already agreed to implement as specified in the Memorandum of Understanding (MOU) between the South Coast AQMD and Ontario International Airport to reduce emissions from non-aircraft mobile sources in accordance with the ONT Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for ONT will contribute. The MOU for ONT specifies the ground support equipment emission reduction policy measure from the ONT AQIP that is capable of achieving State Implementation Plan (SIP) creditable emission reductions. The potential NOx emission reductions to be credited into the SIP, to which the MOU for ONT will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

The proposed project has been reviewed 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. Because the acts of South Coast AQMD and Ontario International Airport voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the Ontario International Airport Authority for the ONT AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. If the proposed project is approved, this Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

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**Date:** November 8, 2019

**Signature:**   
\_\_\_\_\_  
Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

## NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

**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

**Project Title:** Memorandum of Understanding Between the South Coast Air Quality Management District and Ontario International Airport Regarding Ontario International Airport's Air Quality Improvement Plan

**Project Location:** The project is located within the South Coast Air Quality Management District (South Coast AQMD) jurisdiction which includes 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 Memorandum of Understanding (MOU) will be implemented at the Ontario International Airport (ONT) which is located at 2500 East Airport Drive, Ontario, CA 91761.

**Description of Nature, Purpose, and Beneficiaries of Project:** The proposed project is comprised of: 1) a voluntary agreement related to activities ONT has already agreed to implement as specified in the MOU between the South Coast AQMD and Ontario International Airport to reduce emissions from non-aircraft mobile sources in accordance with the ONT Air Quality Improvement Plan (AQIP); and 2) South Coast AQMD's enforceable commitment to the United States Environmental Protection Agency (U.S. EPA) to achieve reductions in oxides of nitrogen (NOx) emissions, to which the MOU for ONT will contribute. The MOU for ONT specifies the ground support equipment emission reduction policy measure from the ONT AQIP that is capable of achieving State Implementation Plan (SIP) creditable emission reductions. The potential NOx emission reductions to be credited into the SIP, to which the MOU for ONT will contribute a portion, are estimated to be 0.52 and 0.37 ton per day in 2023 and 2031, respectively.

**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) – Common Sense Exemption

CEQA Guidelines Section 15306 – Information Collection

CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment

**Reasons why project is exempt:** Pursuant to the California Environmental Quality Act (CEQA), the South Coast AQMD, as Lead Agency, has reviewed the proposed project 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. Because the acts of South Coast AQMD and Ontario International Airport voluntarily agreeing to enter into a MOU, and quantifying emissions for the purpose of establishing an enforceable commitment are administrative and procedural in nature, it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Further, no new physical impacts beyond the potential emission reductions that were previously analyzed under CEQA by the Ontario International Airport Authority Commission for the ONT AQIP will be expected to occur. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Common Sense Exemption. As provided in CEQA Guidelines Section 15306 – Information Collection, the proposed project is also exempt from CEQA because it will consist of basic data collection, research and resource evaluation activities and will not result in a serious or major disturbance to an environmental resource. Further, because the proposed project is designed to further protect or enhance the environment by supporting emission reductions from non-aircraft mobile sources within South Coast AQMD's jurisdiction, the proposed project is also categorically exempt from CEQA pursuant to CEQA Guidelines Section 15308 – Actions by Regulatory Agencies for Protection of the Environment. There is no substantial evidence indicating that any of the exceptions to the categorical exemptions apply to the proposed project pursuant to CEQA Guidelines Section 15300.2 – Exceptions. Therefore, the proposed project is exempt from CEQA.

**Date When Project Will Be Considered for Approval (subject to change):**

South Coast AQMD Governing Board Hearing: December 6, 2019; South Coast AQMD Headquarters

**CEQA Contact Person:**  
Mr. Luke Eisenhardt

**Phone Number:**  
(909) 396-2324

**Email:**  
[leisenhardt@aqmd.gov](mailto:leisenhardt@aqmd.gov)

**Fax:**  
(909) 396-3982

**Project Contact Person:**  
Dr. Sang-Mi Lee

**Phone Number:**  
(909) 396-3169

**Email:**  
[slee@aqmd.gov](mailto:slee@aqmd.gov)

**Fax:**  
(909) 396-3252

**Date Received for Filing:** \_\_\_\_\_

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

*(Signed Upon Board Approval)*

Barbara Radlein  
Program Supervisor, CEQA  
Planning, Rule Development, and Area Sources

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# Facility-Based Mobile Source Measure for Commercial Airports

Governing Board Meeting  
December 6, 2019



# Background

- 2016 AQMP Facility-Based Mobile Source Measures
  - Control Measure MOB-04, Emission Reductions at Commercial Airports
- Board direction in May 2018
  - Voluntary MOU approach for commercial airports
  - MOUs based on airports' air quality improvement plans/measures (AQIP/AQIM)
    - Non-aircraft emission sources





# Draft MOUs developed for five commercial airports

- MOUs cover five commercial airports
  - LAX, Burbank, John Wayne, Ontario, Long Beach airports
- Air Quality Improvement Plans/Measures developed by each airport
  - Emission Inventories (2017, 2023, 2031)
  - Specific measures and initiatives for *non-aircraft* emission sources
- MOUs only cover airports measures that are eligible for SIP credit
  - Performance targets, timeline for implementation, reporting requirements

# MOU commitments

## Airports



- Implement measures included in MOUs and achieve performance targets
- Annual reporting to South Coast AQMD on implementation of MOU measures
  - Equipment/vehicle data
  - Emission benefit calculations
  - Disposition of older equipment

## South Coast AQMD



- Quantify SIP creditable emission reductions for MOU measures
- Provide federally enforceable commitments and report emission reduction benefits to U.S. EPA based on annual reports from airports
- Process to cover potential shortfall
- Provide public access and disclosure



# MOU measures eligible for SIP credit

## ➤ Ground Support Equipment (GSE) Performance Targets by Airport (NOx fleet average emissions rate in g/bhp-hr)

Airport	2023	2031
JWA	1.7	0.9
LAX <sup>1</sup>	1.8	1.0
LGB	0.93	0.44
ONT	2.2	1.0
BUR	1.66	0.74

<sup>1</sup> Hydrocarbons + NOx combined emission factor



# MOU measures eligible for SIP credit (cont'd)

## ➤ Shuttle Bus Electrification Measures

	2023	2031
LAX – Zero Emission Bus Program	20%	100%
JWA- Parking Shuttle Bus Electrification	50%	80%
BUR- Zero-Emission Shuttle Bus Program	50%	100%

# MOU measures eligible for SIP credit (cont'd)

## ➤ LAX

- **Alternative Fuel Vehicle Incentive Program:** Implement an incentive program to distribute up to \$500,000 dollars in funding to assist the purchase of zero or near-zero emission vehicles by December 31, 2021

## ➤ JWA

- **Jet Fuel Delivery Trucks:** Install a jet fuel pipeline to eliminate routine commercial passenger jet fuel delivery trucks by 2023

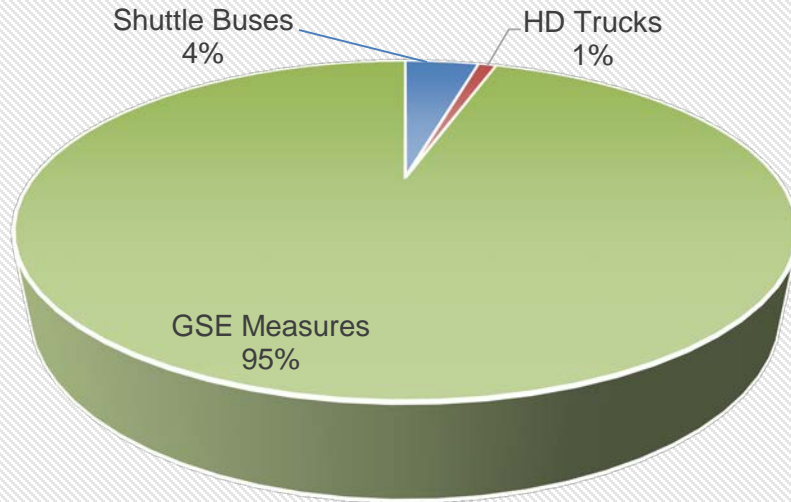
# Total potential NOx SIP emission reductions for MOU measures

	<b>2023 (tons per day)</b>	<b>2031 (tons per day)</b>
SIP Creditable Emission Reductions	0.52	0.37

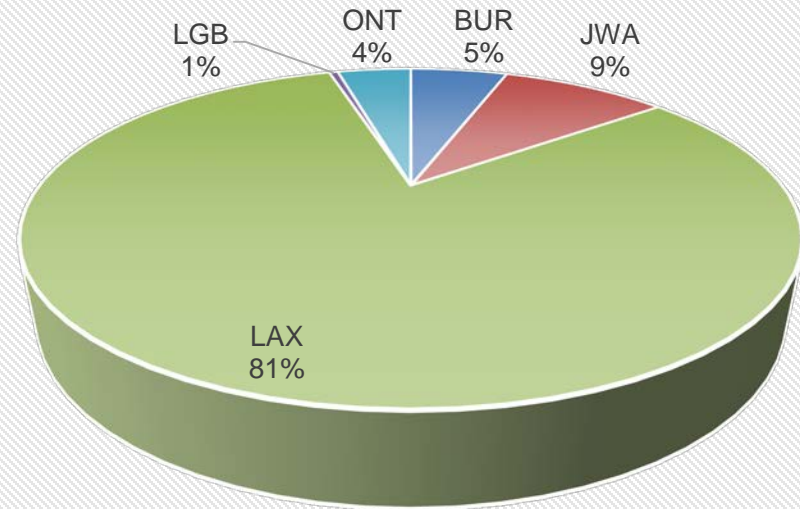


# Potential NOx reductions in 2023

### Reductions by Measure in 2023

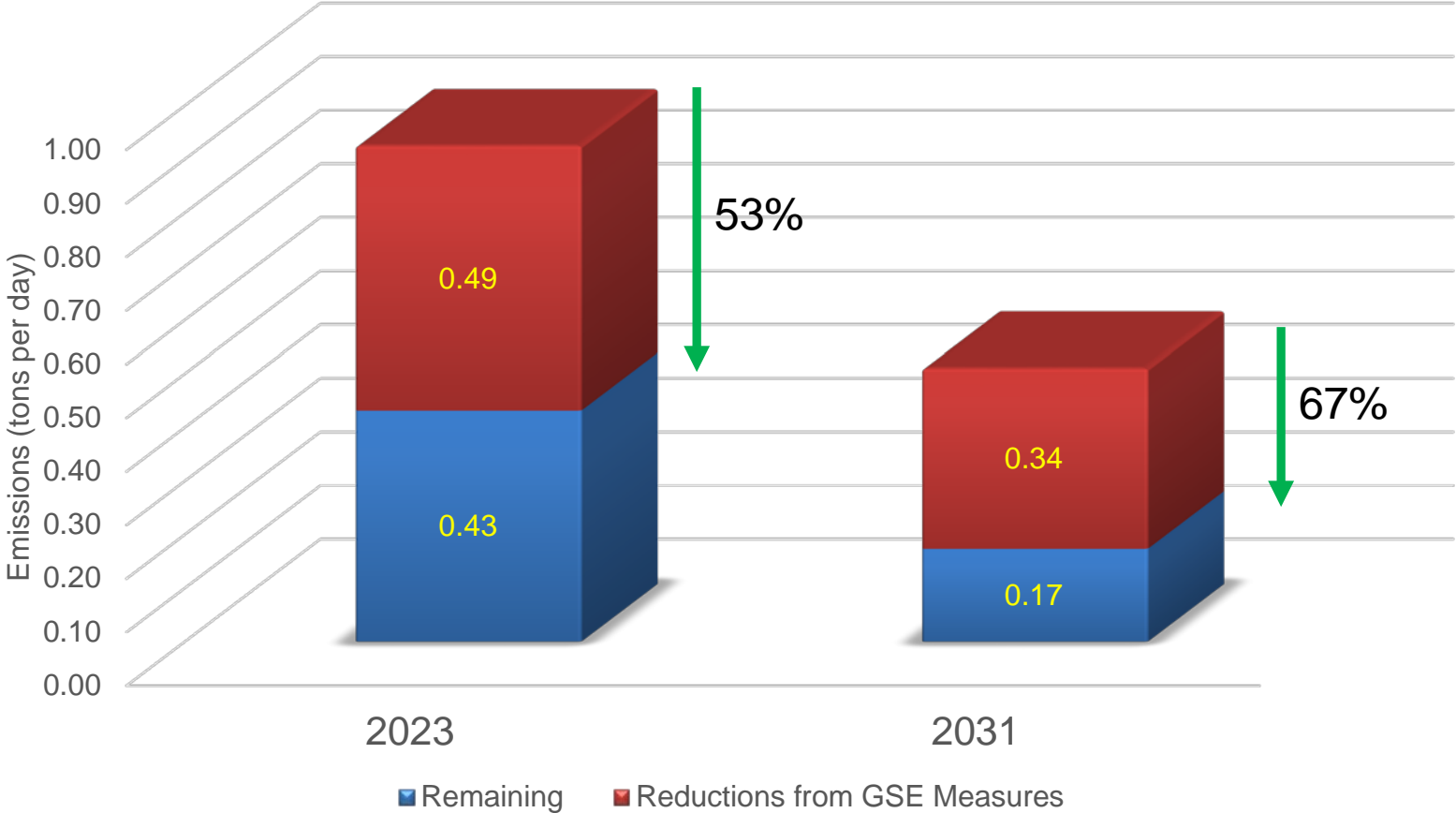


### Reductions by Airport in 2023



**Total NOx Reductions = 190 tons per year**

# NOx Reductions from MOU GSE measures



# South Coast AQMD's enforceable commitment

- Achieve 0.52 and 0.37 tpd NO<sub>x</sub> reductions in 2023 and 2031, respectively
- Track the implementation of MOU measures based on airports' annual reports
- Report to EPA on:
  - Implementation of SIP creditable MOU measures and actual emission reductions achieved; and
  - Make each report and relevant data publicly available
- Through a public process, adopt and submit substitute measures to EPA in the event of any emission reduction shortfall



# Public process to develop draft MOUs

LAX

- Airports MOU working group meetings

JWA

- Updates to Mobile Source Committee
  - Feb 15, Sep 20, Oct 18, and Nov 15, 2019

BUR

- Public Consultation Meeting – October 10, 2019

ONT

- MOUs have been approved by all five airports respective authorities

LGB

- MOUs subject to approval by South Coast AQMD Board





# Public comments

- Questions regarding annual operating data for GSE equipment
  - *Added new MOU language to allow options based on data availability*
- What happens to replacement GSE equipment?
  - *Added new MOU language to require reporting for equipment retired, sold, and relocated with the Basin*
- How are emissions benefits/SIP credits calculated?
  - *Provided clarifications in responses to comments*
- What are the infrastructure needs for GSE?
  - *Airports and airport tenants have agreed to airport-wide performance targets; required infrastructure to be coordinated between airports and airport tenants*

# Public comments (cont'd)

- **Concern regarding modest reductions from MOUs**
  - *Majority of reductions come from GSE*
    - *Reductions from GSE are significant (53% in 2023, 67% in 2031)*
  - *Largest source of emissions at airports are aircraft, then trucks*
    - *The MOUs are targeting non-aircraft emissions per Board direction*
    - *Cargo trucks serving the airports to be addressed under proposed ISR for warehouses*
- **Questions regarding the process for addressing potential shortfall**
  - *Potential reduction shortfalls to be determined based on the annual reports from the airports*
  - *Substitute measures to be developed through public process*



# Comments from Mobile Source Committee

- How is progress toward the 2023 and 2031 targets tracked?
  - Airports required to submit annual reports by June 1 of 2021 to 2032
    - Detailed equipment/vehicle data; emission inventories
  - Annual reports will determine progress toward targets
- How will substitute measures be developed in the case of an emissions shortfall?
  - South Coast AQMD reports on progress to EPA by November 1 annually
  - If cannot demonstrate sufficient progress to EPA by February 2022, South Coast AQMD must submit substitute measures by November 2022
  - Substitute measures to be developed through a public process working with airports and stakeholders to seek reductions from airports



# Comments from Mobile Source Committee (cont'd)

- **Could staff develop a parallel ISR if the MOUs are not successful?**
  - Possible to develop draft language in reserve if directed by the Board
  - Approximately 6 month timeline to complete rulemaking if needed
- **Are Ground Power Units covered by the MOUs?**
  - *Included in the MOUs GSE measures*
  - *7% of total GSE population (4,078); 80% diesel, 20% electric*
- **What happens to older equipment that is replaced? Is it moved to other airports?**
  - *Older equipment mainly retired/scrapped*
  - *Reporting required for equipment retired, sold, and moved within the Basin airports (under rare circumstances)*
- **How is fuel delivered to remote gates and cargo/maintenance areas at LAX**
  - *Primarily through fueling hydrant system*



# Staff recommendations

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Adopt Resolution to:

1. Determine that the Facility-Based Mobile Source Measure for Commercial Airports is exempt from the requirements of California Environmental Quality Act;
2. Approve the MOUs with each of the five commercial airports;
3. Approve South Coast AQMD's enforceable commitment; and
4. Direct the Executive Officer to submit South Coast AQMD's enforceable commitment to CARB for its approval and subsequent submittal to the U.S. EPA for inclusion into California SIP.