South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

MEETING, OCTOBER 2, 2020

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

Pursuant to Governor Newsom's Executive Orders N-25-20 (March 12, 2020) and N-29-20 (March 17, 2020), the Governing Board meeting will only be conducted via video conferencing and by telephone. Please follow the instructions below to join the meeting remotely.

ELECTRONIC PARTICIPATION INFORMATION
(Instructions provided at bottom of the agenda)
Join Zoom Meeting - from PC, Laptop or Phone
https://scaqmd.zoom.us/j/93128605044
Meeting ID: **931 2860 5044** (applies to all)
Teleconference Dial In +1 669 900 6833 or +1 253 215 8782
One tap mobile +16699006833,,97364562763# or +12532158782,,93128605044#

Spanish Language Only Audience (telephone)
Número Telefónico para la Audiencia de Habla Hispana
Teleconference Dial In/Numero para llamar: +1 669 900 6833
One tap mobile: +16699006833,,93112584181#
Meeting ID/Identificación de la reunión: 931 1258 4181

Audience will be allowed to provide public comment through telephone or Zoom connection.

PUBLIC COMMENT WILL STILL BE TAKEN

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.

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 at South Coast AQMD's web page (www.aqmd.gov).

Americans with Disabilities Act and Language Accessibility
Disability and language-related accommodations can be requested to allow participation in the Governing Board meeting. The agenda will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov. Code Section 54954.2(a)). In addition, other documents may be requested in alternative formats and languages. Any disability or language-related accommodation must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to the South Coast AQMD. Please contact the Clerk of the Boards Office at (909) 396-2500 from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to cob@aqmd.gov

A webcast of the meeting is available for viewing at:
http://www.aqmd.gov/home/news-events/webcast

CALL TO ORDER

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

Staff/Phone (909) 396-

CONSENT CALENDAR (Items 1 through 18)

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

1. Approve Minutes of September 4, 2020 Board Meeting **Thomas/3268**

2. Set Public Hearing to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations **Nastri/3131**

   October 27, 2020:

   A. Determine That Proposed Amendments to Rule 445 – Wood-Burning Devices, Are Exempt from CEQA and Amend Rule 445 **Rees/2856**

   Proposed amendments to Rule 445 will satisfy U.S. EPA contingency measure requirements due by October 31, 2020 for the South Coast Air Basin (Basin) which is classified as an extreme non-attainment area for ozone. The proposed amendments would include addition of an ozone-based No-Burn day forecast for the Basin, effective September 1 through April 30. The ozone threshold for No-Burn days would be incrementally lowered automatically for each subsequent final determination by the U.S. EPA of a failure to meet an applicable Clean Air Act milestone. PM2.5 rule provisions will remain unchanged, including calling No-Burn days only from November 1 through the end of February. Other minor amendments include revisions/additions to the definition of terms used in the rule and revisions to improve clarity/rule implementation. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 445 – Wood-Burning Devices, are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 445 – Wood-Burning Devices. (Review: Stationary Source Committee, October 16, 2020)

November 6, 2020:

B. Determine That Proposed Amendments to Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, Are Exempt from CEQA and Amend Rule 1178 **Nakamura/3105**

Rule 1178 establishes requirements to control VOC emissions from storage tanks at petroleum facilities. Amendments to Rule 1178 are needed to address safety concerns related to the enclosure of external floating roof tanks that store sour water. Proposed Amended Rule 1178 will reinstate an expired provision that allows operators to accept a permit condition to limit the vapor pressure of organic liquid stored. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities. (Reviewed: Stationary Source Committee, September 18, 2020)

Budget/Fiscal Impact

3. Execute Contract to Develop Model for Connected Network of Microgrids **Miyasato/3249**

Microgrids are gaining attention as a means of increasing the resiliency and reliability of the electricity system to support alternative fuel transportation. The University of California Irvine Advanced Power and Energy Program (UCI APEP) proposes a study to assess air quality impacts of connected microgrids by evaluating the fueling and charging options of alternative transportation under microgrid control. This action is to execute a contract with UCI APEP to develop a model for a connected network of microgrids for zero emission transportation in an amount not to exceed $290,000 from the Clean Fuels Program Fund (31). (Reviewed: Technology Committee, September 18, 2020; Recommended for Approval)

4. Execute Contract to Develop and Demonstrate Natural Gas and Propane Conversion Systems for Medium-Duty Vehicles **Miyasato/3249**

In 2019, the Board approved three projects to develop natural gas and propane conversion systems for the new Ford 7.3-liter gasoline engine with Ford Qualified Vehicle Modifiers, including a $607,825 award to Agility Fuel Solutions (Agility). However, a contract with Agility was not executed due to lack of necessary Ford approvals. CARB recently adopted a new lower Optional Low NOx Standard of 0.01 g/bhp-hr under the Heavy-Duty On-Road Low NOx "Omnibus" regulation. Subsequently, Agility submitted a revised proposal to further optimize the engine to achieve the newly adopted level. This action is to execute a contract with Agility Fuel Solutions to develop, demonstrate and commercialize the Ford 7.3-liter medium-duty natural gas and propane conversions systems in an amount not to exceed $607,825 from the Clean Fuels Program Fund (31). (Reviewed: Technology Committee, September 18, 2020; Recommended for Approval)

5. Transfer and Appropriate Funds for Rule 1180 Program, Execute Purchase Orders and/or Contracts and Issue Solicitation **Low/2269**

In June 2018, the Board recognized over $7.0 million in revenue from refineries into the Rule 1180 Special Revenue Fund (78) to establish community air monitoring near refineries. Also, the FY 2020-21 budget includes annual fees for community air monitoring totaling over $4.5 million. These actions are to: 1) transfer and appropriate funds of up to $861,000 from the Rule 1180 Special Revenue Fund (78) to Science & Technology Advancement's FY 2020-21 Budget for Rule 1180; 2) execute purchase orders and/or contracts for air quality monitoring equipment and vehicles for the community air monitoring network; and 3) issue a solicitation for an independent audit of the Rule 1180 refinery fenceline and community air monitoring network. (Reviewed: Administrative Committee, September 11, 2020; Recommended for Approval)

6. Issue Program Announcement for Lower Emission School Bus Program **Berry/2363**

Since 2001, South Coast AQMD has funded the replacement of over 1,800 pre-1994 publicly owned diesel school buses and retrofitted nearly 3,400 diesel school buses as part of the Lower Emission School Bus Program. In February 2020, CARB issued a guideline update for the Lower Emission School Bus Program allowing the replacement of diesel buses that are more than 20 years old. This action is to issue a Program Announcement to replace pre-2001 model year diesel school buses owned by public school districts with new alternative fuel or zero emission buses. (Reviewed: Technology Committee, September 18, 2020; Recommended for Approval)

7. Execute Lease Contract for Mailing Equipment **Olvera/2309**

On June 6, 2020, the Board approved the release of an RFQ to solicit lease proposals to replace the mailroom's United States Postal Service-compliant mailing system and to lease additional equipment for folding, inserting, and addressing mail. This action is to execute a five-year lease agreement with Pitney Bowes Inc., for the proposed mailing equipment in an amount not to exceed $156,851. (Reviewed: Administrative Committee, September 11, 2020; Recommended for Approval)

8. Amend South Coast AQMD Salary Resolution to Add Designated Deputy Position **Olvera/2309**

This item is to add a Deputy Executive Officer position, reporting directly to the Executive Officer, to assist with the development and implementation of policies and programs to enhance equity, diversity and inclusion within the organization and in the community. Funding for this position is available in the FY 2020-21 Budget. (No Committee Review)

9. Issue Purchase Order for Ingres Relational Database Management System Software Support **Moskowitz/3329**

The Ingres Relational Database Management System is used for the implementation of the Central Information Repository database. This database is used at the South Coast AQMD to support a suite of client/server and web-based applications known collectively as the Clean Air Support System (CLASS). CLASS applications support all of South Coast AQMD's core activities. Licensing, maintenance and support for this software expire on November 29, 2020. This action is to issue a purchase order to Actian Corporation for a total amount not to exceed $265,000. Funds for this expense are included in the FY 2020-21 Budget. (Reviewed: Administrative Committee, September 11, 2020; Recommended for Approval)

10. Appoint Alternate Public Member to Hearing Board **Thomas/3268**

In February 2020, one of the two Alternate Public Member positions on the South Coast AQMD Hearing Board became vacant. A Hearing Board Advisory Committee reviewed the applications and resumes of 22 candidates and recommended that the Administrative Committee interview the top three ranked candidates. The Administrative Committee interviewed the candidates at its meeting on September 11, 2020. This action is to appoint an Alternate Public Member to fill the unexpired term ending June 30, 2022. (Reviewed: Administrative Committee, September 11, 2020; Recommended for Approval)

Items 11 through 18 - Information Only/Receive and File

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

This report highlights the August 2020 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)

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

This reports the actions taken by the Hearing Board during the period of August 1 through August 31, 2020. (No Committee Review)

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

This reports the monthly penalties from August 1, 2020 through August 31, 2020, and legal actions filed by the General Counsel's Office from August 1 through August 31, 2020. An Index of South Coast AQMD Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, September 18, 2020)

14. Lead Agency Projects and Environmental Documents Received **Nakamura/3105**

This report provides a listing of CEQA documents received by the South Coast AQMD between August 1, 2020 and August 31, 2020, and those projects for which the South Coast AQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, September 18, 2020)

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

This report highlights South Coast AQMD rulemaking activities and public hearings scheduled for 2020. (No Committee Review)

16. Status Report on Major Ongoing and Upcoming Projects for Information Management **Moskowitz/3329**

Information Management is responsible for data systems management services in support of all South Coast AQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects. (Reviewed: Administrative Committee, September 11, 2020)

17. South Coast AQMD 2019-2020 Why Healthy Air Matters Program End-of-Year Report **Alatorre/3122**

The Why Healthy Air Matters (WHAM) Program is South Coast AQMD's high school air quality education program. The report summarizes activities and accomplishments of the WHAM Program for the 2019-2020 school year. This action is to receive and file the 2019-2020 WHAM Program End-of-Year Report. (Reviewed: Administrative Committee, September 11, 2020)

18. Annual Progress Report for AB 617 Community Emissions Reduction Plans **Ghosh/2582**

This report summarizes the results and actions taken from September 2019 to June 2020 to further reduce emissions in AB 617 communities designated in 2018. (Reviewed: Stationary Source Committee, September 18, 2020)

19. Items Deferred from Consent Calendar

BOARD CALENDAR

Note: The September meeting of the Legislative Committee was canceled. The next meeting of the Legislative Committee is scheduled for October 9, 2020.

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

21. Mobile Source Committee (Receive & File) **Chair: Burke** **Fine/2239**

22. Stationary Source Committee (Receive & File) **Chair: Benoit** **Dejbakhsh/2618**

23. Technology Committee (Receive & File) **Chair: Buscaino** **Miyasato/3249**

24. Mobile Source Air Pollution Reduction Review Committee (Receive & File) **Board Liaison: Benoit** **Berry/2363**

25. California Air Resources Board Monthly Report (Receive & File) **Board Rep: Mitchell** **Thomas/2500**

Staff Presentation/Board Discussion

26. Budget and Economic Outlook Update ***(Presentation In Lieu of Board Letter)*** **Whynot/3104**

Staff will provide an update on economic indicators and key South Coast AQMD metrics. (Reviewed: Administrative Committee, September 11, 2020)

27. Recommendation for Year 3 Implementation of Assembly Bill 617 **Ghosh/2582**

Assembly Bill (AB) 617 requires CARB, in consultation with air districts, to annually select communities for community air monitoring and the preparation of community emissions reduction programs as appropriate. AB 617 specifies that the highest priority locations shall be disadvantaged communities with a high exposure burdens for criteria pollutants and toxic air contaminants. Staff recommends the South Los Angeles community for consideration in the AB 617 program. These actions are to: (1) approve the recommendation of the South Los Angeles community to CARB for their consideration in selecting communities for the AB 617 program; and (2) direct staff to seek funding from the Legislature, in the amount of $4-$6 million per year for at least six years, to support the development and implementation of the community plans in the South Los Angeles community. (Reviewed: Stationary Source Committee, September 18, 2020)

PUBLIC HEARINGS

28. Certify Final Environmental Assessment and Adopt Rule 1179.1 – NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities **Nakamura/3105**

Proposed Rule 1179.1 (PR 1179.1) establishes NOx, VOC, and CO emission limits for boilers, process heaters, engines, and turbines at Publicly Owned Treatment Works facilities. PR 1179.1 will consolidate requirements from existing source-specific rules and incorporates new requirements for turbines, which are currently exempt from existing source-specific rules. PR 1179.1 also includes provisions for starting up and shutting down equipment, and monitoring, reporting, and recordkeeping. This action is to adopt the Resolution: 1) Certifying the Final Environmental Assessment for Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities; and 2) Adopting Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities. (Reviewed: Stationary Source Committee, August 21, 2020)

29. Receive and File 2019 Annual Report on AB 2588 Program and Approve Updates to Facility Prioritization Procedure for AB 2588 Program, Public Notification Procedures, and AB 2588 and Rule 1402 Supplemental Guidelines **Rees/2856**

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution control districts to prepare an annual report. The report provides the public with information regarding South Coast AQMD programs to reduce emissions of toxic air contaminants. This annual update describes the various activities in 2019 to satisfy the requirements of AB 2588 and Rule 1402, such as quadrennial emissions reporting and prioritization, the preparation and review of Air Toxics Inventory Reports, Health Risk Assessments, Voluntary Risk Reduction Plans, Risk Reduction Plans, and additional South Coast AQMD activities related to air toxics. Staff is also updating the Facility Prioritization Procedure for the AB 2588 Program, AB 2588 and Rule 1402 Supplemental Guidelines, and Public Notification Procedures to correct typographical errors and to provide additional information and clarification. These actions are to receive and file the 2019 Annual Report on the AB 2588 Air Toxics “Hot Spots” Program and approve revisions to the Facility Prioritization Procedure, AB 2588 and Rule 1402 Supplemental Guidelines, and Public Notification Procedures. (Reviewed: Stationary Source Committee, September 18, 2020)

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 SCAQMD is a party. The actions are:

- 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; (Tesoro)
- Communities for a Better Environment v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. 19STCP05239; (Tesoro II)
- 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); United States Court of Appeals, Third Circuit, Case No. 20-1858;

- In re: Exide Holdings Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 20-11157 (CSS) (Bankruptcy Case);

- In the Matter of SCAQMD v. Southern California Gas Company, Aliso Canyon Storage Facility, SCAQMD 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, SCAQMD Hearing Board Case No. 6060-5 (Order for Abatement);

- 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;

- 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;

- 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);

- SCAQMD, et al. v. NHTSA, EPA, et al., United States Court of Appeals, D.C. Circuit, Filed May 28, 2020;

- Association of Irritated Residents v. U.S. EPA, SCAQMD, SJVUAPCD, et al., United States Court of Appeals, D.C. Circuit, Case No. 19-71223; and

- SCAQMD v. City of Los Angeles, Los Angeles City Council, City of LA Harbor Dept., LA Board of Harbor Commissioners, et al. Los Angeles Superior Court, Case No. 20STCP02985.

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

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

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

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, Deputy Executive Officer – Administrative & Human Resources;
- 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. Persons wishing to speak may do so remotely via Zoom or telephone. To provide public comments via a Desktop/Laptop or Smartphone, click on the "Raise Hand" at the bottom of the screen, or if participating via Dial-in/Telephone Press *9. This will signal to the host that you would like to provide a public comment and you will be added to the list.

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 may be limited to a total of three (3) minutes for the entirety of the Consent Calendar plus Board Calendar, and three (3) minutes or less for each of the 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. Individuals who wish to submit written or electronic comments must submit such comments to the Clerk of the Board, South Coast AQMD, 21865 Copley Drive, Diamond Bar, CA 91765-4178, (909) 396-2500, or to cob@aqmd.gov, on or before 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
EV/BEV = Electric Vehicle/Battery 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 ≤ 10 microns
PM2.5 = Particulate Matter $\underline{<}$ 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

INSTRUCTIONS FOR ELECTRONIC PARTICIPATION

Instructions for Participating in a Virtual Meeting as an Attendee
As an attendee, you will have the opportunity to virtually raise your hand and provide public comment.

Before joining the call, please silence your other communication devices such as your cell or desk phone. This will prevent any feedback or interruptions during the meeting.

For language interpretation:
Click the interpretation Globe icon at the bottom of the screen
Select the language you want to hear (either English or Spanish)
Click "Mute Original Audio" if you hear both languages at the same time.

Para interpretación de idiomas:
Haga clic en el icono de interpretación el globo terráqueo en la parte inferior de la pantalla
Seleccione el idioma que desea escuchar (inglés o español)
Haga clic en "Silenciar audio original" si escucha ambos idiomas al mismo tiempo.

Please note: During the meeting, all participants will be placed on Mute by the host. You will not be able to mute or unmute your lines manually.

After each agenda item, the Chairman will announce public comment.

Speakers may be limited to a total of 3 minutes for the entirety of the consent calendar plus board calendar, and three minutes or less for each of the other agenda items.

A countdown timer will be displayed on the screen for each public comment.

If interpretation is needed, more time will be allotted.

Once you raise your hand to provide public comment, your name will be added to the speaker list. Your name will be called when it is your turn to comment. The host will then unmute your line.

Directions for Video ZOOM on a DESKTOP/LAPTOP:

- If you would like to make a public comment, please click on the **"Raise Hand"** button on the bottom of the screen. This will signal to the host that you would like to provide a public comment and you will be added to the list.

Directions for Video Zoom on a SMARTPHONE:

- If you would like to make a public comment, please click on the **"Raise Hand"** button on the bottom of your screen.
- This will signal to the host that you would like to provide a public comment and you will be added to the list.

Directions for TELEPHONE line only:

- If you would like to make public comment, please **dial *9** on your keypad to signal that you would like to comment.

Directions for Spanish Language TELEPHONE line only:

- The call in number is the same.
- The meeting ID number is 931-1258-4181
- If you would like to make public comment, please **dial *9** on your keypad to signal that you would like to comment.

Instrucciones para la línea de TELÉFONO en español únicamente:

• El número de llamada es el mismo (+1 669900 6833 o +1 253215 8782).
• El número de identificación de la reunión es 931-1258-4181
• Si desea hacer un comentario público, marque * 9 en su teclado para indicar que desea comentar.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the September 4, 2020 meeting.

RECOMMENDED ACTION:
Approve Minutes of the September 4, 2020 Board Meeting.

Faye Thomas
Clerk of the Boards

FT:cmw

FRIDAY, SEPTEMBER 4, 2020

Notice having been duly given, the regular meeting of the South Coast Air Quality Management District Board was conducted remotely via video conferencing and telephone. Members present:

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

Council Member Ben Benoit, Vice Chairman
Cities of Riverside County

Supervisor Kathryn Barger
County of Los Angeles

Council Member Joe Buscaino
City of Los Angeles

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

Senator Vanessa Delgado (Ret.)
Senate Rules Committee Appointee

Gideon Kracov
Governor's Appointee

Mayor Larry McCallon
Cities of San Bernardino County

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

Supervisor V. Manuel Perez
County of Riverside

Council Member Carlos Rodriguez
Cities of Orange County

Supervisor Janice Rutherford
County of San Bernardino

Member absent:

Supervisor Lisa A. Bartlett
County of Orange

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

- Pledge of Allegiance: Led by Supervisor Perez

- Opening Comments

Chairman Burke shared an uplifting moment from his time in the Air Force at Kimpo Air Force Base when a Colonel asked everyone in the room to join in reciting the Pledge of Allegiance.

Wayne Nastri, Executive Officer, reported that the Governor issued an emergency proclamation on September 3, 2020 to address the historic heat wave due to hit Southern California over the weekend. The proclamation allows power plants to generate more power without air quality permitting limitations through Monday, September 7 to meet the high demand on the state's energy grid. Staff will keep the Board apprised of any changes. He also provided an update on staff efforts in the natural gas leak at the Los Angeles Department of Water and Power (LADWP) Valley Generating station. The investigation is ongoing and staff will continue to work with CARB and other agencies.

Council Member Buscaino commented that LADWP is committed to implementing the best available technology at all their facilities and noted the benefits of deploying digital imaging technologies to identify leaks at LADWP facilities as well as all facilities of this type. He expressed his commitment and those of his colleagues on the L.A. City Council to resolve this issue quickly.

CONSENT CALENDAR

1. Approve Minutes of August 7, 2020 Board Meeting

2. Set Public Hearing October 2, 2020 to Consider Adoption of and/or Amendments to South Coast AQMD Rules and Regulations

   Certify Final Environmental Assessment and Adopt Rule 1179.1 – NOx Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities Certify Final Environmental Assessment and Amend Rules 1146, 1146.1, 1146.2 and Adopt Rule 1100

Budget/Fiscal Impact

3. Adopt Resolution Recognizing Funds for FY 2019-20 Community Air Protection Program Incentives and Reimburse General Fund for Administrative Costs

4. Recognize Revenue, Transfer Funds, Amend and Execute Contracts to Demonstrate Class 8 Battery Electric Trucks, Retrofit Ocean-Going Vessel, Deploy Fuel Cell Transit Buses and Reimburse General Fund

5. Recognize Revenue, Transfer Funds and Approve Budget and Expenditures for California Natural Gas Vehicle Partnership Activities and Projects

6. Establish Special Revenue Fund, Recognize Funds, Execute Contract for Installation and Maintenance of Air Filtration Systems and Reimburse General Fund for Administrative Costs

7. Amend Contract to Provide Short- and Long-Term Systems Development, Maintenance and Support Services

8. Issue RFP for Legislative Representation in Sacramento, California

9. Appropriate Funds and Amend Existing Contract for Consultant Services for South Coast AQMD's Why Healthy Air Matters Program and Environmental Justice Outreach and Initiatives, Appropriate Funds for Clean Air Program for Elementary Students, and Modify Existing Board Approved Policy

10. Appoint Alternate Medical Member to Hearing Board

11. Issue New and Amended Solicitations, Approve Reallocation of Funds, and Approve Award and Contract Modifications as Approved by MSRC

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. FY 2019-20 Contract Activity

16. Lead Agency Projects and Environmental Documents Received

17. Report of RFPs/RFQs Scheduled for Release in September

18. Rule and Control Measure Forecast

19. Status Report on Major Ongoing and Upcoming Projects for Information Management

Supervisor Rutherford noted that she has no financial interests in Item No. 5 but is required to identify for the record that she is a Steering Committee member of the California Natural Gas Vehicle Partnership, which is involved in this item.

Supervisor Barger, Council Member Buscaino and Mayor McCallon noted that they do not have financial interests in Item No. 11 but are required to identify for the record that they serve on the Regional Council for SCAG which is involved with this item.

Council Member Mitchell noted that she has no financial interests in Item Nos. 3 and 11 but is required to identify for the record that she is a Board Member of CARB, which is involved with Item No. 3; and serves on the Regional Council for SCAG which is involved with Item No. 11.

Council Member Benoit noted that he does not have a financial interest in Item Nos. 5 and 11 but is required to identify for the record that he is a member of the California Natural Gas Vehicle Partnership, which is involved with Item No. 5; and serves on the Regional Council for SCAG which is involved with Item No. 11.

Bayron Gilchrist, General Counsel, noted that Council Member Rodriguez would like to identify for the record that he does not have a financial interest in Item Nos. 5 and 11 but is required to identify for the record that he is a member of the California Natural Gas Vehicle Partnership, which is involved with Item No. 5; and serves on the Regional Council for SCAG which is involved with Item No. 11.

Supervisor Perez noted that he has no financial interests in Item No. 4 but is required to identify for the record that he is a Board Member of SunLine Transit Agency.

Due to requests to speak and Board member questions on Consent Calendar Item 4, the vote on the Consent Calendar was deferred until after those comments were made.

20. Item Deferred from Consent Calendar

4. Recognize Revenue, Transfer Funds, Amend and Execute Contracts to Demonstrate Class 8 Battery Electric Trucks, Retrofit Ocean-Going Vessel, Deploy Fuel Cell Transit Buses and Reimburse General Fund

Council Member Cacciotti noted his support for this item and asked staff to comment on the Volvo Switch-On project and its potential to accelerate the program.

Matt Miyasato, Chief Technologist/Science and Technology Advancement explained that the initial Volvo LIGHTS (Low Impact Green Heavy Transport Solutions) project was to develop and demonstrate early Class 8 battery electric trucks. This item includes a grant from U.S. EPA for the Volvo Switch-On project, which is the next phase of the Volvo LIGHTS program. The Switch-On project will deploy up to 70 additional commercial Class 8 battery electric trucks in five fleets throughout the Inland Empire and the San Fernando Valley in the City of Los Angeles. He noted the importance of deploying a larger number of trucks to test the robustness of the architecture to further commercialize battery electric trucks.

Council Member Cacciotti noted staff's work and the Board's leadership on being transformative in this industry.

Ranji George, a member of the public, urged the Board to allocate more funding to hydrogen fuel cell technology. He noted the disproportionate amount of funding for battery technology and expressed concerns about battery waste.

Florence Gharibian, a member of the public, commented on her former work with the Department of Toxic Substances Control (DTSC) and the former Exide battery facility. She urged support for new technologies to replace batteries or for battery recycling.

MOVED BY CACCIOTTI, SECONDED BY BARGER, AGENDA ITEMS 1 THROUGH 11 APPROVED AS RECOMMENDED, ADOPTING RESOLUTION NO. 20-14 RECOGNIZING FY 2019-20 COMMUNITY AIR PROTECTION INCENTIVE FUNDS, BY THE FOLLOWING VOTE:

AYES: Barger, Benoit, Burke, Buscaino, Cacciotti, Delgado, Kracov, McCallon, Mitchell, Perez, Rodriguez and Rutherford

NOES: None

ABSENT: Bartlett

Mr. Nastri announced staff's request to pull RFP #P2021-03, (Issue Request for Proposal to Hire Outside Counsel, Establish a Prequalified List), from Item 17.

Harvey Eder, Public Solar Power Coalition, expressed concerns about the Arctic melting, climate change and the dangers of methane gas. He advocated for additional funding for solar energy. He also noted difficulties with access to Zoom meetings.

MOVED BY MITCHELL, SECONDED BY BENOIT, AGENDA ITEMS 12 THROUGH 19 APPROVED AS RECOMMENDED, WITH THE MODIFICATION TO PULL RFP #P2021-03 FROM AGENDA ITEM 17, BY THE FOLLOWING VOTE:

AYES:	Barger, Benoit, Burke, Buscaino, Cacciotti, Delgado, Kracov, McCallon, Mitchell, Perez, Rodriguez and Rutherford
NOES:	None
ABSENT:	Bartlett

BOARD CALENDAR

21. Administrative Committee

22. Investment Oversight Committee

23. Legislative Committee ***(Withheld for Comment and Discussion)***

24. Mobile Source Committee

25. Stationary Source Committee

26. Technology Committee

27. Mobile Source Air Pollution Reduction Review Committee

28. California Air Resources Board Monthly Report ***(Withheld for Comment and Discussion)***

Agenda Item Nos. 23 and 28 were withheld for comment and discussion.

MOVED BY BENOIT, SECONDED BY BARGER, AGENDA ITEMS 21, 22, 24 THROUGH 27, APPROVED AS RECOMMENDED, RECEIVING AND FILING THE COMMITTEE AND MSRC REPORTS, BY THE FOLLOWING VOTE:

AYES: Barger, Benoit, Burke, Buscaino, Cacciotti, Delgado, Kracov, McCallon, Mitchell, Perez, Rodriguez and Rutherford

NOES: None

ABSENT: Bartlett

23. Legislative Committee

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

Agenda Item	**Recommendation**
AB 1714 (Aguiar-Curry) Emissions limitations: wine fermentation	Continue
SB 662 (Archuleta) Energy: transportation sector: hydrogen	Support

Council Member Mitchell noted that the 2019-20 Legislative Session has ended and AB 1714 and SB 662 died in committee; therefore, there is no action required on these bills.

28. California Air Resources Board Monthly Report

Council Member Mitchell reported on two recent significant measures that CARB adopted in August. The Ocean-Going Vessels At-Berth regulation implements several changes to the existing regulation and adds emission limits on auto carriers and oil tankers at berth in California ports, which will begin in 2023 and be phased in over time. The Heavy-Duty and Vehicle Omnibus regulation, a measure in the Mobile Source Strategy, establishes a low NOx engine emission

standard for on-road heavy-duty trucks. She noted that detailed information regarding both regulations can be found in the CARB report. U.S. EPA is delaying action on CARB's low NOx petition, but action is expected in 2021.

Board Member Kracov noted that recent actions by CARB are significant and suggested that a report be presented to the Board about how these rules will help towards achieving attainment standards for 2023 and beyond.

Council Member Mitchell noted that CARB staff will be releasing a Mobile Source Strategy document in October 2020 that provides information about how the contribution of various mobile sources will help to meet the State Implementation Plan. She noted that reducing NOx emissions is a challenge that requires CARB working with air districts to fulfill SIP requirements.

Mr. Nastri commented that staff has begun work on developing the next AQMP to identify strategies and commitments and address the attainment of federal air quality standards. He stated that staff will provide an update to the Board on the progress of the AQMP. Staff continues to work with CARB to further identify how the emission reduction strategies will be achieved to meet attainment deadlines.

Carlo De La Cruz, Sierra Club, expressed his support for CARB's adoption of the Ocean-Going Vessels At-Berth and Heavy-Duty and Vehicle Omnibus regulations and commented on the associated health benefits. He commended CARB for their work and stated that he looks forward to the work on South Coast AQMD rules and regulations that will support these actions.

MOVED BY MITCHELL, SECONDED BY CACCIOTTI, AGENDA ITEMS 23 AND 28, APPROVED AS RECOMMENDED TO RECEIVE AND FILE THE LEGISLATIVE COMMITTEE AND CARB REPORTS, AND APPROVE THE FOLLOWING POSITION ON LEGISLATION*****, BY THE FOLLOWING VOTE:

AYES:	Barger, Benoit, Burke, Buscaino, Cacciotti, Delgado, Kracov, McCallon, Mitchell, Perez, Rodriguez and Rutherford
NOES:	None
ABSENT:	Bartlett

Receive and file; and take the following action as recommended:*

Agenda Item	Recommendation
AB 1714 (Aguiar-Curry) Emissions limitations: wine fermentation	Continue
SB 662 (Archuleta) Energy: transportation sector: hydrogen	Support

**The 2019-2020 Legislative Session ended on August 31, 2020 and both bills died in committee; therefore, no action was required.*

Staff Presentation/Board Discussion

29. Status Report on Regulation XIII - New Source Review

David Ono, Planning and Rules Manager, gave the staff presentation on Item No. 29.

RECEIVE AND FILE; NO ACTION NECESSARY

30. Budget and Economic Outlook Update ***(Presentation In Lieu of Board Letter)***

Jill Whynot, Chief Operating officer, gave the presentation on Item No. 30.

Chairman Burke commended staff on their work in putting together the data for this report, which provides valuable information on the South Coast AQMD's financial and economic outlook. He recommended that staff continue to provide this report regularly and several Board members concurred.

Ms. Whynot expressed appreciation to all the staff that provided the data.

Council Member Rodriguez requested clarification on the number of potential expired permits that are small businesses and those that will be expiring within 30-90 days of the 12-month reinstatement period.

Ms. Whynot noted that 10 percent of the potentially expiring permits are small businesses and many of them are paying within 30-90 days, with very few going to the end of the 12-month reinstatement period.

Mr. Nastri commented that staff has been reaching out and working closely with businesses regarding their permits and noted that some companies have several permits expiring. He suggested waiting another 30 days to gather and evaluate more data.

Council Member Mitchell inquired about the renewal fees for permits and late penalties.

Ms. Whynot provided the costs for annual renewal and late fees for small and large equipment, noting that the renewal and late fees for small equipment are a modest amount and for large equipment the late fee is a small percentage of the annual fee.

Council Member Mitchell expressed concern that the late fees for small businesses are higher than larger facilities on a percentage basis and recommended that staff continue to monitor expiring permits.

Mayor McCallon commended staff for providing the data and suggested they continue to provide the Board with this report even after the pandemic. He also agreed that staff should continue to monitor the expiring permits for small businesses.

Council Member Buscaino commented that activity at the Ports are often an indication of whether the economy is recovering; however, the increase in cargo volume for August may not be a solid indicator. All indications are that the increase is due to significant replenishment of warehouse inventories. He noted that the region heavily relies on jobs related to the ports.

Chairman Burke commented that the sell-through rate of the supplies will be a good indicator of whether port activities will remain strong.

Ranji George commented on the valuable economic information in the report but cautioned that the increased demand for supplies could be due to the federal stimulus packages, which artificially inflates the stock market.

RECEIVE AND FILE; NO ACTION NECESSARY

PUBLIC HEARING

31. Determine That Proposed Amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces, and Revisions to Clean Air Furnace Rebate Program Are Exempt from CEQA; Amend Rule 1111 and Approve Revisions to Clean Air Furnace Rebate Program

Susan Nakamura, Assistant DEO/Planning, Rule Development and Area Sources, gave the staff presentation on Item No. 31.

Board Member Kracov asked when the 14 ng/Joule (ng/J) emission limit was adopted, its cost effectiveness, and whether the NOx reductions are significant.

Ms. Nakamura responded that the amendments adopted in 2009 established the lower NOx limit of 14 ng/J and staff estimated the cost effectiveness to be between $8,600 and $19,000 per ton. She noted that the NOx emission reductions are significant.

Board Member Kracov inquired about the amount of time given to manufacturers to meet the new standard, including dual fuel systems, and whether the manufacturers have stepped up. He also asked if Supervisor Rutherford's concerns regarding furnaces for high-altitude communities had been resolved.

Ms. Nakamura commented that the manufacturers have stepped up to develop the 14 ng/J technology for condensing and non-condensing furnaces and noted that almost 450 models have been submitted for certification.

Board Member Kracov asked if amendments to Rule 1111 have been approved by U.S. EPA for inclusion in the SIP.

Ms. Nakamura stated that all of the rule amendments have been submitted for inclusion in the SIP and U.S. EPA approved the 2014 amendments. She noted that the compliance date for high-altitude furnaces has been extended, including a provision to allow 40 ng/J dual fuel systems until 2022 and a consumer rebate of $500 will be provided to incentivize installation of the high-altitude 14 ng/J units.

Senator Delgado commented that these issues have been discussed extensively in Stationary Source Committee meetings. She thanked Ms. Nakamura and staff for their hard work and coming up with a good compromise.

Council Member Cacciotti inquired about the $500 rebate and the retail cost for a furnace unit.

Ms. Nakamura responded that the cost difference between the 14 ng/J and 40 ng/J is $600, and the $500 incentive helps to close the gap. The cost varies for heat pumps and electrical upgrades, but staff estimates the starting point is about $5,600. Based on information from the manufacturers and their website, the average cost for a 14 ng/J furnace is $1,600 and a 40 ng/J furnace is $1,000.

Vice Chairman Benoit noted that the costs provided do not include labor or installation.

Supervisor Rutherford thanked Board Member Kracov for inquiring about her concerns for furnaces in high-altitude areas. She commended staff for their hard work and efforts in adapting the rule to resolve those concerns and their commitment to revisit the issue in 2022.

Chairman Burke inquired about the funding source and the amount of the incentive.

Ms. Nakamura explained that the Clean Air Furnace Rebate Program uses monies collected through the Rule 1111 Mitigation Fee Fund, which was established in 2014 as a compliance option for manufacturers to pay a mitigation fee in lieu of meeting the lower limits.

Mr. Nastri commented that the rebate is to help incentivize the purchase of cleaner residential heating alternatives.

The public hearing was opened, and the following individuals addressed the Board on Item 31.

Angus Lemon, Trane Technologies, thanked staff for their hard work and expertise in developing the rule. He noted that Trane is working on an anti-override technology for dual fuel systems that will address staff's concerns about the potential for customers to override the switchover point and run equipment as a stand-alone furnace. He cited a study funded by Trane and conducted by the University of California, Davis (UC Davis) which concluded that the potential NOx emissions reductions can be greater than 90 percent when using hybrid heating systems and requested the 40 ng/J dual fuel systems be considered for use throughout the Basin without a time limitation.

Regina Hsu, Earthjustice, commented on the high levels of pollution this summer that have exceeded the federal ozone standard amidst the pandemic, highlighting the importance of reducing emissions from top NOx sources in the region. She urged the Board to not further weaken Rule 1111 and to address commercial and residential sources of NOx pollution in buildings, including gas appliances that worsen both outdoor and indoor air quality. She requested that the rulemaking process for Rule 1121 – Control of Nitrogen Oxides from Residential-Type, Natural Gas-Fired Natural Water Heaters, be initiated to achieve emission reductions under Control Measure CMB-02.

Harvey Eder expressed the need to do better to improve the environment, expressed concerns about climate change and advocated for solar energy.

John Anderson stated that he represents a small family business that has been attempting to open an art gallery. He requested an extension to allow additional time to purchase a new high-efficient HVAC roof-top unit for an art gallery as he is unable to purchase and install a new unit by the September 2020 deadline, due to the pandemic. *(Ms. Nakamura clarified that the proposal is to extend the compliance date for one year for weatherized roof-type furnaces.)*

Leah Louis-Prescott, Rocky Mountain Institute, urged the Board to further strengthen Rule 1111 and not allow the requested exemptions. She commented on the harmful levels of toxic pollutants from building appliance emissions that

cause respiratory illnesses, noting that buildings emit more NOx per day than light-duty vehicles and power plants.

Chairman Burke commented on a company in Las Vegas, Nevada that is working on water heaters powered by solar cells and noted that he has arranged for them to meet with Mr. Nastri to discuss the technology.

Ranji George expressed support for staff's proposal and solar water heaters. He also commented on the likely interest to switch over to natural gas in the dual fuel system if given the opportunity, and toxic levels of pollutants from gas appliances that harm indoor air quality.

Rusty Tharp, Goodman Manufacturing, expressed support for the amendments to the rule and appreciation for staff working with the manufacturers. He also commented on concerns with 40 ng/J dual fuel systems, including backsliding, the switchover point, enforcement challenges, higher NOx emissions compared to a 14 ng/J furnace, consumer operating costs, and potential for consumers to tamper or disconnect the heat pump.

Kellie Lindenmoyer, Trane Technologies, requested a continuance of the public hearing as many installers are in high demand due to the heat wave and were unable to attend today's meeting. She highlighted the benefits of the 40 ng/J dual fuel systems and requested they be considered for use throughout the Basin without a time limitation.

Dave Winningham, Lennox International, expressed support for the staff proposal. He was opposed to allowing 40 ng/J in dual fuel applications and noted that Lennox offers 14 ng/J non-condensing and condensing furnaces that can be configured for dual fuel applications.

Chris Chavez, Coalition for Clean Air, opposed loosening the NOx standards and backsliding that is inconsistent with the SIP, given the difficulty in achieving federal air quality standards. He noted that gas appliances are a major contributor of pollutants in the region and the need for South Coast AQMD to consider how to reduce emissions from gas appliances, especially water heaters.

Doug McLeish, Johnson Controls, noted reasons for requesting a 60-day sell through period in addition to the 12-month extension. He clarified the retail cost difference on weatherized packaged units relative to the furnace rebate.

Chris Forth, Johnson Controls, requested allowing dual fuel systems with non-compliant 40 ng/J furnaces for the entire South Coast region, which would provide additional options for consumers. He also requested an additional 60-day sell through period for weatherized furnaces beyond the one-year extension of the compliance date.

Silverio Davila, Ferguson
Miguel, Owner of HVAC company
Codi Novini, HVAC contractor
Mark Ramirez, HVAC contractor

Requested allowing dual fuel systems with non-compliant 40 ng/J furnaces in all areas to provide consumers with more options.

Ms. Nakamura responded to comments regarding the furnace rebate and commented that the 12-month extension allows sufficient time for manufacturers to manage existing inventory.

Senator Delgado suggested that staff contact individual commenters to clarify the extension and sell through period.

Senator Delgado and Vice Chairman Benoit commented on the 12-month mitigation extension, noting that the extension satisfies the sell through period and accommodates concerns discussed at the Stationary Source Committee meeting.

Council Member Rodriguez asked for the Stationary Source Committee's perspective regarding the 60-day sell through period and staff's response to the UC Davis study.

Ms. Nakamura commented on staff's concerns that a dual fuel system with a 40 ng/J non-compliant furnace would result in 65 percent higher NOx emissions than a dual fuel system with a 14 ng/J furnace and an increased supply of 40 ng/J NOx furnaces used in dual fuel split systems could create additional enforcement challenges.

Senator Delgado noted that she is sensitive to the concerns regarding the sell through period and felt the 12-month extension was a good compromise.

Council Member Mitchell commented that the consensus of the Stationary Source Committee is that the 12-month extension was sufficient. She also emphasized an option to buy the 14 ng/J dual fuel system is available, and the substantial emission reductions from this rule.

Council Member Cacciotti thanked the Stationary Source Committee and noted that the furnace rebates will help to stimulate the economy.

Vice Chairman Benoit noted that his biggest concern with the 40 ng/J dual fuel system is backsliding and pointed out that the option for a 14 ng/J dual fuel system. He expressed his appreciation to industry representatives for their comments and acknowledged the work that it took to get to this point. He recommended moving forward with the staff proposal.

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

Written Comments Submitted on behalf of the following organizations:

Adrian Martinez/ Rebecca Barker/Regina Hsu, Earthjustice
Matthew Gough, Sierra Club
Hoi Poon, Silicon Valley Youth Climate Action
Bronwyn Janet Barry, North American Passive House Network
Amanda Millstein, M. D., Climate Health Now
Council Member Daniel Brotman, City of Glendale
Lauren Weston, Acterra: Action for a Healthy Planet
Antonina Markoff, The Climate Reality Project Bay Area Chapter
Pauline Seales, Santa Cruz Climate Action Network
Daniel W. Chandler, 350 Humboldt
Robert Gould, M.D., San Francisco Bay Physicians for Social Responsibility
Leah Louis-Prescott, Rocky Mountain Institute

MOVED BY MITCHELL, SECONDED BY CACCIOTTI, AGENDA ITEM NO. 31 APPROVED AS RECOMMENDED, ADOPTING RESOLUTION NO. 20-13 DETERMINING THAT PROPOSED AMENDED RULE 1111 – REDUCTION OF NOX EMISSIONS FROM NATURAL-GAS-FIRED, FAN-TYPE CENTRAL FURNACES, AND REVISIONS TO THE CLEAN AIR FURNACE REBATE PROGRAM ARE EXEMPT FROM THE REQUIREMENTS OF CEQA, AMENDING RULE 1111 – REDUCTION OF NOX EMISSIONS FROM NATURAL-GAS FIRED, FAN TYPE CENTRAL FURNACES AND REVISING THE CLEAN AIR FURNACE REBATE PROGRAM, BY THE FOLLOWING VOTE:

AYES: Barger, Benoit, Burke, Buscaino, Cacciotti, Delgado, Kracov, McCallon, Mitchell, Perez, Rodriguez and Rutherford

NOES: None

ABSENT: Bartlett

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

Steven Goldsmith, Torrance Refinery Action Alliance (TRAA)
Florence Gharibian, Del Amo Action Committee
Tom Hazelleaf, Seal Beach resident
Al Sattler, TRAA
David and Vanessa Poster

Commented on the continued use of modified hydrofluoric acid (MHF) at the refineries and called for the immediate phase out of MHF; noted that the South Coast AQMD has not provided updates on this issue, including available alternatives, since September 2019; requested enhanced inspections at the refineries during the extreme heat; and cautioned about the consequences if HF is released.

Chris Chavez inquired about the status of the proposed safety enhancements for MHF outlined in the refineries proffer letters and any community outreach efforts, including public noticing, and the scoping/CEQA process.

Todd Campbell, Clean Energy, thanked Council Member Mitchell for her representation on the CARB Board at their June and July public hearings in conveying the NOx emissions reduction challenges the South Coast region faces. He requested that South Coast AQMD encourage CARB to pursue aggressive approaches to lower NOx emissions and commented on the lack of transparency with the Mobile Source Strategy document that CARB is developing. He also requested that South Coast AQMD staff develop indirect source rules and explore public and private partnerships that can help replace aging trucks with significantly cleaner options.

Ian Stewart, Rail Propulsion Systems, commented on their current project with South Coast AQMD to demonstrate a small battery powered switcher locomotive. He gave a presentation that included a video on a full size zero emissions locomotive known as the 999 and requested funding for a three-month demonstration at the Metrolink central maintenance yard.

Chairman Burke inquired about the batteries that are being used.

Mr. Stewart responded that the batteries are a combination of legacy locomotive batteries and recycled batteries from electric vehicles.

Ranji George expressed concerns with the San Bernardino County Employees' Retirement Association's (SBCERA) interpretation of the *Alameda County Deputy Sheriff's Association v. Alameda County Employees' Retirement Association* case regarding health premiums.

Supervisor Rutherford reiterated that there is no discretion for either the South Coast AQMD or SBCERA in implementing the California Supreme Court's decision on this matter.

Harvey Eder expressed concerns with the posting of meeting notices and Zoom connections.

CLOSED SESSION

The Board recessed to closed session at 12:20 p.m., pursuant to Government Code sections:

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

- 54956.9(a) and 54956.9(d)(1) to confer with its counsel regarding pending litigation which has been initiated formally and to which the South Coast AQMD is a party. The action is:

  In the Matter of SCAQMD v. Southern California Gas Company, Aliso Canyon Storage Facility, SCAQMD 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.

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

- 54956.9(a) and 54956.9(d)(4) to consider initiation of litigation (two cases).

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, Deputy Executive Officer – Administrative & Human Resources;
- Employee Organization(s): Teamsters Local 911, and South Coast AQMD Professional Employees Association; and
- Unrepresented Employees: Designated Deputies and Management and Confidential employees.

PUBLIC EMPLOYEE PERFORMANCE EVALUATIONS

It Is also necessary to recess to closed session pursuant to Government Code section 54957, as specified below:

- Title: Executive Officer
- Title: General Counsel

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

ADJOURNMENT

There being no further business, the meeting was adjourned by Mr. Gilchrist at 1:15 p.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on September 4, 2020.

Respectfully Submitted,

Faye Thomas
Clerk of the Boards

Date Minutes Approved: _____

_____
Dr. William A. Burke, Chairman

ACRONYMS

AQMP = Air Quality Management Plan
CARB = California Air Resources Board
CEQA = California Environmental Quality Act
FY = Fiscal Year
MSRC = Mobile Source (Air Pollution Reduction) Review Committee
NOx = Oxides of Nitrogen
RFP = Request for Proposal
RFQ = Request for Quotations
SCAG = Southern California Association of Governments
SIP = State Implementation Plan
U.S. EPA = United States Environmental Protection Agency

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 2

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

October 27, 2020:

A. Determine That Proposed Amendments to Rule 445 – Wood-Burning Devices, Are Exempt from CEQA and Amend Rule 445
Proposed amendments to Rule 445 will satisfy U.S. EPA contingency measure requirements due by October 31, 2020 for the South Coast Air Basin (Basin) which is classified as an extreme non-attainment area for ozone. The proposed amendments would include addition of an ozone-based No-Burn day forecast for the Basin, effective September 1 through April 30. The ozone threshold for No-Burn days would be incrementally lowered automatically for each subsequent final determination by the U.S. EPA of a failure to meet an applicable Clean Air Act milestone. PM2.5 rule provisions will remain unchanged, including calling No-Burn days only from November 1 through the end of February. Other minor amendments include revisions/additions to the definition of terms used in the rule and revisions to improve clarity/rule implementation. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 445 – Wood-Burning Devices, are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 445 – Wood-Burning Devices. (Review: Stationary Source Committee, October 16, 2020)

November 6, 2020:

B. Determine That Proposed Amendments to Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, Are Exempt from CEQA and Amend Rule 1178

Rule 1178 establishes requirements to control VOC emissions from storage tanks at petroleum facilities. Amendments to Rule 1178 are needed to address safety concerns related to the enclosure of external floating roof tanks that store sour water. Proposed Amended Rule 1178 will reinstate an expired provision that allows operators to accept a permit condition to limit the vapor pressure of organic liquid stored. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities, are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities. (Reviewed: Stationary Source Committee, September 18, 2020)

RECOMMENDED ACTIONS:
Set Public Hearing October 27, 2020 to Amend Rule 445 and Set Public Hearing November 6, 2020 to Amend Rule 1178

The complete text of the proposed amendments, staff reports and other supporting documents will be available from the South Coast AQMD's publication request line at (909) 396-2001, or from: Mr. Derrick Alatorre – Deputy Executive Officer/Public Advisor, South Coast AQMD, 21865 Copley Drive, Diamond Bar, CA 91765, (909) 396-2432, PICrequests@aqmd.gov and on the Internet (www.aqmd.gov) as of September 25, 2020 for Rule 445 and October 7, 2020 for Rule 1178.

Wayne Nastri
Executive Officer

ft

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 3

PROPOSAL: Execute Contract to Develop Model for Connected Network of Microgrids

SYNOPSIS: Microgrids are gaining attention as a means of increasing the resiliency and reliability of the electricity system to support alternative fuel transportation. The University of California Irvine Advanced Power and Energy Program (UCI APEP) proposes a study to assess air quality impacts of connected microgrids by evaluating the fueling and charging options of alternative transportation under microgrid control. This action is to execute a contract with UCI APEP to develop a model for a connected network of microgrids for zero emission transportation in an amount not to exceed $290,000 from the Clean Fuels Program Fund (31).

COMMITTEE: Technology, September 18, 2020; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Chairman to execute a contract with UCI APEP to develop a model for a connected network of microgrids for zero emission transportation in an amount not to exceed $290,000 from the Clean Fuels Program Fund (31).

Wayne Nastri
Executive Officer

MMM:NB:JI:SH

Background

The University of California Irvine (UCI) through its Advanced Power and Energy Program (APEP) is conducting a $7.12 million CEC-funded study to demonstrate a microgrid at the Port of Long Beach (POLB) and enhance resiliency for a critical facility at the port. To date, majority of the research into microgrids has been focused on

islanding transition and reliability impacts of a single microgrid, but mass deployment of microgrids in the South Coast Air Basin (Basin) and integration of alternative transportation in a system dominated by microgrids has not been fully analyzed.

Microgrids have also been identified as a grid resource to help increase the reliability of serving loads and resiliency in case of unforeseen occurrences such as public safety power shutoff events. The previous studies, including UCI's assessment conducted under an award by the U.S. Department of Energy, suggested that a microgrid system provides significant emission reductions by increasing the efficiency, shifting loads through energy storage and minimizing electricity delivery losses and providing heating to the community through combined heat and power during both grid connected and islanded modes.

Proposal

The proposed project will develop a model to assess air quality impacts of connected microgrids serving the SCAB by evaluating the use of various power generation technologies in microgrids and alternative transportation (battery electric and fuel cell) vehicles operating under microgrid control. The study will include evaluating air quality impacts during both grids connected and islanded modes, including public safety power shutoff events, and estimating overall NOx benefits by emission reduction factors of microgrids such as system efficiency, energy storage, electricity delivery losses and combined heat and power system.

In the proposed project, university campuses, ports, shopping centers and critical facilities will be modeled. Each representative microgrid system will be evaluated to assess air quality impacts resulting from widespread deployment of microgrids. Based on the modeling and analyses defined above, this project will inform the South Coast AQMD of the required policy and permitting procedures for microgrids in the SCAB, leveraging the CEC project with POLB and assessing mass deployment of microgrids and the interaction of the network of microgrids.

Sole Source Justification

Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for sole source award is made under provision B.2.d.(8): Research and development efforts with educational institutions or nonprofit organizations. UCI is an educational institution and APEP is an umbrella organization that addresses the broad utilization of energy resources and the emerging nexus of electric power generation, infrastructure, transportation, water resources and the environment. Built on a foundation established in 1970 with the creation of the UCI Combustion Laboratory and the 1998 dedication of the National Fuel Cell Research Center, APEP focuses on education and research on clean and efficient distributed power generation and integration.

Benefits to South Coast AQMD
The proposed project will provide an implementation roadmap of renewable electrolytic hydrogen production facilities that could be used to further reduce NOx and other criteria pollutant emissions from existing sources within the Basin. Potential aggregated NOx emission reductions using connected and islanded operations may be up to 6 tons per day, comparable to the NOx emission reductions from the recently adopted Omnibus Regulation for heavy-duty engines. The injection of renewable hydrogen into the existing natural gas system represents a key pathway towards reducing GHG emissions by displacing the corresponding volume of fossil-derived natural gas. For mobile sources, electrolysis facilities could allow a more sustainable and economic hydrogen supply for fuel cell electric vehicles. This activity is included in the Technology Advancement Office Clean Fuels Program 2020 Plan Update under "Develop and Demonstrate Microgrids with Photovoltaic/Fuel Cell/Battery Storage/EV Chargers and Energy Management".

Resource Impacts
The total cost for the proposed project is $370,000, of which South Coast AQMD's proposed contribution will not exceed $290,000 from the Clean Fuels Program Fund (31), as summarized below:

Proposed Partners	Funding Amount	% of Project
UCI (match funding)	$80,000	21
South Coast AQMD (*requested*)	$290,000	79
Total	**$370,000**	**100**

Sufficient funds are available from the Clean Fuels Program Fund (31), 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.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 4

PROPOSAL: Execute Contract to Develop and Demonstrate Natural Gas and Propane Conversion Systems for Medium-Duty Vehicles

SYNOPSIS: In 2019, the Board approved three projects to develop natural gas and propane conversion systems for the new Ford 7.3-liter gasoline engine with Ford Qualified Vehicle Modifiers, including a $607,825 award to Agility Fuel Solutions (Agility). However, a contract with Agility was not executed due to lack of necessary Ford approvals. CARB recently adopted a new lower Optional Low NOx Standard of 0.01 g/bhp-hr under the Heavy-Duty On-Road Low NOx "Omnibus" regulation. Subsequently, Agility submitted a revised proposal to further optimize the engine to achieve the newly adopted level. This action is to execute a contract with Agility Fuel Solutions to develop, demonstrate and commercialize the Ford 7.3-liter medium-duty natural gas and propane conversions systems in an amount not to exceed $607,825 from the Clean Fuels Program Fund (31).

COMMITTEE: Technology, September 18, 2020; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Chairman to execute a contract with Agility Fuel Solutions in an amount not to exceed $607,825 to develop, demonstrate and commercialize the Ford 7.3-liter medium-duty natural gas and propane conversions systems from the Clean Fuels Program Fund (31).

Wayne Nastri
Executive Officer

MMM:NB:JI:SC

Background
South Coast AQMD has been supporting the rapid deployment of near-zero, 0.02 g/bhp-hr NOx vehicles through its incentive programs since the first near-zero, heavy-duty natural gas engines became commercially available in 2015.

In October 2019, the Board approved three projects to develop the new Ford 7.3-liter near zero NOx engine natural gas and propane conversion systems, including an award to Agility Fuel Solutions (Agility). Due to the lack of Ford Qualified Vehicle Modifiers (QVM) program approvals, staff was unable to finalize the contract with Agility. The Ford QVM program assures that vehicles converted through the program are converted to Ford standards and the given QVM can carry the added alternative fuel components and emissions warranty.

In August 2020, CARB adopted the Heavy-Duty On-Road Omnibus Low NOx regulation that included multiple lower NOx standards to be phased in starting in 2024. Additionally, the regulation included a 50 percent lower new Optional Low NOx Standard (OLNS) level of 0.01 g/bhp-hr. Agility subsequently submitted a revised proposal for the Ford 7.3-liter natural gas and propane conversion systems to the lower OLNS level of 0.01 g/bhp-hr.

The Ford medium-duty engine has significant market share in multiple applications, including local and regional goods movement, municipal fleets, utilities, and a variety of transit, shuttle and school bus operations. Agility has demonstrated their commercialization strategy as well as aftermarket service and warranty capability for their current large fleet of low-NOx natural gas and propane vehicles that include the Ford 6.8-liter natural gas trucks converted under the QVM program.

Proposal
Agility proposes to develop, demonstrate and commercialize the propane and natural gas conversion systems for the new 7.3-liter Ford engine to the recently adopted OLNS of 0.01 g/bhp-hr. Agility will partner with SoCalGas on the CNG conversion and work with MAHLE Powertrain, LLC, to codevelop the alternative fuel system and engine control calibrations in MAHLE's laboratory. Agility will also demonstrate the certified natural gas and propane engine in two separate chassis configurations for system integration and validation, as well as fleet customer drive events. Agility will continue to seek QVM program approvals from Ford, while supporting the vehicles through its existing Agility Service and Warranty program which covers the added alternative fuel components and required CARB emissions warranty.

Benefits to South Coast AQMD
Availability of more near-zero NOx alternative fuel medium-duty engines, combined with renewable fuels, will lead to further near-term NOx reductions to help with ozone attainment and greenhouse gas reductions. This will expand the number of engine

offerings for South Coast AQMD incentive programs, especially heavy-duty engines that can achieve the lowest OLNS, which will contribute towards lower emissions, particularly in environmental justice communities. Projects to support development of near-zero emission engines are included in the Technology Advancement Office Clean Fuels Program 2020 Plan Update under the category "Engine Systems."

Sole Source Justification
Section VIII.B.1 of the Procurement Policy and Procedure identifies provisions by which sole source awards may be justified. The request for sole source award is made under provision B.2.d.(1): Project involving cost-sharing by multiple sponsors. The proposed projects include cash and in-kind cost-sharing from SoCalGas and the project proponents.

Resource Impacts
South Coast AQMD's cost-share will not exceed $453,500 and SoCalGas's cost-share will not exceed $154,315. The total project cost will not exceed $607,825 from the Clean Fuels Program Fund (31). The estimated total cost is summarized below:

Proposed Project	Amount	Percent
Agility	$1,226,175	67
SoCalGas	$154,325*	8
South Coast AQMD *(requested)*	$453,500	25
Total Project Cost	$1,834,000	100

*Cost-share for CNG conversion only

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 Cleans 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.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 5

PROPOSAL: Transfer and Appropriate Funds for Rule 1180 Program, Execute Purchase Orders and/or Contracts and Issue Solicitation

SYNOPSIS: In June 2018, the Board recognized over $7.0 million in revenue from refineries into the Rule 1180 Special Revenue Fund (78) to establish community air monitoring near refineries. Also, the FY 2020-21 budget includes annual fees for community air monitoring totaling over $4.5 million. These actions are to: 1) transfer and appropriate funds of up to $861,000 from the Rule 1180 Special Revenue Fund (78) to Science & Technology Advancement's FY 2020-21 Budget for Rule 1180; 2) execute purchase orders and/or contracts for air quality monitoring equipment and vehicles for the community air monitoring network; and 3) issue a solicitation for an independent audit of the Rule 1180 refinery fenceline and community air monitoring network.

COMMITTEE: Administrative, September 11, 2020; Recommended for Approval

RECOMMENDED ACTIONS:

1. Transfer and appropriate funds up to $861,000 from the Rule 1180 Special Revenue Fund (78) to Science & Technology Advancement's (STA's) FY 2020-21 Budget (Org 42), Services & Supplies ($795,000) and Capital Outlays ($66,000) Major Objects, as indicated in Tables 1 and 2, and return any unspent funds to Fund 78.
2. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue sole source purchase orders for the following as listed in Table 1:
   a. Up to two pure air generators with hydrocarbon scrubbers from Teledyne Advanced Pollution Instrumentation (Teledyne) in an amount not to exceed $25,000; and
   b. Up to three hydrogen sulfide/sulfur dioxide (H2S/SO2) multiple-gas analyzers from Teledyne in an amount not to exceed $57,000.
3. Authorize the Procurement Manager, in accordance with South Coast AQMD's Procurement Policy and Procedure, to issue sole source, 'prior bid, last price,' and/or cooperative purchasing purchase orders as listed in Table 1.

4. Authorize the Chairman to issue a solicitation and, based on the results of the solicitation, execute a contract for independent audit of Rule 1180 fenceline and community air monitoring network in an amount not to exceed $700,000 as listed in Table 2.

Wayne Nastri
Executive Officer

MMM:JCL:AP:OP:ld

Background

Rule 1180 Program

Petroleum refineries are among the largest stationary sources of air pollution in the South Coast Air Basin (Basin). Refineries process crude oil into various products, such as gasoline, diesel fuel, aviation fuel and other fuel oils. These and other related activities can result in emissions of greenhouse gases, criteria pollutants, toxic air contaminants and other air pollutants.

Rule 1180 - Refinery Community Air Monitoring and Fenceline was adopted by the Board in December 2017 and requires the major refineries in the Basin to measure levels of various air pollutants at their fenceline. This Rule also established a fee schedule to fund air monitoring stations to provide air quality information to the public about the potential impact of refineries emissions in their communities. In FYs 2017-18 and 2018-19, the Board recognized revenue in two installments of $2,145,390 and $5,005,907, into the Rule 1180 Special Revenue Fund (78) for the installation of community air monitoring stations near refineries by January 1, 2020. Beginning January 2020, pursuant to Rule 301- Permitting and Associated Fees, the refineries also started funding annual operating and maintenance costs totaling $4,507,870 for refinery-related community air monitoring near the following refineries:

- Tesoro Refining & Marketing Company, LLC, Carson;
- Tesoro Refining & Marketing Company, LLC, Wilmington;
- PBF Energy, Torrance Refining Company, Torrance;
- Chevron Products Company, Chevron El Segundo Refinery, El Segundo;
- Phillips 66 Company, Carson;
- Phillips 66 Company, Wilmington; and
- Valero Energy Corporation, Valero Wilmington Refinery, Wilmington.

Annual operating and maintenance fees pursuant to Rule 301 have been accounted for in the FY 2020-21 Budget.

The Rule 1180 refinery fenceline and community air monitoring network began operations in January 2020. This network consists of the fenceline air monitoring systems that have been installed and operated by each refinery in accordance to their Fenceline Air Monitoring Plans, and community air monitoring stations established and operated by the South Coast AQMD in accordance with the Rule 1180 Community Air Monitoring Plan (see the Rule 1180 webpage for details; www.aqmd.gov/Rule1180). In order to satisfy the strict Rule 1180 air monitoring requirements, novel optical remote sensing (ORS) and traditional analyzers have been deployed at all fenceline and community air monitoring sites, making it the first of its kind in the nation in terms of complexity and technologies deployed.

Proposal

Rule 1180 Program

This action is to transfer and appropriate up to $861,000 from the Rule 1180 Special Revenue Fund (78) into STA's FY 2020-21 Budget (Org 42) for expenditures in Capital Outlays (Table 1) in an amount not to exceed $66,000 and Services and Supplies (Table 2) in an amount not to exceed $795,000 to support work required under Rule 1180. Along with $1,650,000 included in the FY 2020-21 Budget for Services and Supplies and Capital Outlays funded with annual fees, these actions are to obtain the resources required to continue implementation and operation of the Rule 1180 community monitoring network. These activities are fully supported by funding received from the refineries subject to Rule 1180 initial and ongoing fees.

Proposed Purchases through Sole Source, 'Prior Bid, Last Price,' and/or Cooperative Purchasing Purchase Orders

This action is to purchase the following equipment as listed in Table 1 using the procurement method noted.

Pure Air Generators with Hydrocarbon (HC) Scrubbers

Pure air generators equipped with enhanced HC scrubbers are currently being used at all Rule 1180 community air monitoring sites. The additional two scrubbers will be used for quality assurance and equipment verification purposes. Teledyne pure air generators are uniquely specialized to provide a complete zero air system to support the Rule 1180 community air monitoring sites set-up by staff. These zero air systems are currently being used at all other South Coast AQMD Rule 1180 air monitoring sites, therefore providing compatibility and continuity between all stations. The cost for up to two Teledyne pure air generators will not exceed $25,000.

H2S/SO2 Analyzers
H2S/SO2 multi-pollutant analyzers will be used to conduct real-time, high-resolution measurements of these compounds at three community monitoring stations near refineries. Seven of these analyzers are currently installed at other Rule 1180 community air monitoring sites. The proposed addition of three more instruments will ensure continuous monitoring of these compounds at all Rule 1180 community air monitoring sites. Teledyne H2S/SO2 multi-pollutant analyzers are fully compatible with those used in the existing South Coast AQMD air monitoring network, including Rule 1180 air monitoring. The cost for up to three Teledyne H2S/SO2 analyzers will not exceed $57,000.

Air Monitoring Equipment
Extractive ultra-violet differential optical adsorption spectrometer (UV-DOAS) and Fourier-transform infrared spectroscopy (FTIR) optical multi-pollutant analyzers, automated field gas chromatographs (Auto-GCs), Teledyne gas dilution systems and other supporting equipment will be used to complete the measurements of all required pollutants at all Rule 1180 community air monitoring stations. One extractive UV-DOAS and FTIR optical multi-pollutant analyzer (FluxSense), up to two automated field Auto-GCs (Tricorntech), and one gas dilution system (Teledyne) will be purchased in an amount not to exceed $220,000, $150,000, and $25,000 respectively, through either sole source or 'prior bid, last price' purchase orders. The technical specifications of these proposed air monitoring instruments are consistent with those of equipment already used within the South Coast AQMD community network for Rule 1180 monitoring.

Vehicles
This action is to authorize the Procurement Manager to purchase up to three vehicles, either BEV, PHEV or SULEV, if available, for field staff, as listed in Table 1. The vehicles will be used by staff to perform calibration, maintenance and repair of air monitoring equipment for all Rule 1180 community air monitoring stations. The purchase will be made through a solicitation process, 'prior bid, last price', or through a Cooperative Purchasing Agreement. Low emission vehicles are available from vendors through cooperative purchasing under the State of California, Department of General Services, Procurement Division, and Alternative Fueled Vehicles Contract 1-18-23-23A through H. Low emission sedans, trucks or vans will be selected from the vendor on the list with the most competitive price for these types of vehicles. The cost of the vehicles will not exceed $120,000.

Issue Solicitation (Request for Proposals)
Independent Audit of Rule 1180 Fenceline and Community Air Monitoring Network
The Rule 1180 refinery fenceline and community air monitoring network consists of a substantial number of novel ORS and traditional analyzers deployed at fenceline and community air monitoring sites. While similar technologies are deployed at all sites,

different contractors are using different instrument makes/models for conducting fenceline air monitoring at different refineries. Staff have worked with the refineries to assure that all fenceline instruments, independent of their vendors, standardize their data acquisition and reporting, and maintain data of the highest quality through common calibration, verification, maintenance, and other quality assurance procedures and criteria. The same stringent data quality requirements are in effect for the community air monitoring sites. However, due to the innovative nature of the Rule 1180 program and ORS equipment, there is a pressing need for a qualified independent entity to conduct a systematic review of the entire Rule 1180 network to ensure that the collected data meets the quality assurance criteria of the program. This action is to issue a request for proposals (RFP) from qualified firms, research labs or educational institutions to conduct independent technical systematic and performance audits of the Rule 1180 refinery fenceline and community air monitoring network; and based on the results of the RFP, execute a contract for an amount not to exceed $700,000, as listed in Table 2. Table 2 also includes itemized appropriations for other Services and Supplies Major Objects.

Sole Source Justification
Section VIII.B.2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. The request for sole source purchases from Teledyne, FluxSense, and Tricorntech are made under Sections VIII.B.2.c(1): The unique experience and capabilities of the proposed contractor; VIII.B.2.c(2): The project involves the use of proprietary technology; and VIII.B.2.d(6): Projects requiring compatibility with existing specialized equipment. These vendors are uniquely qualified to provide zero air generators with enhanced hydrocarbon scrubbers (Teledyne), H2S/SO2 instruments (Teledyne), extractive optical multi-pollutant analyzers (FluxSense), automated field GC (Tricorntech), and gas dilution systems (Teledyne). There are no other vendors who can provide instruments meeting all required specifications. The proposed equipment, which is currently being used at Rule 1180 and other air monitoring stations, will allow for full specialized equipment compatibility throughout the South Coast AQMD air monitoring network.

Benefits to South Coast AQMD
Funding for the implementation of Rule 1180 will allow the South Coast AQMD to fulfill the requirements of Rule 1180 and the legislative directives of AB 1647, which will result in benefits to environmental justice communities and others working and living in the Basin near refineries.

Resource Impacts
The initial payments received from petroleum refineries under Rule 1180 provide sufficient resources to establish the required community air monitoring program. Rule 301 annual fees will provide sufficient resources for ongoing community air monitoring operation and maintenance.

Attachments

Table 1: FY 2020-21 Proposed Capital Outlays Expenditures for Rule 1180

Table 2: FY 2020-21 Proposed Services and Supplies Expenditures for Rule 1180

Table 1
FY 2020-21 Proposed Capital Outlays Expenditures for Rule 1180*

Description	Quantity	Appropriated in the Adopted FY 2020-21 Budget (Org 42)	Appropriation from Fund 78	Total Estimated Amount	Action
Pure air generators with HC scrubbers	2	$25,000	$0	$25,000	Sole Source
H2S/SO2 analyzers	3	57,000	0	57,000	Sole Source
Extractive UV-DOAS and FTIR optical multi-pollutant analyzer**	1	174,000	46,000	220,000	Sole Source, 'Prior Bid, Last Price'
Automated field-GC systems	2	150,000	0	150,000	Sole Source, 'Prior Bid, Last Price'
Gas dilution system	1	25,000	0	25,000	Sole Source, 'Prior Bid, Last Price'
Vehicles	3	100,000	20,000	120,000	'Prior Bid, Last Price,' Cooperative Purchasing
FY 2020-21		$531,000	$66,000	**Up to $597,000**	

*Appropriations approved in the July 12, 2019, Agenda 7, Table 1, Board letter for FYs 2019-20 and/or 2020-21 have been fully appropriated and expended in FY 2019-20.

**Note: During the procurement process, these items may be categorized as Capital Outlays or Services and Supplies depending on whether the item is purchased, leased, or contracted as a service.

Table 2
FY 2020-21 Proposed Services and Supplies Expenditures for Rule 1180*

Description	Account Number	Appropriated in the Adopted FY 2020-21 Budget (Org 42)	Additional Appropriations from Fund 78	Estimated Amount FY 2020-21
Rents and Leases Structure	67350	$274,000	$5,000	$279,000
Professional and Specialized Services**	67450	250,000	85,000	335,000
Independent Audit Contract	67450	0	700,000	700,000
Building Maintenance Operation	67650	30,000	5,000	35,000
Other Services and Supplies Categories**		565,000	0	565,000
FY 2020-21		$1,119,000	$795,000	**Up to $1,914,000**

*This supersedes FY 2020-21 Services and Supplies Appropriations in Table 2 presented to the Board on July 12, 2019, Agenda 7.
**Note: Expenditures may be appropriated in the Capital Outlays Major Object as warranted.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 6

PROPOSAL: Issue Program Announcement for Lower Emission School Bus Program

SYNOPSIS: Since 2001, South Coast AQMD has funded the replacement of over 1,800 pre-1994 publicly owned diesel school buses and retrofitted nearly 3,400 diesel school buses as part of the Lower Emission School Bus Program. In February 2020, CARB issued a guideline update for the Lower Emission School Bus Program allowing the replacement of diesel buses that are more than 20 years old. This action is to issue a Program Announcement to replace pre-2001 model year diesel school buses owned by public school districts with new alternative fuel or zero emission buses.

COMMITTEE: Technology, September 18, 2020; Recommended for Approval

RECOMMENDED ACTION:
Issue Program Announcement #PA2021-02 for replacement of pre-2001 diesel school buses owned by public school districts with new alternative fuel or zero emission buses.

Wayne Nastri
Executive Officer

MMM:NB:VW:YT

Background

Since the start of the Lower Emission School Bus Program in 2001, South Coast AQMD has awarded nearly $325 million in local, state and federal funds to replace over 1,800 highly polluting publicly owned diesel school buses with alternative fuel or zero emission buses and to retrofit 3,400 diesel school buses with particulate traps. This program has resulted in helping thousands of school children to commute in some of the cleanest school buses in the country. South Coast AQMD has used a variety of funding sources for the Lower Emission School Bus Program, including U.S. EPA Targeted

Airshed Grant Program, Proposition 1B and Carl Moyer AB 923. During the last funding cycle of South Coast AQMD's Lower Emission School Bus Program, many school districts were able to leverage the South Coast AQMD grant with funds from CARB's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). More recently, funding for battery-electric school buses was made available through the Volkswagen Beneficiary Mitigation Program and the California Energy Commission.

Proposal

This action is to issue Program Announcement #PA2021-02 for replacement of pre-2001 model year diesel school buses owned by public school districts and joint power authorities with new alternative fuel or zero emission buses. The school buses will need to have a Gross Vehicle Weight Rating (GVWR) over 14,000 lbs and have continuous CHP certification for the past three years. The PA will close on January 26, 2021, after a three-month application period. Funding will be provided from the Carl Moyer Program AB 923 Fund (80). Depending on the number of applications received, all the requests may not be funded in their entirety; final funding amounts will be recommended to the Board when they consider the proposed awards. Public school districts and joint power authorities will have the choice to purchase alternative fuel and zero emission school buses, including propane, compressed natural gas (CNG) and battery-electric. Both propane and CNG bus replacements must have engines certified at or below the optional low NOx standard of 0.02 g/bhp-hr. South Coast AQMD staff proposed funding options are highlighted below:

Fuel Type	Bus Type	South Coast AQMD Maximum Award (Up To)	Infrastructure per Replacement School Bus (Up To)
Propane	C	$155,000	$5,000
Compressed Natural Gas	C, D	$205,000	$15,000
Zero Emission*	A	$325,000	$20,000
	C, D	$370,000	$20,000

*Combined Award from South Coast AQMD and HVIP cannot exceed $400,000.

Outreach

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

Additionally, potential bidders may be notified utilizing South Coast AQMD's own electronic listing of certified minority vendors. Notice of the PA will be emailed to the Black and Latino Legislative Caucuses and various minority chambers of commerce

and business associations, and placed on the Internet at South Coast AQMD's website (http://www.aqmd.gov) where it can be viewed by making menu selection "Grants & Bids."

Bid Evaluation
Proposals will be reviewed and evaluated in accordance with the Lower-Emission School Bus Program Guidelines, including all advisories and mail-outs, and the criteria in the attached PA.

Benefits to South Coast AQMD
The successful implementation of the Lower Emission School Bus Program will ensure less polluting transportation for school children and will reduce public exposure to toxic diesel particulate matter emissions. This program is also expected to reduce criteria and toxic air pollution in disadvantaged and low-income communities in the South Coast AQMD.

Resource Impacts
Funding for the Lower Emission School Bus Program will be provided from the Carl Moyer Program AB 923 Fund (80) and the final funding amounts will be recommended to the Board when they consider the proposed awards. The total amount of funding available for this program is up to $45,118,730, including 6.25 percent in administrative costs.

Attachment
Program Announcement #PA2021-02 for the Lower Emission School Bus Program.

Announcing South Coast Air Quality Management District's
Funding for Alternative Fuel School Bus Replacement Program
(Eligibility restricted to public school districts and joint power authorities)

South Coast AQMD's Lower-Emission School Bus Program

Program Announcement & Application

PA2021-02

October 2, 2020

Depending upon the number of applications received and availability of funding, the South Coast AQMD Board retains discretion to make full awards, partial awards, or no awards at all under this Program Announcement. If the choice to make a partial award causes any bidder to withdraw, the funds that would have been awarded to that bidder will be re-allocated to the other bidders or allocated pursuant to a new program announcement. South Coast AQMD also reserves the right to change any criteria such as the schedule, qualifications, grant provisions and selection criteria outlined in this Program Announcement & Application.

INTRODUCTION

The South Coast Air Quality Management District (South Coast AQMD) is pleased to announce this funding opportunity for public school districts to replace older diesel school buses with cleaner bus technologies, including near-zero emission and zero emission bus technologies. The Lower-Emission School Bus Program (LESBP) is designed to reduce diesel air pollution and children's exposure to the harmful emissions from diesel school buses. This Program Announcement applies to all public school districts, including those participating under a Joint Powers Authority agreement (JPA) in the South Coast Air Basin.

BACKGROUND

Since 2001, South Coast AQMD has expended a total of $325 million in state, local and federal funds and replaced over 1,800 highly polluting diesel school buses with new alternative fuel or zero emission buses and retrofitted nearly 3,400 diesel buses with particulate traps. Over 50 percent of these funds have focused on reducing diesel air pollution in disadvantaged and/or low-income communities. This program has enabled thousands of school children to commute in some of the cleanest and safest school buses in the South Coast AQMD jurisdictional area.

PROGRAM ELIGIBILITY CRITERIA

Applicant Eligibility

Only public school districts and Joint Power Authorities (JPAs) within the geographical boundaries of the South Coast AQMD are eligible to apply.

School Bus Eligibility

Existing School Bus Requirements:

South Coast AQMD is seeking applications from public school districts to replace older diesel school buses (Type A, C, or D) that are a minimum of 20 years old (including MY2000 or older), and with a Gross Vehicle Weight Rating (GVWR) of over 14,000 lbs. At a minimum, applicants will need to provide information identifying each of the school buses proposed for replacement, as well as documentation demonstrating current DMV registration and continuous CHP certification for the past three years. The school buses proposed for replacement must be crushed/dismantled as required by the LESBP Guidelines.

Given that funds may be limited, the program will prioritize funding awards to each school district with consideration for the older school buses and/or school buses with the highest accumulated mileages first. Applicants are encouraged to list their oldest diesel school buses first and/or buses with the highest cumulative mileages. Depending upon the number of applications received and availability of funding, all the requests may not be funded in their entirety. Be aware that there is a possibility that due to program priorities, cost effectiveness or funding limitations (i.e., caps), applicants may be offered only partial funding, and not all applications meeting the eligibility criteria may be funded. South Coast AQMD retains discretion to make full awards, partial awards, or no awards.

Table 1, below, provides a summary of the key eligibility requirements for the existing school buses proposed for replacement.

Table 1: Existing School Bus Requirements
1) Diesel Fueled
2) Type A, C, or D
3) Model Year that is a minimum of 20 years old (Pre-2001)
4) GVWR > 14,000 lbs
5) Currently registered with the DMV
5) Maintained continuous CHP Certificates for at least the past 3 years
6) Must be willing to crush/dismantle existing school bus once replaced

Replacement School Bus Requirements:

For replacement of Pre-2001 diesel school buses, applicants will have the option to purchase near-zero and zero emission school buses, including propane, compressed natural gas (CNG), and/or battery-electric school bus technologies. If applicants choose to purchase a new CNG or propane fueled replacement bus, then the replacement engine must be CARB-certified to the Optional Low NOx Standard of 0.02 g/bhp-hr or cleaner. As another option, applicants may choose to purchase a zero-emission school bus that is certified or approved by CARB, including zero emission school buses that are eligible through the state's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP). Documentation verifying CARB certification/approval is not required if the zero emission school bus technology is listed by HVIP. Table 2, below, provides an itemized summary of the key eligibility requirements for the replacement school buses.

Table 2: Replacement School Bus Requirements
1) Near-Zero or Zero Emission (Propane, Natural Gas, or Electric)
2) Type A, C, or D
3) Model Year 2020 and newer
4) GVWR > 14,000 lbs*
5) Maintain CHP Certificates during the term of contract
6) CNG/Propane School Bus: Replacement engine must be CARB certified at 0.02 g/bhp-hr NOx or cleaner
7) Zero Emission: Must be a zero emission school bus technology certified or approved by CARB including HVIP-listed zero emission school bus technologies.

MAXIMUM FUNDING AMOUNTS

Depending upon the number of applications received and availability of funding, all the requests may not be funded in their entirety. Be aware that there is a possibility that due to program priorities, cost effectiveness or funding limitations (i.e., caps), applicants may be offered only partial funding, and not all applications meeting the eligibility criteria may be funded. South Coast AQMD retains discretion to make full awards, partial awards, or no awards.

The maximum funding amounts are shown in Table 3. If a school district is approved to receive funding through HVIP for the same project, the maximum funding amount will be reduced by the HVIP voucher amount, except for zero emission school bus projects which may receive up to $400,000 in total funding from the South Coast AQMD and HVIP.

Funding awards will be made based on several factors, including an equitable distribution of the program funds based on county population, benefits to disadvantaged and/or low-income communities, and project cost effectiveness. A school bus project will be considered as benefitting a disadvantaged or low-income community if it meets any one of the following: 1) it is domiciled within a disadvantaged or low-income community, 2) it will operate a majority of time in a disadvantaged or low-income community, or 3) makes at least one stop in a disadvantaged or low-income community census tract. The project's cost effectiveness will be determined using the methodology in the Carl Moyer Program and may be used to rank projects for the awards selection.

South Coast AQMD will be providing funds for this solicitation from the Carl Moyer Program AB 923 Program. Of the total Program funds available, the South Coast AQMD expects to allocate about 70 percent of the funds for near-zero emission bus technologies and 30 percent for zero emission school buses. The final allocation of Program funds will also be determined based on the funding requests submitted by the school districts, and subject to change at the time of the awards recommendation and upon consideration by the South Coast AQMD Governing Board.

South Coast AQMD will fund up to the maximum funding amounts shown in Table 3 for each school bus technology. To help offset the cost of zero emission school buses, schools may also apply for funding through the state's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), if available. The combined award amount from South Coast AQMD and HVIP cannot exceed $400,000 for zero emission school buses.

Any match funding required by the Lower Emission School Bus Program Guidelines will be provided by the South Coast AQMD on behalf of the participant up to the maximum funding amounts shown in Table 3.

The maximum funding amounts shown in Table 3 include sales tax and the cost of fire suppression and gas detection systems, however school districts will have to pay for any additional discretionary options that they may choose to include on the school bus. Funding for fueling/charging infrastructure will also be available to school districts. Table 3, below, provides a summary of the potential funding amounts for each type of school bus technology and infrastructure options. Depending on the number of applications received, all the requests may not be funded in their entirety. Final funding amounts will be determined upon South Coast AQMD's Governing Board approval of the awards.

Table 3: Lower Emission School Bus Program Funding Amounts[1]				
School Bus Type	**Fuel Type**	**NOX Certification Level (g/bhp-hr)**	**South Coast AQMD Maximum Award**	**Infrastructure per School Bus**
Type C	Propane	0.02 or lower	$155,000	$5,000
Type C or D	CNG	0.02 or lower	$205,000	$15,000
Type A	Zero Emission	0.00	$325,000 [1,2]	$20,000
Type C or D	Zero Emission	0.00	$370,000 [1,2]	$20,000

[1] The funding amounts shown in this table may be reduced if the project also receives HVIP funding.
[2] South Coast AQMD + HVIP = $400,000 Maximum Award for zero emission buses

PROGRAM SCHEDULE

A tentative implementation schedule for the LESBP Program Announcement PA2021-02 is outlined below.

Tentative Schedule for School Bus Replacement Program

October 2, 2020	Issue the Program Announcement & Application PA2021-02
January 26, 2021	**Applications due by 3 p.m.** Applicants are encouraged to apply well before this deadline
April 2, 2021	South Coast AQMD Board to consider approval of the awards
July 1, 2021	All school bus orders must be placed with vendors by school districts. Copies of vendor quotes and purchase orders emailed to South Coast AQMD staff, Ms. Lily Garcia, lgarcia1@aqmd.gov
October 4, 2022	New buses delivered, and infrastructure completed by no later than this date
November 4, 2022	All requests for reimbursement submitted by school districts, along with evidence of buses crushed/dismantled.

APPLICATION SUBMITTAL

The applicant shall submit **three copies** (1 original and 2 copies) of the application, each marked "**Program Application PA2021-02."** These three copies should be placed together in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the applicant, **no later than 3:00 p.m., Tuesday, January 26, 2021.**

The program announcement and application document PA2021-02 can also be accessed via the internet by visiting South Coast AQMD's website at: http://www.aqmd.gov/nav/grants-bids

The application package must be addressed to:

Mr. Dean D. Hughbanks, Procurement Manager
Re: Program Application PA2021-02
Lower Emission School Bus Program
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

All applications must be **signed by the school's superintendent**. (School superintendents shall not delegate this responsibility for signature to his or her deputy.)

The main objective of this program is to reduce diesel air pollution and children's exposure to harmful emissions from diesel school buses. We look forward to receiving your application.

ADDITIONAL INFORMATION & ASSISTANCE

This Program Announcement and Application can be obtained by accessing the South Coast AQMD website at http://www.aqmd.gov/nav/grants-bids. South Coast AQMD staff members are available to answer questions during the application acceptance period. In order to help expedite assistance, please direct your inquiries to the applicable staff person, as follows:

- For **General, Administrative, or Technical Assistance**, please contact:

  Yuh Jiun Tan
  Air Quality Specialist
  Technology Advancement Office
  Phone 909-396-2463
  Fax: 909-396-3252
  ytan@aqmd.gov

- For **Questions on Invoices and Contracts**, please contact:

  Lily Garcia
  Contract Assistant
  Technology Advancement Office
  Phone: 909-396-2832
  Fax: 909-396-3252
  lgarcia1@aqmd.gov

PARTICIPATION GUIDELINES, REQUIREMENTS, & CONDITIONS:

GRANT PROVISIONS FOR SCHOOL BUS REPLACEMENT & INFRASTRUCTURE

Depending upon the number of applications received and availability of funding, all the requests may not be funded in their entirety. Be aware that there is a possibility that due to program priorities, cost effectiveness or funding limitations (i.e., caps), applicants may be offered only partial funding, and not all applications meeting the eligibility criteria may be funded.

Funding awards will be made based on several factors, including an equitable distribution of the program funds based on county population, benefits to disadvantaged and/or low-income communities, and project cost effectiveness. A school bus project will be considered as benefitting a disadvantaged or low-income community if it meets any one of the following: 1) it is domiciled within a disadvantaged or low-income community, 2) it will operate a majority of time in a disadvantaged or low-income community, or 3) makes at least one stop in a disadvantaged or low-income community census tract. The project's cost effectiveness will be determined using the methodology in the Carl Moyer Program and may be used to rank projects for the awards selection.

A. School Bus Replacement Criteria

Only public school districts within the jurisdiction of the South Coast AQMD that own and operate school buses, including under the provisions of a Joint Powers Authority, can apply for funding. The program is for the replacement of pre-2001 diesel school buses with new, low NOx alternative fuel or zero emission buses. The following criteria will apply:

1. Each pre-2001 diesel school bus must have continuous CHP certification for the previous 3 years, including 2018 to 2020.

2. The existing school bus must be currently registered with the Department of Motor Vehicles.

3. The existing and new replacement school buses must have a manufacturer gross vehicle weight rating (GVWR) of greater than 14,000 pounds. The existing bus must be diesel fueled and the proposed replacement bus must be equipped with a near-zero, alternative fuel engine or zero emission drivetrain.

4. The replacement school bus must be in the same weight class as the existing school bus, unless otherwise approved by the South Coast AQMD.

5. Only <u>replacement</u> buses will be funded. Fleet expansion buses (that fail to crush an existing school bus) will not be eligible for funding.

6. Only CARB certified near-zero engines and zero emission drivetrains that meet the following criteria will be eligible for funding:

    - Near-Zero (Low NOx): At least 0.02 g/bhp-hr NOx or lower, and 0.01 g/bhp-hr PM or lower for propane and CNG engines

- Zero-Emission: CARB certified zero emission technology, including HVIP-listed zero emission school bus technologies

7. Availability of fueling or charging infrastructure for the school bus replacement project must be documented. The school district can apply for fueling or charging infrastructure funds, as shown in Table 3.

8. Priority may be given to replacement of the oldest school buses (or buses with the highest cumulative mileages) identified in a single application from a school district.

9. Only Pre-2001 diesel school buses with current DMV registration and continuous CHP certificates for previous 3 years (2018-2020) are eligible for replacement.

10. All Pre-2001 diesel school buses proposed for replacement must be in current use. These buses must have a current, valid CHP certificate at the time of application, and continuous CHP certification for the previous 3 years. The application form calls for specific information related to the existing school bus to be replaced. Additional information may be required as evidence that the existing school bus is in operation. If there is a break in documentation, please inform the South Coast AQMD staff Yuh Jiun Tan at ytan@aqmd.gov.

11. Complete documents pertaining to the existing school bus to be replaced, proposed new school bus, vendor quotes, and proof of crushing must be kept in files for a period of seven (7) years after the date of removal of the existing school bus. Access to these files, and personnel involved in the transactions, shall be allowed in the event of an audit from either state or local authorities.

12. Schools will need to provide the CARB Executive Order for the proposed school bus engine that will be ordered and specify which bid will be used to order the new school bus.

13. Schools need to operate the new school buses for a minimum of fifteen (15) years from the date of the initial CHP certification.

14. With the application, attach a copy of the TRUCRS Fleet List located on the Vehicle Info tab showing the compliance option each vehicle in the fleet is using and a copy of the TRUCRS General Fleet and Compliance Information Summary showing compliance located on the Compliance Status tab ("Meets Small Fleet Option" will specify "yes" if the fleet is using the Small Fleet option). The TRUCRS website can be accessed at: https://ssl.arb.ca.gov/ssltrucrstb/trucrs_reporting/login.php.

B. Infrastructure Criteria

1. Funding for fueling or charging infrastructure will also be available to school districts. The basis for the amount of funding requested for purchase and installation of alternative-fuel or electric charging infrastructure shall be documented in the application.

2. Depending on the fueling/charging infrastructure requested, school districts can get up to

$5,000 per propane school bus, up to $15,000 per CNG school bus, and up to $20,000 per zero emission school bus.

3. If funds for infrastructure are needed, the applicant must make such request, and provide justification for the funds requested, including a disclosure of all funding sources that will be used for the purchase/installation of the infrastructure.

4. Requested funds may be used to offset the cost of procuring/installing new infrastructure equipment or expanding the capacity of an existing refueling/charging station.

5. Funding for expansion of an existing station must be related to the capacity needed by the new CNG, propane, or zero emission buses awarded through this program.

6. Applicants who apply for Electric Vehicle Supply Equipment (EVSE) infrastructure must indicate if co-funding from other sources, such as the local utility company, will be used.

FUNDING ALLOCATIONS

A. Amounts of Funding

There is a possibility that due to program priorities, cost effectiveness or funding limitations (i.e., caps), applicants may be offered only partial funding, and not all applications meeting the eligibility criteria may be funded.

Public school districts may rely on any legally valid piggy-back bid in the State of California to purchase the new replacement school buses. Examples include, but are not restricted to, the Waterford and Hemet bids. Funding requested for purchase of a bus shall be consistent with the prices on the legally valid piggy-back bid.

Depending on the replacement school bus technology chosen by the school district, South Coast AQMD will fund up to the maximum funding amounts in Table 3. To help offset the cost of zero emission school buses, schools may apply for the state's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP) funds if available. The combined award amount from South Coast AQMD and HVIP cannot exceed $400,000. The maximum funding amounts in Table 3 include sales tax and the cost of a fire suppression system, however school districts will have to pay for any additional discretionary options that they may choose to include on the school bus.

B. Matching Fund Requirement

For the replacement of 2000 and older model year school buses, applicants will be required to pay the amount above South Coast AQMD's maximum funding amounts in Table 3, if applicable.

1. Any school district match funding required by the Lower Emission School Bus Program Guidelines will be provided by the South Coast AQMD on behalf of the school districts up to the maximum funding amount shown in Table 3.

2. If other grant funds will be used, all funding sources must be disclosed at the time of application and prior to invoice payment. The sum of all grants and other funds applied

toward the project shall not exceed the total project cost.

C. Authorizing Signature

The submitted application, including the copies, shall have the school district's superintendent's signature. Applications without authorizing signatures will not be accepted.

D. Disbursement of Funds

1. Following receipt of the fully executed grant from South Coast AQMD, the school district must provide a copy of the grant agreement and key attachments to the selected vendor(s). Per the provisions of the grant, a purchase order shall be placed without delay to allow for the prompt delivery of the buses.

2. Funds will be paid on a reimbursement basis to the vendor, following the delivery of the new school bus(es) to the applicant (and all supporting documents required by the grant have been submitted satisfactorily).

3. Vendors should be encouraged to directly invoice South Coast AQMD for South Coast AQMD's share of funds. Applicants shall cooperate fully with the vendor to provide the vendor with the various documents South Coast AQMD would need before reimbursing the vendor. These documents are listed in the grant agreement.

4. All buses must be physically delivered to the school district by no later than **October 4, 2022.**

5. Proof of vehicle delivery and supporting documents, as required in the grant, must accompany any request for reimbursement of approved funds. School district must identify any options purchased over and above those included in the base price. Besides the fire suppression and/or gas detection systems, other discretionary options must be paid by the school district. The receipt of vehicle should be signed by the Director of Transportation before submission to South Coast AQMD.

6. All requests for reimbursement along with proof of crushing must be received by **November 4, 2022**. Monies owed will be paid directly to the bus vendor.

7. Funds will be paid on a reimbursement basis at the time of completion of the infrastructure (i.e., the fueling or charging station). All infrastructure must be completed by **October 4, 2022**. Proof of completion shall accompany any request for reimbursement of approved funds. All requests for reimbursement must be signed by the transportation director and received by South Coast AQMD on or before **November 4, 2022**. Monies owed will be paid directly to the infrastructure provider.

PROJECT IMPLEMENTATION

A. *Preferred List of School Bus Replacement*

Applicants are encouraged to list their Pre-2001 (2000 and older) school buses in order of applicant preference. If a priority list is not provided by the applicant, South Coast AQMD will consider the oldest school buses or the school buses with highest cumulative mileage first.

B. *Project Completion Deadlines and Penalties*

1. School bus purchase orders must be placed no later than July 1, 2021.

2. New buses must be delivered **no later than October 4, 2022.** The business entity responsible for delaying the delivery of the buses may be subject to $100 per day per bus penalty for buses delivered after October 4, 2022.

3. All requests for reimbursement for purchases submitted by school districts, along with evidence of school bus dismantling, and other documentation, should be submitted to South Coast AQMD by November 4, 2022.

C. *Monitoring and Reporting*

1. School districts must notify South Coast AQMD staff by email to ytan@aqmd.gov, when the school buses are ordered and again when the school buses arrive on site. Prior to reimbursement, an inspection by South Coast AQMD may be required.

2. School districts must notify South Coast AQMD staff by email to ytan@aqmd.gov when any equipment is ordered for the refueling or charging station, and when the equipment is operating. Prior to, or following reimbursement, an inspection by South Coast AQMD may be required.

ADDITIONAL GUIDANCE

If you need additional guidance or assistance on any of the information in this program announcement, South Coast AQMD staff members are available to answer questions during the application acceptance period. In order to help expedite assistance, please direct your inquiries to the applicable staff person, as follows:

- For **General, Administrative, or Technical Assistance**, please contact:
  Yuh Jiun Tan, Air Quality Specialist
  Phone 909-396-2463
  ytan@aqmd.gov

- For **Questions on Invoices and Contracts**, please contact:
  Lily Garcia, Contract Assistant
  Phone: 909-396-2832
  lgarcia1@aqmd.gov

Appendix A

South Coast Air Quality Management District

GRANT APPLICATION FOR THE LOWER EMISSION SCHOOL BUS PROGRAM

Fiscal Year 2020-2021

PA2021-02

Depending upon the number of applications received and availability of funding, the South Coast AQMD Board retains discretion to approve awards, partial awards, or no awards at all under this Program Announcement. If the choice to make a partial award causes any bidder to withdraw, the funds that would have been awarded to that bidder will be re-allocated to the other bidders or allocated pursuant to a new program announcement. South Coast AQMD also reserves the right to change any criteria such as the schedule, qualifications, grant provisions and selection criteria outlined in this Program Announcement & Application.

TABLE OF CONTENTS

GRANT APPLICATION

LOWER EMISSION SCHOOL BUS PROGRAM

Program Announcement PA2021-02

(Please return signed application with all 8 pages filled out)

School District:			
Street Address:			
City:		Zip Code:	
County:		State:	

School District Primary Contact Name:			
Title:			
Phone Number:		Ext:	
Email:		Fax Number:	

Alternative Contact Name:			
Title:			
Phone Number:		Ext:	
Email:		Fax Number:	

Submit the original completed application (with all required supporting documents and signatures) along with two (2) copies of the entire application package, each marked **"Program Application PA2021-02"**. These three copies should be placed together in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the application, **no later than 3:00 p.m., Tuesday, January 26, 2021**.

The application package **must be addressed** to:

Mr. Dean D. Hughbanks, Procurement Manager
Re: Program Application PA2021-02
Lower Emission School Bus Program
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

All applications must be **signed by the school's superintendent.** (School superintendents shall not delegate this responsibility for signature to his or her deputy).

The following table shows the maximum funding amount for each school bus.

Maximum Funding Amounts[1]				
School Bus Type	**Fuel Type**	**NOx Certification Level (g/bhp-hr)**	**Maximum Award per School Bus**	**Maximum Award for Infrastructure per School Bus**
Type C	Propane	0.02 or lower	$155,000	$5,000
Type C or D	CNG	0.02 or lower	$205,000	$15,000
Type A	Zero Emission	0.00	$325,000 [2]	$20,000
Type C or D	Zero Emission	0.00	$370,000 [2]	$20,000

[1] The funding amounts shown in this table may be reduced if the project also receives HVIP funding.
[2] South Coast AQMD + HVIP = $400,000 Maximum Award

A. Funding Request			
Total number of school buses proposed for replacement	# of CNG:		
	# of Propane:		
	# of Electric:		
Total Funding Request for School Bus Replacement:		$	
Will you be requesting Infrastructure funding?		☐ No	☐ Yes
Total Funding Request for Infrastructure:		$	
Total Program funds requested		$	

B. Other Sources of Funding		
All funding sources must be disclosed at the time of application and prior to invoice payment. The sum of all grants and other funds applied toward the project shall not exceed the total project cost.		
Are there other sources of funding for this project?	☐ No	☐ Yes
If there are other source(s) of funding that will be utilized for this project, fill out the following information.		
Source(s) of Funding:		
Funding Amount from each Source:	$	

A copy of the school board resolution authorizing submittal of the application and identifying the individual authorized to implement the school bus replacement project will need to be submitted with the application.

C. AUTHORIZATION	
I understand that this application is for evaluation purposes only and does not guarantee project funding. I certify that to the best of my knowledge, the information contained in this application and in any documentation accompanying this application or submitted in furtherance of this application is true and accurate. I certify that I have the legal authority to apply for funding on behalf of the applicant entity and that I am authorized to sign this application on behalf of applicant.	
Superintendent's Signature:	
Date Signed:	
Name of Superintendent (Print):	

TABLE 1: INFORMATION ON SCHOOL BUSES TO BE REPLACED

- List only diesel school buses (MY2000 or older) with GVWR above 14,000 pounds.
- For each school bus CHP certification for the previous 3 years is required. *
- List the school buses in your preferred order of priority for replacement (with the top priority buses first).
- *Attach additional sheets if needed.*

Bus ID #	School Bus Make	Model Year	VIN	GVWR (lbs)	Odometer Reading	Engine Make/Model	Engine Model Year	Diesel Fueled? (Yes/No)

*Attach CHP 292/CHP 343A certificates for each bus listed above. CHP certification must be continuously valid for the previous 3 years. **Applications submitted without CHP Certificates will be deemed incomplete and will not be moving forward.**

TABLE 2: INFORMATION ON NEW SCHOOL BUSES TO BE PURCHASED

- **Please attach a copy of the CARB Executive Order. If the zero emission school bus technology is HVIP listed, then documentation verifying CARB approval is not needed.**
- **Please attach a price quote for each school bus.**
- *Please attach additional sheets if needed.*

Name of Vendor	School Bus Make/Model	Model Year	GVWR (lbs)	Engine Make/Model	Engine Model Year	Fuel Type (Propane, CNG, Electric)	Type of School Bus (Type A, C, or D)

*The price quote must identify any discretionary options being purchased by the School District. South Coast AQMD will not pay for any discretionary options above those include as standard in the base bid.

D. Current Infrastructure Information	
Do you have CNG refueling Infrastructure at your facility?	
☐ No ☐ Yes	
Do you have propane refueling infrastructure at your facility?	
☐ No ☐ Yes	
Do you have electric charging infrastructure at your facility?	
☐ No ☐ Yes	
Where do you currently refuel or charge?	☐ Onsite ☐ Offsite

E. If you currently refuel or charge offsite, supply the following information. ***If not applicable, write N/A.***			
Distance to nearest refueling/charging facility (one-way):			
Please provide the address to the nearest refueling/charging facility below.			
Street Address:			
City		Zip Code:	

F. Proposed Infrastructure Information
Where do you plan to fuel or charge the new school buses? Please document availability of refueling or charging infrastructure (if applicable) for the new school buses.
Are you requesting Infrastructure funding?
☐ No ☐ Yes

GRANT APPLICATION

LOWER EMISSION SCHOOL BUS PROGRAM

G. If you are requesting Infrastructure funding, fill out the following:		
What will the requested infrastructure funds be used for?		
☐ New Station ☐ Upgrade Existing Station		
Will the future station be accessible to the public?	☐ No ☐ Yes	
CNG	Number of CNG fueling dispensers to be installed:	
	Number of CNG Fuel Nozzles per dispenser to be installed:	
	What is the CFM capacity needed at the CNG station for the additional school buses?	
Propane	Number of propane fueling dispensers to be installed:	
	Number of propane fueling nozzles per dispenser to be installed:	
	What is the CFM capacity need at the propane station for the additional school buses?	
Electric	Number of electric charging post to be installed:	
	Number of electric chargers per post to be installed:	

H. SUPPLEMENTAL INFORMATION: PLEASE ATTACH THE FOLLOWING DOCUMENTS TO COMPLETE YOUR APPLICATION.

☐ A copy of the school board resolution authorizing submittal of the application and identifying the individual authorized to implement the school bus replacement project.

☐ Complete and submit the Business Information Request Packet containing:

- ☐ Business Information Request Form
- ☐ Disadvantaged Business Certification
- ☐ W-9
- ☐ Form 590 Withholding Exemption Certificate
- ☐ Federal Contract Debarment Certification
- ☐ Campaign Contributions Disclosure

GRANT APPLICATION

LOWER EMISSION SCHOOL BUS PROGRAM

SUPPLEMENTAL INFORMATION: PLEASE ATTACH THE FOLLOWING DOCUMENTS TO COMPLETE YOUR APPLICATION. (CONT.)

☐ Attach a copy of the TRUCRS Fleet List located on the Vehicle Info tab showing the compliance option each vehicle in the fleet is using and a copy of the TRUCRS General Fleet and Compliance Information Summary showing compliance located on the Compliance Status tab ("Meets Small Fleet Option" will specify "yes" if the fleet is using the Small Fleet option). The TRUCRS website can be accessed at: https://ssl.arb.ca.gov/ssltrucrstb/trucrs_reporting/login.php.
☐ A spreadsheet of all school buses in the fleet, including at a minimum the following information: - School Bus Manufacturer, Make, Model, Model Year - School Bus VIN # - Passenger Capacity - School Bus Type (Type A, C, or D) - Engine Make, Model, Model Year - Fuel Type - Accumulated Mileage and Annual Mileage. Be sure to include an electronic version of the spreadsheet with the application on a flash drive.
☐ For each Pre-2001 school bus listed in Table 1, include the following: ☐ Current DMV Registration ☐ School Bus Title (Must be clear of any lien holders) ☐ A price quote for each school bus. ☐ CHP 292 or CHP 343A certificates for the past 3 years. Certificates must show continuous compliance for the last 3 years. Certificates must clearly show inspection date and odometer reading. ☐ Clear photo of the GVWR tag of the bus confirming VIN# and GVWR of the school bus. ☐ Clear photo of the engine tag showing engine make/model, engine serial number, engine family number and engine model year.
☐ Include a copy of the CARB Executive Order for the near-zero school buses. If the zero-emission school bus technology is HVIP listed, then documentation verifying CARB approved is not needed.

Submit the original completed application (with all required supporting documents and signature) along with two (2) copies of the entire application package by the application deadline.

Application Deadline: January 26, 2021 at 3 pm

CERTIFICATIONS AND REPRESENTATIONS

1. Business Contact Information
2. W9- with EIN Taxpayer ID#
3. Campaign Contribution Disclosure Form

South Coast
Air Quality Management District

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

South Coast
Air Quality Management District

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

BUSINESS INFORMATION REQUEST

Business Name	
Division of	
Subsidiary of	
Website Address	
Type of Business *Check One:*	☐ Individual ☐ DBA, Name _____, County Filed in _____ ☐ Corporation, ID No. _____ ☐ LLC/LLP, ID No. _____ ☐ 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:

☐ Small Business Enterprise/Small Business Joint Venture
☐ Local business
☐ Minority-owned Business Enterprise
☐ Women-owned Business Enterprise
☐ Disabled Veteran-owned Business Enterprise/DVBE Joint Venture
☐ 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.

Form **W-9**
(Rev. October 2018)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

▶ Go to *www.irs.gov/FormW9* for instructions and the latest information.

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

Print or type. See Specific Instructions on page 3.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.

2 Business name/disregarded entity name, if different from above

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

☐ Individual/sole proprietor or single-member LLC ☐ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate

☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=Partnership) ▶ _____

Note: 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 **not** 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.

☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):

Exempt payee code (if any) _____

Exemption from FATCA reporting code (if any) _____

(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.) See instructions.

Requester's name and address (optional)

6 City, state, and ZIP code

7 List account number(s) here (optional)

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

___ - ___ - ____

or

Employer identification number

___ - _____

Part II Certification

Under penalties of perjury, I certify that:

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

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.

Sign Here | **Signature of U.S. person** ▶ | **Date** ▶

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*.

Purpose of Form

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

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

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

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, *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[1]	Generally, exempt payees 1 through 5[2]
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4

[1] See Form 1099-MISC, Miscellaneous Income, and its instructions.

[2] 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*. 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* and clicking on Employer Identification Number (EIN) under Starting a Business. Go to *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* 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[1]
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[2]
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee[1]
b. So-called trust account that is not a legal or valid trust under state law	The actual owner[1]
6. Sole proprietorship or disregarded entity owned by an individual	The owner[3]
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i)(A))	The grantor*
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[4]
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
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

[1] 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.

[2] Circle the minor's name and furnish the minor's SSN.

[3] 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.

[4] 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*. 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* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.IdentityTheft.gov* and Pub. 5027.

Visit *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.

TAXABLE YEAR

CALIFORNIA FORM

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 file no.

Address (apt./ste., 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&TC) Section 23701 _____ (insert letter) or Internal Revenue Code Section 501(c) _____ (insert number). If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.

☐ **Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit-Sharing Plans:**
The entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.

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

☐ **Estates — Certification of Residency of Deceased Person:**
I am the executor of the above-named person's estate or trust. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return.

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

CERTIFICATE OF PAYEE: Payee must complete and sign below.

To learn about your privacy rights, how we may use your information, and the consequences for not providing the requested information, go to **ftb.ca.gov/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** 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** 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** and search for **nonwage**. **MyFTB** offers secure online tax account information and services. For more information and to register, go to **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**
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**
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.

_____

Typed Name & Title of Authorized Representative

_____

Signature of Authorized Representative Date

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

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). 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

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

Direct Deposit Authorization

STEP 1: Please check all the appropriate boxes

- ☐ Individual (Employee, Governing Board Member)
- ☐ Vendor/Contractor
- ☐ Changed Information
- ☐ New Request
- ☐ Cancel Direct Deposit

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

1. 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.
2. This authorization remains in effect until South Coast AQMD receives written notification of changes or cancellation from you.
3. 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

Staple Voided Check Here

Name of Bank/Institution		
Account Holder Name(s)		
☐ Saving ☐ 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 _____

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 7

PROPOSAL: Execute Lease Contract for Mailing Equipment

SYNOPSIS: On June 6, 2020, the Board approved the release of an RFQ to solicit lease proposals to replace the mailroom's United States Postal Service-compliant mailing system and to lease additional equipment for folding, inserting, and addressing mail. This action is to execute a five-year lease agreement with Pitney Bowes, Inc. for the proposed mailing equipment in an amount not to exceed $156,851.

COMMITTEE: Administrative, September 11, 2020; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Executive Officer to execute a five-year lease agreement with Pitney Bowes Inc., for mailing and shipping, folding, inserting, and addressing equipment, at a five-year lease and maintenance cost of $156,851.

Wayne Nastri
Executive Officer

AJO:VMR:KM:vl

Background
South Coast AQMD's current lease for high-volume United States Postal Service (USPS) compliant postage and shipping equipment expires October 31, 2020. The lease also includes equipment that folds, inserts and addresses outgoing mail.

The Mail/Subscription Services staff processes all incoming and outgoing mail, including public hearing and workshop notices, and Title V permit notices. In 2019, staff processed 228,710 pieces of outgoing mail using the postage and shipping machine, and 184,223 pieces of mail utilizing the folding, inserting and/or addressing equipment.

In an effort to continue to save costs and increase flexibility and productivity, South Coast AQMD's RFQ solicitation included replacement of the existing postage and

shipping system, including the folding, inserting and addressing equipment. This action is to obtain a new lease agreement for a comprehensive mailing system.

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

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

Bid Evaluation
Nineteen copies of the RFQ were mailed out and three proposals, responding to one or more of the three categories included in the RFQ, were received by close of bidding at 2:00 p.m., July 8, 2020. Of the three responsive proposals, two self-certified for Most Favored Customer Pricing Status, and one for Local Business for additional percentage points. The Attachment summarizes the costs and scores of the responsive proposals.

Panel Composition
The evaluation panel consisted of a Facilities Services Technician, a Mail/Subscription Services Supervisor, and a Print Shop Supervisor. Of the three panelists, one is African-American and two are Caucasian; all are male.

Proposal
This action is to execute a five-year lease agreement with Pitney Bowes, Inc. for all three categories of mailing equipment solicited in the RFQ: high-production mailing and shipping; folding and inserting; and addressing. Pitney Bowes, Inc. was the bidder with the highest average evaluation score and lowest overall cost proposal for the three categories.

Resource Impacts
The annual lease and maintenance cost for the high-production mailing and shipping system is $8,306.40 per year, the folding and inserting system is $16,654.44, and the addressing system is $6,409.20, for a total annual cost of $31,370.04. Sufficient funds have been requested in the FY 2020-2021 budget for the first year, and funds will be requested in subsequent budgets for the remaining four years of the lease.

Attachment
Evaluation Summary

ATTACHMENT

EVALUATION SUMMARY
RFQ# 2020-17
Mailing Equipment – Five-Year Lease

Bidder	Total Five-Year Cost	Evaluation Score*
CBE Office Solutions	$203,796.86	57.4
Neopost/Quadient	$168,559.61	84.65
Pitney Bowes, Inc.	$156,850.20	87.77

*Average score for Categories I-III, including preference percentage points.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 8

PROPOSAL: Amend South Coast AQMD Salary Resolution to Add Designated Deputy Position

SYNOPSIS: This item is to add a Deputy Executive Officer position, reporting directly to the Executive Officer, to assist with the development and implementation of policies and programs to enhance equity, diversity and inclusion within the organization and in the community. Funding for this position is available in the FY 2020-21 Budget.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Amend the Salary Resolution to add a Designated Deputy position to the Executive Office (Attachment A).

Wayne Nastri
Executive Officer

AJO:mm

Background

South Coast AQMD is committed to improving how the agency addresses diversity, inclusiveness and equity both outside and within the organization. Since June of this year, the agency has conducted an internal survey soliciting anonymous input from employees on these issues, reviewed workforce demographic and recruitment statistics, joined the Government Accountability for Race and Equity (GARE) project, and recently held a presentation for all employees by Kori Carew - a leading authority on issues of inclusion, cultural fluency, and how to foster diverse talent in an organization.

In addition, the Executive Officer established the Inclusion, Diversity and Equity Advisory (IDEA) panel. The employee-driven IDEA panel includes a diverse

representation of backgrounds and experiences, in terms of ethnicity, gender, department and positions. The purpose of this group is to help prioritize issues and make recommendations to the Executive Council.

As one of its first priorities and recommendations, the IDEA panel recommended that the Executive Officer pursue the creation of a new position to assist in the development and implementation of South Coast AQMD policies and programs to enhance equity, diversity and inclusion within the organization and in the community.

Proposal

This proposal is to add an executive level position to drive engagement, strategy, execution, and accountability for all South Coast AQMD diversity and inclusion policies and initiatives. The Deputy Executive Officer/Diversity, Equity & Inclusion Officer (DEIO) will report directly to the Executive Officer and will work closely with the Chief Operating Officer, Executive Council, and each department to develop and foster an organization that promotes principles of equity, collaboration and mutual respect on matters of human rights and cultural fluency.

The DEIO will develop strategies to integrate diversity and inclusion management into South Coast AQMD initiatives and programs, will review and evaluate policies and procedures to ensure the acknowledgement and implementation of diversity and inclusion issues and needs are met, and will play a role in equal employment opportunity matters. The DEIO will also serve as the liaison to the GARE project, as well as the IDEA panel. In addition, this new Deputy Executive Officer position will coordinate with and provide support to South Coast AQMD environmental justice programs and other community-based initiatives that involve diversity and inclusion of historically underrepresented people and neighborhoods.

In furtherance of this action, staff recommends amending the *Salary Resolution* to reflect the new position. (Attachment A). With Board approval of this proposal, a robust recruitment effort for a DEIO will be initiated.

Resource Impacts

Sufficient funding for a Deputy Executive Officer/Diversity, Equity & Inclusion Officer position is included in the FY 2020-21 Budget.

Attachment

Attachment A – Proposed Amendment to the *Salary Resolution*

ATTACHMENT A

ARTICLE 7

DESIGNATED DEPUTY ANNUAL SALARIES

(Effective with the start of the pay period encompassing January 1, 2017)

Assistant Chief Deputy Counsel, Major Prosecutions	$162,826
Assistant Deputy Executive Officer, including Chief Information Officer	$160,374
Chief Deputy Counsel	$183,790
Deputy Executive Officer, including Chief Operating Officer and Chief Administrative Officer	$171,651
Director of Strategic Initiatives	$153,218
Health Effects Officer	$126,053 - $153,218 (Steps 1 – 5)
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	$156,196

(Effective with the start of the pay period encompassing July 1, 2018)

Assistant Chief Deputy Counsel, Major Prosecutions	$167,304
Assistant Deputy Executive Officer, including Chief Information Officer	$164,784
Chief Deputy Counsel	$188,844
Deputy Executive Officer, including Chief Operating Officer and Chief Administrative Officer	$176,371
Director of Strategic Initiatives	$157,432
Director of Communications	$157,432
Health Effects Officer	$126,053 - $157,432 (Steps 1 – 6)
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	Vacant

(Effective with the start of the pay period encompassing July 1, 2019)

Assistant Chief Deputy Counsel, Major Prosecutions	$171,905
Assistant Deputy Executive Officer	$169,316
Chief Deputy Counsel	$194,037
Chief Operating Officer	$194,037
Deputy Executive Officer, including Chief Financial Officer and Chief Information Officer	$181,222
Director of Strategic Initiatives	$161,761
Director of Communications	$161,761
Director of Community Air Programs/Health Effects Officer	$126,053 - $161,761

	(Steps 1 – 7)
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	Vacant

(Effective with the start of the pay period encompassing July 1, 2020)

Assistant Chief Deputy Counsel, Major Prosecutions	$176,632
Assistant Deputy Executive Officer	$173,972
Chief Deputy Counsel	$199,373
Chief Operating Officer	$199,373
Deputy Executive Officer, including Chief Financial Officer, Chief Information Officer, ~~and~~ Chief Technologist, and Diversity, Equity & Inclusion Officer	$186,205
Director of Strategic Initiatives	$166,209
Director of Communications	$166,209
Director of Community Air Programs/Health Effects Officer	$126,053 - $166,209
	(Steps 1 – 8)
Intergovernmental Affairs Officer	Vacant
Senior Policy Advisor	Vacant

(The remainder of this page is left intentionally blank.)

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 9

PROPOSAL: Issue Purchase Order for Ingres Relational Database Management System Software Support

SYNOPSIS: The Ingres Relational Database Management System is used for the implementation of the Central Information Repository database. This database is used at the South Coast AQMD to support a suite of client/server and web-based applications known collectively as the Clean Air Support System (CLASS). CLASS applications support all of South Coast AQMD's core activities. Licensing, maintenance and support for this software expire on November 29, 2020. This action is to issue a purchase order to Actian Corporation for a total amount not to exceed $265,000. Funds for this expense are included in the FY 2020-21 Budget.

COMMITTEE: Administrative, September 11, 2020; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Procurement Manager to issue a purchase order to Actian Corporation (formerly Ingres Corporation) for Ingres Relational Database Management System software licensing, maintenance and support, for the period of November 30, 2020 through November 29, 2021, for a total amount not to exceed $265,000.

Wayne Nastri
Executive Officer

WN:RM:MH:HP:hlp

Background
In December 2017, the South Coast AQMD entered into a one-year licensing, maintenance and support agreement for Ingres Relational Database Management System (RDBMS) software. The RDBMS software runs on three database servers for production, development and ad hoc reporting. The production server hosts the Central Information Repository database. This database supports a collection of more than 30

client/server and web-based applications known as the Clean Air Support System (CLASS). The CLASS application suite supports: permit administration and processing of equipment-based and facility-based permits; emissions offsetting, monitoring and inventory management for New Source Review; RECLAIM and annual emission reporting operations; compliance-related complaint, inspection, assignment, notification, investigation and settlement operations; and financial accounts receivable operations. The development server supports software development for CLASS and other applications accessing the Central Information Repository. The decision support server supports CLASS system ad-hoc query and reporting and web-based inquiry applications. These applications are an integral component of the South Coast AQMD's day-to-day responsibilities. The RDBMS software licensing, maintenance and support expires on November 29, 2020.

Ingres maintenance and support includes the following services:

Software Maintenance	Licensed product updates, enhancements and repairs.
Software Support	Assistance in resolving online operating difficulties, system failures, Ingres application-related problems, potential system bugs, and installation and upgrade issues.

Sole Source Justification
Section VIII.B.2 of the Procurement Policy and Procedure identifies circumstances under which a sole source purchase award may be justified. This request for a sole source award is made under provision VIII.B.2.c.(2) because the project involves the use of proprietary technology, and provision VIII.B.2.c.(3) because the contractor has ownership of key assets required for project performance. Previous quotes indicated it would cost well over $1 million to convert the CLASS applications to another relational database. Actian Corporation (formerly Ingres Corporation) is the sole manufacturer and provider of this software and therefore the only source for its maintenance and support licensing agreements.

Proposal
Staff recommends the issuance of a one-year purchase order for RDBMS software licensing, maintenance and support to Actian Corporation in an amount not to exceed $265,000. Actian has performed well in the past providing timely technical support, updates and patches.

Resource Impacts
Sufficient funds are available in Information Management's FY 2020-21 Budget, Services and Supplies Major Object, Professional and Special Services account.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 10

PROPOSAL: Appoint Alternate Public Member to Hearing Board

SYNOPSIS: In February 2020, one of the two Alternate Public Member positions on the South Coast AQMD Hearing Board became vacant. A Hearing Board Advisory Committee reviewed the applications and resumes of 22 candidates and recommended that the Administrative Committee interview the top three ranked candidates. The Administrative Committee interviewed the candidates at its meeting on September 11, 2020. This action is to appoint an Alternate Public Member to fill the unexpired term ending June 30,2022.

COMMITTEE: Administrative, September 11, 2020; Recommended for Approval

RECOMMENDED ACTION:
Appoint Micah Ali as an Alternate Public Member to the South Coast AQMD Hearing Board effective October 2, 2020 to fill the unexpired term ending June 30, 2022.

Wayne Nastri
Executive Officer

FT

Background
The Hearing Board is a five-member quasi-judicial body appointed by, but acting independently of, the Governing Board that consists of one engineer, one attorney, one medical professional and two public members. An alternate member is appointed for each position to serve in the absence of the regular member.

One of the two Alternate Public Member positions became vacant in February 2020 and a recruitment announcement to fill the vacancy was released on May 12, 2020. At the closing of the recruitment on June 2, 2020, there were 22 qualified applicants.

Health and Safety Code Section 40501.1(b) requires that a Hearing Board Advisory Committee (Advisory Committee) appointed by each of the Governing Board members that represent the Counties of Los Angeles, Orange, Riverside, and San Bernardino, and the City of Los Angeles review Hearing Board candidates and make recommendations to the appropriate Governing Board committee for appointments to the Hearing Board. (The appropriate Governing Board standing committee that will make a final recommendation to the full Board is the Administrative Committee). The members of the Advisory Committee for this recruitment are as follows:

Representing/Appointed By	Member
County of Riverside Supervisor V. Manuel Perez	Buford Crites Former South Coast AQMD Governing Board Consultant
County of Orange Supervisor Lisa Bartlett	Lucy Dunn President & CEO Orange County Business Council
County of Los Angeles Supervisor Kathryn Barger	Diane Moss Former South Coast AQMD Governing Board Consultant
City of Los Angeles Council Member Buscaino	Ray Regalado Los Angeles County Commission on Human Relations Department of Workforce Development, Aging and Community Services
County of San Bernardino Supervisor Rutherford	William Sterling, Ph.D. President & CEO BCM Group

The Advisory Committee members reviewed the application materials, and used an evaluation criteria they had previously approved to evaluate the qualifications of the 22 candidates and rank them according to their overall scores. Per the Advisory Committee's request, a panel of South Coast AQMD staff also evaluated and ranked the candidates, which the Advisory Committee used to cross reference and compare with their individual evaluations. The South Coast AQMD three-member panel consisted of the Chief Financial Officer, Chief Information Officer and Deputy Executive Officer/Administrative & Human Resources.

On August 4, 2020, the Advisory Committee met to discuss the candidate rankings and decide on a short list of candidates to interview. The Advisory Committee unanimously agreed to waive their interview of the candidates and recommended that the top three ranked candidates listed below in alphabetical order be referred to the Administrative Committee for interviews.

Micah Ali
Maria Slaughter
Vasken Yardemian

Proposal
After interviewing each candidate at their September 11, 2020 meeting, the Administrative Committee recommended that the Board appoint Micah Ali to the South Coast AQMD Hearing Board as an Alternate Public Member to fill the term that commenced July 1, 2019 and ending June 30, 2022. Subsequent to the Administrative Committee meeting, Mr. Ali was informed of the Committee's recommendation and he expressed his willingness to serve. The following is a summary of Mr. Ali's qualifications.

Micah Ali – Mr. Ali is a public advocate and community leader, who has championed students, working families, and urban communities over the past 12 years on the Compton Unified School District Board of Trustees. His record of public service and community engagement includes serving as national Chair of the Council of Urban Boards of Education, national Chair-elect of the National Black Council of School Board Members, Founder of the California Association of Black School Educators and Senate appointee to California's Racial and Identity Profiling Advisory Board.

His environmental justice work includes serving as President of the Compton Creek Mosquito Abatement District, a Member of South Coast Air Quality Management District's Environmental Justice Working Group and a member of the Friends of Ballona Wetlands Board of Directors.

Mr. Ali is the longest serving President in the history of the Compton Unified School District and a proud graduate of Loyola Marymount University.

Fiscal Impacts
Sufficient funds are budgeted each year to compensate those who serve on the Hearing Board.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 11

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the August 2020 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:FW:NM:LTO:KH:DM:ar

BACKGROUND
This report summarizes the activities of the Legislative, Public Affairs and Media Office for August. 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 several major events throughout South Coast AQMD's four county areas to promote, educate, and

provide important information to the public regarding reducing air pollution, protecting public health, improving air quality, and the economy.

Environmental Justice Community Partnership Inter-Agency Task Force Staff Training

On August 19, staff hosted a virtual training session for 80 participants from cities, Los Angeles County, local districts and other government agencies who are responsible for working and responding to complaints in environmental justice communities throughout our region. The training included discussions on collaborating with partner agencies, empathy, best practices and complaint protocols. Presentations and panel discussions included: Keywords to Address Complaints Efficiently; Virtual Inspections - A New Reality Due to COVID-19; Communicating and Assisting the Public; and Complaint Processes - Steps Taken to a Resolution. Attendees included 211 Los Angeles County, My311LA, California Office of the Attorney General, California Safe Schools, Cal Recycle, County of Los Angeles, Department of Toxic Substances Control, East Yard Communities for Environmental Justice, Los Angeles Sanitation District, Los Angeles Department of Public Works, Los Angeles County Fire Department/CUPA, Los Angeles County Fire Department/Health and Hazardous Materials Division, Los Angeles County Department of Public Health, Los Angeles Regional Water Quality Control Board, Neighborhood Council Sustainability Alliance, Pacoima Beautiful and Sierra Club.

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 August events and meetings:

AllenCo Meeting

On August 5, staff participated in a Los Angeles County Department of Public Health AllenCo interagency and stakeholder conference call. The meeting was attended by

Esperanza Community Housing, Mount Saint Mary's University, California Geologic Energy Management, City of Los Angeles, County of Los Angeles, Department of Conservation, CalEPA, CARB and staff from Senator Feinstein. Staff provided an update on the deployment of the remote trigger sampler and related issues.

Good Afternoon Long Beach
Staff attended the virtual Long Beach Chamber of Commerce event on August 11 to provide information on the $27 million VW Settlement Fund administered by South Coast AQMD for Zero Emission Class 8 Freight and Port Drayage Trucks. Meeting attendees included business and governmental organizations.

Western Community Energy
Staff attended the virtual Western Community Energy Board meeting on August 12, to present on the $27 million VW Settlement Fund administered by South Coast AQMD for Zero Emission Class 8 Freight and Port Drayage Trucks. The meeting was attended by government, members of the public, community organizations and business representatives.

UCLA Luskin School of Public Policy Conference
Staff attended a UCLA virtual conference entitled "Insights on Solving the Climate Crisis" on August 25. The conference featured a discussion by U.S. Representatives Jared Huffman, Mike Levin and Julia Brownley on the Congressional Climate Action Plan for a Clean Energy Economy. The panel focused on how the Congressional plan could relate to California policy, and the opportunities and challenges to transitioning to a green economy.

Western Riverside Council of Governments (WRCOG) Conference on Governance
On August 27, staff participated in the online WRCOG conference, "Navigating Virtual Governance and the Brown Act.". The event, hosted by the Inland Empire Regional Chamber of Commerce, discussed the impacts of COVID-19 on governance, transparency, public participation and access to the internet.

Orange County Council of Governments (OCCOG) Board Meeting
On August 27, staff supported Council Member Rodriguez during the OCCOG Board meeting. In addition to the Board Member's report, staff provided a presentation on South Coast AQMD's iPhone and Android apps.

ENVIRONMENTAL JUSTICE UPDATE
The following are key environmental justice-related activities in which staff participated during August. These events and meetings involve communities affected disproportionately from adverse air quality impacts.

Federal Interagency Working Group on Environmental Justice
On August 5, staff participated in a webinar, "Meaningful Engagement in Environmental Justice without Public Meetings," that discussed public engagement during COVID-19. The panel included staff from various federal agencies including Department of Energy, Environmental Protection Agency, Federal Highway Administration and others.

Polluting and Providing: The Dirty Energy Dilemma
Staff participated in a live stream hosted by Commonwealth Club of California and Climate One on August 11. The panel discussed how the renewable energy industry can transform into a model of diversity and equity, and provide affordable energy for all.

Environmental Justice Community Partnership (EJCP) Inter-Agency Task Force (Task Force) Meeting
Staff hosted the quarterly EJCP Task Force meeting virtually on August 12 and provided information on the upcoming Task Force training. California Safe Schools gave a presentation on the Who to Call Guide, a printed and virtual community resource guide on environmental concerns. Task Force members requested information on emPOWER, a Los Angeles County-wide outreach program whose mission is to overcome barriers to sustainable energy usage commonly experienced in low-income and working-class communities of color.

Physicians for Social Responsibility-Los Angeles (PSR-LA)
Staff met with PSR-LA on August 12. The discussion included AB 617, partnership opportunities and community engagement.

Advocacy and Activism at Work: Clean Air, Climate, and Equity Webinar
On August 19, staff attended a webinar hosted by the American Lung Association's Healthy Air Campaign. The webinar featured a screening of "Unbreathable: The Fight for Healthy Air," which focused on the progress of improving air quality since the enactment of the Clean Air Act, and the obstacles to eliminating air pollution and saving lives. Key themes presented advocated for environmental justice and a livable climate.

Advancing Racial Equity in Government: What's Next?
Staff participated in a virtual event hosted by the SoCal Policy Forum, in partnership with Southern California Association of Governments (SCAG) on August 20. The conversation focused on racial equity in local government across Southern California. The meeting included discussion on how the regional movement started; what racial equity in local government means; and benchmarks in the upcoming year and beyond. Community leaders, elected officials, executives and government agencies attended the meeting.

Environmental Justice Advisory Group (EJAG) Meeting

At the EJAG quarterly virtual meeting on August 28, staff provided an overview of South Coast AQMD's small business assistance and incentive programs. An EJAG member gave a presentation on COVID-19 impacts on environmental justice communities. Staff provided an update on Environmental Justice Community Partnership programs such as the Annual Conference, Community Bus Tour and K-12 air quality educational outreach.

AB 617 UPDATE

The following are key AB 617-related activities in which staff participated during August. These events, workshops and meetings involve AB 617 communities to support the Community Steering Committees (CSC), Community Air Monitoring Plans (CAMPs) and Community Emissions Reduction Plans (CERPs).

CARB AB 617 Consultation Group Meeting

On August 5, staff participated in a CARB AB 617 Consultation Group meeting. CARB provided an update on stipends for CSC members. Local air districts were asked to provide a stipend to CSC members who are residents. At future meetings, the Consultation Group will discuss equity, racism and other issues.

AB 617 Community ID (Year 3 Selection) Meeting

Staff held an AB 617 Community ID meeting on August 12 for stakeholders interested in the Year 3 process for the program. Staff provided an overview on South Coast AQMD and background on the AB 617 program. Discussion focused on the process for designating future AB 617 communities. Representatives of South Los Angeles and East Santa Ana communities expressed interest in Year 3 AB 617 opportunities.

Wilmington, Carson, West Long Beach (WCWLB) CSC

Staff held the third quarterly AB 617 CSC meeting for the WCWLB Community on August 13. There were 90 attendees participating in the virtual meeting. Staff provided updates on the implementation of the CERP and CAMP. Agenda topics included the AB 617 Annual Progress Report, an overview on best available retrofit control technology, updates on CERP actions related to refineries and ports, and CSC community member stipends. CARB provided an overview of their Technology Clearinghouse. The meeting was attended by community members, government representatives, staff from elected officials' offices, businesses and other stakeholders.

East Los Angeles, Boyle Heights, West Commerce CSC

On August 19, approximately 60 people participated in a CSC meeting for Boyle Heights, East Los Angeles, West Commerce. Assembly Member Cristina Garcia provided opening remarks and Mayor Mitchell participated in the meeting. South Coast AQMD staff presented an update on the railyard and warehouse indirect source rules, air monitoring, the Automatic License Plate Reader system for trucks, and stipends for

CSC community members. Staff also presented an overview of the CERP Annual Progress Report. CARB staff presented on rail enforcement and Los Angeles County staff presented an overview of the Los Angeles County's Green Zone Ordinance.

San Bernardino, Muscoy CSC

The San Bernardino, Muscoy CSC was attended by approximately 20 people on August 20. Mayor Mitchell participated in the meeting. Staff provided updates on the implementation of the CERP and CAMP. Agenda topics included an update from Omnitrans, overview of the AB 617 Annual Progress and Monitoring Report, sensor deployment, the ALPR system for trucks, a Technical Advisory Group (TAG) meeting update, and CSC Member stipends. CARB provided an enforcement update.

Eastern Coachella Valley (ECV) CSC

On August 26, approximately 50 people participated in the ECV CSC meeting. Supervisor Perez and Assembly Members Cristina Garcia and Eduardo Garcia provided opening comments. Board Member Kracov also attended the meeting. Staff presented an update on the Coachella Valley ozone plan and an overview of the open burn program. Committee members provided updates on the last TAG meeting and the committee charter. A vote on the CSC Charter was deferred until the draft document could be translated into Spanish. Staff provided an update on CSC community member stipends and committee members requested the budget for the AB 617 program.

South East Los Angeles (SELA) CSC and Workshop on Metal Processing and Greenspaces

On August 27, approximately 80 people participated in a SELA CSC meeting. Assembly Member Cristina Garcia provided opening remarks and Board Member Kracov participated in the meeting. Staff presented information on the top two CSC air quality priorities which are metal processing facilities and green spaces. Los Angeles County Department of Regional Planning staff presented an overview of the proposed Green Zones Program. Committee members emphasized that South Coast AQMD should coordinate with other public agencies, especially land use agencies, on compliance efforts and CERP development.

Rule 1109.1 Workshop for WCWLB

On August 27, staff attended the Rule 1109.1 - NOx Emission Reduction for Refinery Equipment, working group meeting for the WCWLB AB 617 community. The meeting was attended by several WCWLB CSC Members. Staff provided updates on the rule development process and answered questions from stakeholders.

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.

Due to the COVID-19 pandemic, there were no requests for the Speaker's Bureau and Visitor Services in August.

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 month of August were:

Calls to South Coast AQMD's Main Line and 1-800-CUT-SMOG® Line	2,511
Calls to South Coast AQMD's Spanish-language Line	35
Clean Air Connections	8
Total Calls	2,554

PUBLIC INFORMATION CENTER STATISTICS

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

Calls Received by PIC Staff	9
Calls to Automated System	1,061
Total Calls	1,070

Email Advisories Sent	27,339

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 virtual on-site consultation, as summarized below for August.

- Provided permit application assistance to 216 companies; and,
- Processed 57 Air Quality Permit Checklists.

Types of businesses assisted:

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

MEDIA RELATIONS

The Media Office handles all South Coast AQMD outreach and communications with television, radio, newspapers and all other publications, and media operations. August reports are listed below:

Major Media Interactions	293
Press Releases	36

Major Media Topics

- **Smoke Advisory Graphic File:** Staff has been sending SpectrumNews1 a graphic file of air quality maps used daily on weather forecasts.
- **Wildfires and Smoke Advisory Extensions:** Smoke advisories were issued or extended thirty-five times during August. Pitches were sent to local news outlets for each advisory, resulting in extensive coverage on all major local channels. KPCC conducted an interview with staff to discuss air quality impacts, and CBS 2/KCAL 9 conducted an interview with staff about air quality and health impacts.
- **Wildfires/Facemasks:** Kaiser Health News provided questions regarding the use of facemasks during wildfire season. Responses were sent.
- **Petroleum Storage:** Inside Climate News emailed written questions about bulk petroleum storage practices for a larger national news story. Responses were sent.
- **Air Quality Effects of COVID-19:** E&E News reached out looking for information regarding health effects and air pollution that have come as a result of COVID-19. Information was provided.
- **VW Settlement Funding:** Pitches were sent to 13 news outlets regarding the VW settlement press release. KTLA had two specific inquiries. FreightWaves inquired regarding which companies had applied for funding. Responses were sent.
- **PRR Request:** HIS Markit inquired about how to make a public records request. Instructions were sent to the reporter.
- **Ozone and Special Air Advisory:** Due to the heat wave and wildfires, a special air quality advisory was issued or extended four times. Pitches were sent to local news outlets for each advisory, resulting in coverage from KNX, KCRW,

KABC, KFI-AM, KPCC, KNX, KCBS, KCAL9, NBC4, FOX 11, Telemundo, Univision, and KESQ Palm Springs. LA Times requested a copy of the Ozone Advisory. Staff participated in an interview with KESQ that aired on CBS, NBC and FOX affiliates in Palm Springs. Staff also participated in an interview with KPCC.

- **LA City Council/China Shipping:** Random Lengths News requested comments regarding the port terminal decision and followed up with a request for transcripts. Responses were sent to reporter.
- **Story Correction:** A written response was sent to Truthout regarding misinformation on the agency's COVID response efforts as part of a recent interview with environmentalists.
- **Heat waves effects on air pollution:** E&E News requested a phone interview on how heat waves affect air pollution and exacerbate the effects of wildfire smoke. Staff participated in the interview
- **Regulations on ships at berth:** CalMatters requested information on the CARB vote regarding ships at berth. Staff participated in a phone interview. Additional information was requested and sent to the reporter after the interview.
- **Hexavalent chrome emissions in Paramount:** Environmental Health News requested information regarding hexavalent chrome emissions data in Paramount. Responses were sent.
- **Methane Leak:** Reuters asked about South Coast AQMD's knowledge regarding the methane leak occurring at the Los Angeles DWP Valley Generating Station. A statement was sent to the reporter.
- **LACMA Demolition:** Architect's Newspaper requested updates on the LACMA demolition project. Responses were sent to the reporter, and reporter submitted additional follow-up questions. An additional written response was sent. The reporter requested additional documents and information on submitting a public records request was sent.
- **Air quality update:** Spectrum News 1 had questions regarding the air quality forecast for 8/21. A response was provided.
- **Dust complaints:** CalMatters reached out for dust complaint information from almond harvests near Shafter. The reporter was referred to San Joaquin Valley APCD.

News Release and Announcements

- **Smoke Advisory Extensions Due to Apple Fire -** August 1-9, 2020: Smoke advisory was issued and extended eight times. (9 releases)
- **$27 Million Now Available for Zero-Emission Trucks in California -** August 7, 2020: Announced Board approval of new VW funding.
- **Smoke Advisory Due to Ranch Fire, Ranch Fire 2, North of Azusa -** August 13-21, 2020: Advisory issued due to smoke impacts of the Ranch Fire. Advisory was issued and then extended eight times. (9 releases)
- **Smoke Advisory Due to Lake Fire -** August 13-17 and 20-23, 2020: Advisory issued due to smoke impacts of the Lake Fire. The advisory was issued and then extended eight times. (9 releases)
- **Smoke Advisory due to Lake and Holser Fire -** August 18-19, 2020: Advisory issued due to smoke impacts of both the Lake and Holser Fires. The advisory including the Holser fire was extended once. (2 releases)
- **South Coast AQMD Issues Ozone Advisory -** August 14 and17, 2020: Ozone advisory due to heat wave. (2 releases)
- **Special Air Advisory Due to Elevated Ozone and PM2.5 Levels -** August 19-22, 2020: Poor air quality in many parts of the Basin due to heat wave and wildfires. Advisory was continued three times. (4 releases)

Social Media Notable Posts

- Apple Fire Smoke Adv Ext (8/1): 15,402 Twitter Impressions
- Apple Fire Smoke Adv Ext (8/2): 17,655 Twitter Impressions
- Apple Fire Smoke Adv Ext (8/3): 14,217 Twitter Impressions
- Apple Fire Smoke Adv Ext (8/9): 9,135 Twitter Impressions
- Ranch Fire Smoke Advisory (8/13): 29,963 Twitter Impressions
- AQ Forecast (8/16): 30,898 Twitter Impressions
- AQ Advisory Update (8/21): 41,151 Twitter Impressions
- AQ Advisory Update (8/20): 40,015 Twitter Impressions

OUTREACH TO COMMUNITY GROUPS AND FEDERAL, STATE, AND LOCAL GOVERNMENTS

In light of COVID-19, outreach was conducted virtually in August, utilizing web based and other technologies to communicate with elected officials or staff from the following cities:

Alhambra
Arcadia
Avalon
Azusa
Baldwin Park
Bradbury
Buena Park
Carson
Claremont
Commerce
Covina
Cudahy
Diamond Bar
Duarte
El Monte
Fullerton
Garden Grove
Glendora
Industry
Irvine
Irwindale
La Cañada Flintridge
La Habra
La Puente
La Verne
Laguna Niguel
Long Beach
Los Alamitos
Los Angeles
Mission Viejo
Monrovia
Monterey Park
Pasadena
Placentia
Pomona
Riverside
Rosemead
San Bernardino
San Dimas
San Gabriel
San Marino
Santa Ana
Santa Monica
Sierra Madre
South El Monte
South Gate
South Pasadena
Temple City
Tustin
Walnut
West Covina
Yorba Linda

Communication conducted in August with elected officials and/or staff from the following state and federal offices:

- U.S. Senator Dianne Feinstein
- U.S. Senator Kamala Harris
- U.S. Representative Nanette Barragán
- U.S. Representative Karen Bass
- U.S. Representative Raúl Grijalva
- U.S. Representative Grace Napolitano
- Senator Bob Archuleta
- Senator Susan Rubio
- Assembly Majority Leader Ian Calderon
- Assembly Member Cristina Garcia
- Assembly Member Eduardo Garcia
- Assembly Member Eloise Gomez Reyes

Staff represented South Coast AQMD in August and/or provided updates or a presentation to the following governmental agencies and business organizations:

211 Los Angeles County
Asian Business Association of Orange County
Association of California Cities, Orange County
Association of California Water Agencies
Cal Recycle
CARB
California Fuel Cell Partnership
California League of Cities
California Special Districts Association
California Department of Transportation
Coachella Valley Association of Governments
Department of Toxic Substances Control
Fountain Valley Chamber of Commerce
Gateway Cities Council of Governments
Harbor Association of Industry and Commerce
Inland Empire Regional Chamber of Commerce
Inland Valley Development Agency
LA Metro
Las Virgenes-Malibu Council of Governments
Long Beach Chamber of Commerce
Los Angeles City Attorney, Environmental Justice
Los Angeles City Fire Department
Los Angeles County Board of Supervisors
Los Angeles County Department of Public Health
Los Angeles County Department of Public Works
Los Angeles County Fire Department
Los Angeles Department of Sanitation
Los Angeles Regional Water Quality Control Board
Mountain Transit Board
MyLA311
Neighborhood Council Sustainability Alliance
Newport Beach Chamber of Commerce
North Orange County Chamber of Commerce
Office of California Attorney General
Omnitrans
Orange County Business Council
Port of Long Beach
Riverside Board of Supervisors
Riverside Transit Agency, Transportation NOW
San Bernardino Board of Supervisors

San Bernardino County Transportation Authority
San Bernardino International Airport
San Gabriel Valley City Managers Association
San Gabriel Valley Council of Governments
San Gabriel Valley Public Affairs Network
Santa Ana Chamber of Commerce
Santa Fe Springs Chamber of Commerce
South Bay Cities Council of Governments
South Pasadena Chamber of Commerce
SCAG
U.S. Forest Service
U.S. Green Business Council, Los Angeles
Western Community Energy Board
Western Regional Council of Governments

Staff represented South Coast AQMD in August and/or provided updates or a presentation to the following community and educational groups and organizations:

Altadenans for Clean Healthy Air (CHA CHA)
American Green Zone Alliance
American Lung Association
Azusa Pacific University
Baldwin Hills Community Action Partnership
California Safe Schools
California State University, Long Beach
California State University, San Bernardino
Coalition for Clean Air
Center for Community Action and Environmental Justice
East Yard Communities for Environmental Justice
Esperanza Community Housing
Inland Empire Health Plan
Mount Saint Mary's University
Pacoima Beautiful
People Not Pozos
Physicians for Social Responsibility, Los Angeles
Sierra Club

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 12

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of August 1 through August 31, 2020.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Julie Prussack
Chairman of Hearing Board

ft

Two summaries are attached: **August 2020 Hearing Board Cases** and **Rules From Which Variances and Orders for Abatement Were Requested in 2020**. An index of South Coast AQMD Rules is also attached.

There were no appeals filed during the period August 1 to August 31, 2020.

Report of August 2020 Hearing Board Cases

Case Name and Case No. (Staff Attorney)	Rules	Reason for Petition/Hearing	South Coast AQMD Position/Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. South Coast AQMD vs. Torrance Refining Company Case No. 6060-5 (D. Hsu and K. Manwaring)	402 H&S 41700	Modification to reflect that only one condition remains outstanding (upgrade on the BMS), and that the Order will end once Respondent achieves compliance with that condition.	Stipulated/Modified	Mod. O/A issued commencing 8/26/20; Within 30 days of completion of the BMS upgrade/replacement Respondent shall provide proof of completion and certify final compliance with all other conditions of the O/A. The Hearing Board shall retain jurisdiction over this matter for 45 days following receipt of the required certification of final compliance.	N/A

Acronyms
BMS: Boiler Management System
Mod. O/A: Modification Order for Abatement
N/A: Not Applicable

Rules from which Variances and Orders for Abatement were Requested in 2020													
Rules	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total Actions
202		1											1
203(a)				1	1								2
203(b)	6	7	3	4	2		2						24
218(f)(3)			1										1
218.1(b)(4)(C)		2			1		1						4
402								1					1
401(b)(1)		1											1
407(a)		1											1
441				1									1
461				1									1
461(e)(2)(A)(i)							1						1
463(c)	1	1											2
463(c)(2)			1										1
463(e)(4)			1										1
1121(c)(3)(A)				1									1
1147 (c)(2)					1								1
1148.1(d)(8)	1												1
1173(d)(1)(B)	1												1
1176(e)(2)(A)		1											1
1178(d)(3)			1										1
1178(g)			1										1
1180(e)			2	1		1							4
1196							1						1
1196(d)(1)							1						1
1196(f)(8)(a)							1						1
1196(f)(10)							1						1
1430						1							1
2004(f)(1)	5	6	2	2	1		1						17
2011(c)(2)(A)		1					1						2
2011(c)(2)(B)		1					1						2
2011(e)(1)		1					1						2
2012(c)(2)(A)		1	1		1		1						4
2012(c)(2)(B)		1	1		1		1						4
2012(d)(2)	1				1								2
2012(g)(1)		1	1				1						3
2012, Apendix A	1												1
2012, Appendix A, Chapter C h.		2											2
3002(c)	1	1											2
3002(c)(1)	4	5	3	2	1		1						16
H&S 41700								1					1
H&S 41701		1											1

SOUTH COAST AQMD RULES AND REGULATIONS INDEX
FOR 2020 HEARING BOARD CASES AS OF AUGUST 31, 2020

REGULATION II – PERMITS

Rule 202	Temporary Permit to Operate
Rule 203	Permit to Operate
Rule 218	Continuous Emissions Monitoring
Rule 218.1	Continuous Emission Monitoring Performance Specifications

REGULATION IV – PROHIBITIONS

Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 407	Liquid and Gaseous Air Contaminants
Rule 441	Research Operations
Rule 461	Gasoline Transfer and Dispensing
Rule 463	Organic Liquid Storage

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1121	Control of Nitrogen Oxides (NOx) from Residential Type, Natural-Gas-Fired Water Heaters
Rule 1147	NOx Reductions from Miscellaneous Sources
Rule 1148.1	Oil and Gas Production Wells
Rule 1173	Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants
Rule 1176	VOC Emissions from Wastewater Systems
Rule 1178	Reductions VOC Emissions from Storage Tanks at Petroleum Facilities
Rule 1180	Refinery Fenceline and Community Air Monitoring
Rule 1196	Clean On-Road Heavy-Duty Public Fleet Vehicles

REGULATION XIV - TOXICS AND OTHER NON-CRITERIA POLLUTANTS

Rule 1430	Control of Emissions from Metal Grinding Operations at Metal Forging Facilities

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	Requirements
Rule 2011	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions

SOUTH COAST AQMD RULES AND REGULATIONS INDEX
FOR 2020 HEARING BOARD CASES AS OF AUGUST 31, 2020

REGULATION XXX - TITLE V PERMITS

Rule 3002 Requirements

CALIFORNIA HEALTH AND SAFETY CODE

§41700 Prohibited Discharges
§41701 Restricted Discharges

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 13

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from August 1, 2020 through August 31, 2020, and legal actions filed by the General Counsel's Office from August 1 through August 31, 2020. An Index of South Coast AQMD Rules is attached with the penalty report.

COMMITTEE: Stationary Source, September 18, 2020, Reviewed

RECOMMENDED ACTION:
Receive and file.

Bayron T. Gilchrist
General Counsel

BTG:ew

Civil Filings	Violations
1. John Esposito Porsche Restorations Los Angeles Superior Court – Burbank Case No. 20BBCV00484; Filed 8.7.20 (KR) P63788, P67725, P69655 and P69664 R. 203 – Permit to Operate	4
2. Arrow Concrete Cutting Co., Inc. Los Angeles Superior Court – Chatsworth Case No. 20CHCV00497; Filed 8.25.20 (KR) P63776, P65927 and P66416 R. 203 – Permit to Operate R. 1403 – Asbestos Emissions from Demolition/Renovation Activities	3

3. James Cho 1
Los Angeles Superior Court - Small Claims
Case No. 20IWSC01397; Filed 8.14.20 (GV)
P63310
R. 1403 – Asbestos Emissions from Demolition/Renovation Activities

8 Violations

Attachments
August 2020 Penalty Report
Index of South Coast AQMD Rules and Regulations

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

Settlement Penalties Report (08/01/2020 - 08/31/2020)

	Total Penalties
Civil Settlement :	$1,145,492.00
Hearing Board Settlement :	$30,000.00
MSPAP Settlement :	$31,408.00
Total Cash Settlements:	$1,206,900.00
Fiscal Year through 08/31/2020 Cash Total :	$3,242,607.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
183832	AST TEXTILE GROUP, INC.	2004, 2005, 2012	08/14/2020	DH	P65379, P66906, P66912, P66916	$49,992.00
188623	CAL RETROFIT	1403, 40 CFR 60, QQQ	08/14/2020	BT	P67458, P67459	$2,900.00
119219	CHIQUITA CANYON LLC	203, 3002	08/11/2020	DH	P67616	$1,000.00
800037	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	2004	08/14/2020	DH	P64424	$1,200.00
189467	NAM AUTO BODY	109, 201, 203(a), 1151(e)(1)	08/27/2020	KER	P68610	$500.00
8547	QUEMETCO INC	1420.1, 2004, 3002, 40 CFR 60, QQQ	08/27/2020* *Date payment received; case settled 4/30/20	NSF	P52420, P64422, P67052, P67053, P67054	$600,000.00
15504	SCHLOSSER FORGE COMPANY	1155, 1430, 2004, 3002(c)(1)	08/14/2020	VT	P63874, P64143, P67363	$6,500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
184301	SENTINEL PEAK RESOURCES CALIFORNIA, LLC	463(c), 2004(f)(1)	08/20/2020	DH	P67907	$3,400.00
181667	TORRANCE REFINING COMPANY LLC	401, 1114, 1118, 1173, 1176, 3002, 40 CFR 60, QQQ	08/20/2020	DH	P65605	$350,000.00
800026	ULTRAMAR INC	3002(c)(1)	08/14/2020	TB	P63377	$30,000.00
111176	WESTERN RIVERSIDE CO REG WASTEWATER AUTH	402, H&S 41700	08/14/2020	MR	P52412, P52419, P61120, P63163, P63465, P63466, P63467, P63468, P63469, P63918, P64517, P64518, P64570, P64571, P64572, P64573, P64853, P65853, P65884, P66255, P66275, P66292, P66424, P66427, P66430, P67051	$100,000.00

Total Civil Settlements : $1,145,492.00

Hearing Board

104234	SCAQMD v. Mission Foods	202, 203(b), 1153.1, 1303	8/20/2020	KCM	5400-4	$25,000.00
10966	WEBER METALS INC	1430	08/27/2019	DH	6136-1	$5,000.00

Total Hearing Board Settlements : $30,000.00

MSPAP

109142	AGRISCAPE SOILS	203(a)	08/05/2020	GC	P67426	$800.00
134482	ALEX CLEANERS	203(a), 1421	08/27/2020	GC	P69507	$850.00
168966	ALI'S ENTERPRISES, INC. 2	461, H&S 41960	08/05/2020	GC	P68415	$360.00
167321	ANABI OIL, DBA WILLIAM HAWATMEH, PASADENA	461	08/06/2020	TCF	P70059	$300.00
127384	CIRCLE K STORES INC. #2705786	461	08/27/2020	GC	P68126	$1,063.00
181985	DINO STATION	461, H&S 41960	08/27/2020	GC	P68405	$960.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
7018	L & N COSTUME SERVICES	1146	08/06/2020	TCF	P68755	$750.00
164968	L.A.N. TESTING	1166	08/07/2020	TCF	P70355	$1,000.00
126273	LUCKY CENTER CLEANERS, BYOUNG M LEE DBA	1421	08/07/2020	TCF	P68703	$100.00
91211	MOBIL DLR, AMIR BARHOMA	461, H&S 41960.2	08/20/2020	TCF	P69050	$900.00
191046	NAVARCHUS, LLC	1403, 40 CFR 60, QQQ	08/20/2020	TCF	P69204, P69212	$1,600.00
143533	NEW CINGULAR WIRELESS PCS LLC	1470	08/07/2020	TCF	P69395	$800.00
117724	OIL OPERATORS INC.	203(b)	08/07/2020	TCF	P66843	$1,600.00
145971	PACIFIC MINI MARKET, PHILIP J. LAO DBA	461, H&S 41960.2	08/27/2020	TCF	P68454	$2,000.00
102355	PCM INC/GOLDEN RAIN FOUNDATION	461(c)(3)(Q)	08/07/2020	TCF	P68764	$300.00
177201	PREMIER INV GRP, INC. VENICE CHEVRON	201, 203(a)	08/27/2020	TCF	P68429	$400.00
168554	PRISTINE FIDELITY ENTERPRISES	461, H&S 41960.2	08/27/2020	TCF	P69603	$800.00
179739	PROPEL FUELS CMSI #109	461	08/27/2020	TCF	P69043	$375.00
142501	PROSPECT CLEANERS, YANG KON KIM DBA	1421	08/27/2020	TCF	P68760	$375.00
128235	PUENTE HILLS TOYOTA, INC.	203(b)	08/27/2020	TCF	P70259	$375.00
190240	R A CONSTRUCTION	403(d)(2)	08/27/2020	TCF	P68858	$800.00
149378	RIVERSIDE CO TRAVEL ZONE CENTER INC	461(c)(3)(Q)	08/27/2020	TCF	P66396	$500.00
100806	ROBINSON HELICOPTER CO INC	3002	08/28/2020	TCF	P69954	$500.00
175999	RUBBER RECOVERY, INC	203(b)	08/28/2020	TCF	P69390	$1,000.00
100	RUSS BASSETT COMPANY	201, 203(a)	08/28/2020	TCF	P70253	$1,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
184292	SENTINEL PEAK RESOURCES CALIFORNIA LLC	203	08/28/2020	TCF	P66511	$1,000.00
159612	SIGNATURE FLIGHT SUPPORT-VNY	461	08/28/2020	TCF	P67717	$500.00
171593	SOUTH SHORE MOBIL NABIL KHEIR	461(c)(3)(Q)	08/28/2020	TCF	P69032	$300.00
181224	SUNSET FUELS, INC	461(e)(2)(C)	08/28/2020	TCF	P69034	$800.00
71051	SYSTEM TRANSPORT	1146.1	08/28/2020	TCF	P63898	$3,200.00
171612	TESORO (US) 63270, TESORO REFINING & MAR	461, H&S 41960.2	08/20/2020	TCF	P69026	$800.00
171549	TESORO (USA) 63133	461, H&S 41960.2	08/20/2020	TCF	P70352	$800.00
117466	THREE SISTERS TRUCK STOP	461(e)(2)	08/20/2020	TCF	P66386	$500.00
143057	UNITED NO. 1, LLC	461, H&S 41960	08/20/2020	TCF	P68430	$800.00
151073	V-T WEST, INC. CALIFORNIA DIV.	203(b)	08/20/2020	TCF	P65900	$500.00
175260	W & M, INC	1166	08/20/2020	TCF	P69048	$500.00
189371	WHITTIER UNION HIGH SCHOOL DISTRICT	461(c)(3)(Q)	08/28/2020	TCF	P65874	$300.00
27306	WINALL OIL CO #9	461	08/20/2020	TCF	P68432	$1,600.00
31923	WORTMANN OIL COMPANY, INC.	461	08/20/2020	TCF	P70057	$300.00

Total MSPAP Settlements : $31,408.00

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX
FOR AUGUST 2020 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

REGULATION IV - PROHIBITIONS

Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 403	Fugitive Dust
Rule 461	Gasoline Transfer and Dispensing
Rule 463	Storage of Organic Liquids

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1114	Petroleum Refinery Coking Operations (MCS-01)
Rule 1118	Emissions from Refinery Flares
Rule 1146	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
Rule 1146.1	Emissions of Oxides of Nitrogen from Small 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 1155	Particulate Matter Control Devices (10-08)
Rule 1166	Volatile Organic Compound Emissions from Decontamination of Soil
Rule 1173	Fugitive Emissions of Volatile Organic Compounds
Rule 1176	Sumps and Wastewater Separators

REGULATION XIII - NEW SOURCE REVIEW

Rule 1303	Requirements

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities
Rule 1420.1	Emissions Standards for Lead from Large Lead-Acid Battery Recycling 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 1470	Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	RECLAIM Program Requirements
Rule 2005	New Source Review for RECLAIM
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

CODE OF FEDERAL REGULATIONS

40 CFR 60, QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 14

REPORT: Lead Agency Projects and Environmental Documents Received

SYNOPSIS: This report provides a listing of CEQA documents received by the South Coast AQMD between August 1, 2020 and August 31, 2020, and those projects for which the South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, September 18, 2020, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

PF:SN:JW:LS:MC

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 August 1, 2020 and August 31, 2020 is included in Attachment A. A list of active projects for which South Coast AQMD staff is continuing to evaluate or prepare comments for the August reporting period is included as Attachment B. A total of 50 CEQA documents were received during this reporting period and 14 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 August 2020, the South Coast AQMD received 50 CEQA documents. Of the 66 documents listed in Attachments A and B:

- 14 comment letters were sent;
- 20 documents were reviewed, but no comments were made;
- 25 documents are currently under review;
- 0 document did not require comments (e.g., public notices);
- 0 document were not reviewed; and
- 7 documents were screened without additional review.

(The above statistics are from August 1, 2020 to August 31, 2020 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.

Attachment 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 two 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Goods Movement **LAC200804-05** Pier 400 Corridor Storage Tracks Expansion Project	The project consists of relocation of 8,000 feet of existing rail tracks, expansion of project boundary 1,800 feet to the north, and construction of two track crossings, rail track connections, and roadway improvements. The project is located parallel to Navy Way between Pier 400 and New Dock Street within the Port of Los Angeles. Reference LAC180904-12 Comment Period: N/A Public Hearing: 8/6/2020	Notice of Availability of an Addendum to a Mitigated Negative Declaration	City of Los Angeles Harbor Department	Document reviewed - No comments sent for this document received
Goods Movement **LAC200818-07** Innovative Barracuda Chassis Depot Project	The project consists of expansion of existing operations to allow truckers to pick up and drop off chassis on 13.2 acres. The project is located at 915 Earle Street on the southwest corner of Cannery Street and Earle Street within the Port of Los Angeles. Comment Period: 8/20/2020 - 9/18/2020 Public Hearing: N/A	Negative Declaration	City of Los Angeles Harbor Department	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **LAC200813-05** 13131 Los Angeles Street Industrial Project	Staff provided comments on the Draft Environmental Impact Report for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/May/LAC200423-10.pdf. The project consists of demolition of two existing buildings and construction of a 528,710-square-foot warehouse on 24.9 acres. The project is located at 13131 Los Angeles Street near the northwest corner of Los Angeles Street and Little John Street. Reference LAC200423-10 and LAC190820-11 Comment Period: N/A Public Hearing: 8/19/2020	Response to Comments	City of Irwindale	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **ORC200804-08** Goodman Logistics Center Project	The project consists of construction of 1,609,384 square feet of warehouses on 73.1 acres. The project is located on the southeast corner of Kimberly Avenue and Acacia Avenue. Reference ORC200402-01 Comment Period: 8/4/2020 - 9/17/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Fullerton	Document reviewed - No comments sent for this document received

**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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC200825-01** Barker Logistics, LLC Project	Staff provided comments on the Draft Environmental Impact Report for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/July/RVC200611-28.pdf. The project consists of construction of a 699,630-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. Reference RVC200611-28 and RVC190924-01 Comment Period: N/A Public Hearing: 9/2/2020	Final Environmental Impact Report	County of Riverside	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **RVC200825-02** MA20118	The project consists of construction of a 20,000-square-foot warehouse and 9,070 square feet of support facilities on 3.3 acres. The project is located on the southwest corner of Bellegrave Avenue and Mission Boulevard. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/RVC200825-02.pdf Comment Period: 8/21/2020 - 9/4/2020 Public Hearing: N/A	Site Plan	City of Jurupa Valley	South Coast AQMD staff commented on 9/3/2020
Airports **LAC200821-01** Bob Hope Airport Replacement Terminal Project	The project consists of demolition of existing passenger terminal, and construction of a 14-gate passenger terminal, extensions of two taxiways, and roadway improvements. The project is located on the southwest corner of Winona Avenue and North Hollywood Way in the southeast quadrant within the Bob Hope Hollywood Burbank Airport. Reference LAC190205-01, LAC160628-07, and LAC160504-03 Comment Period: 8/21/2020 - 10/5/2020 Public Hearing: 9/23/2020	Notice of Availability of a Draft Environmental Impact Statement	United States Federal Aviation Administration	Under review, may submit written comments
Industrial and Commercial **LAC200813-08** 414 South San Gabriel Boulevard Project	The project consists of construction of a 199,358-square-foot self-storage facility on 1.75 acres. The project is located near the southeast corner of San Gabriel Boulevard and East Broadway Street. Comment Period: 8/12/2020 - 9/11/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of San Gabriel	Document reviewed - No comments sent for this document 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **ORC200818-06** Lower Curtis Park - Dirt Import and Stockpile Project	The project consists of import of 760,000 cubic yards of soil on 40.26 acres. The project is located at 24460 Olympiad Road near the northeast corner of Olympiad Road and La Paz Road. Comment Period: 8/13/2020 - 9/11/2020 Public Hearing: N/A	Mitigated Negative Declaration	City of Mission Viejo	Document reviewed - No comments sent for this document received
Industrial and Commercial **RVC200825-08** Green River Ranch Business Park	The project consists of construction of five industrial buildings totaling 746,330 square feet on 159.2 acres. The project is located on the southeast corner of Green River Ranch Road and Fresno Road. www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/RVC200825-08.pdf Comment Period: 8/20/2020 - 9/3/2020 Public Hearing: 9/3/2020	Site Plan	City of Corona	South Coast AQMD staff commented on 9/3/2020
Industrial and Commercial **SBC200813-06** Fontana Foothills Commerce Center	The project consists of construction of two industrial buildings totaling 754,408 square feet on 33.6 acres. The project is located on the northeast corner of Juniper Avenue and Jurupa Avenue. Reference SBC200423-03 Comment Period: 8/11/2020 - 9/25/2020 Public Hearing: 9/15/2020	Notice of Availability of a Draft Environmental Impact Report	City of Fontana	Under review, may submit written comments
Waste and Water-related **LAC200804-07** Clean Harbors Wilmington, LLC	The project consists of modifications to an existing hazardous waste facility permit to change emergency response contact information. The project is located at 1737 East Denni Street near the northeast corner of North Henry Ford Avenue and Denni Street in the community of Wilmington within Los Angeles County. Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent for this document 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **LAC200813-01** Whittier Narrows Operable Unit Treatment	The project consists of construction of 7,285 linear feet of groundwater pipelines 30 inches in diameter, a water storage tank, and a water pump station on 2.5 acres. The project is located at 331 North Durfee Avenue near the northeast corner of Rosemead Boulevard and Durfee Avenue in the City of South El Monte. Reference LAC130725-04 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200813-01.pdf Comment Period: 8/11/2020 - 9/9/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Department of Toxic Substances Control	South Coast AQMD staff commented on 9/8/2020
Waste and Water-related **LAC200813-02** 1910-1918 South Los Angeles Street	The project consists of development of cleanup activities to excavate, remove, and dispose contaminated soil with volatile organic compounds, lead, tetrachloroethylene, and trichloroethylene on 1.4 acres. The project is located on the southeast corner of Los Angeles Street and Washington Boulevard in the community of Southeast Los Angeles within the City of Los Angeles. Reference LAC181120-05 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200813-02.pdf Comment Period: 8/10/2020 - 9/9/2020 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 9/8/2020
Waste and Water-related **LAC200813-03** Pratt and Whitney-Rocketdyne	The project consists of evaluation of no further action request after cleanup of soil contaminated with chlorinated volatile organic compounds, tetrachloroethylene, and trichloroethylene is completed on 47 acres. The project is located at 633 Canoga Avenue near the northwest corner of Canoga Avenue and Ingomar Street in the community of Canoga Park-Winnetka-Woodland Hills-West Hills within the City of Los Angeles. Reference LAC141210-02 Comment Period: 7/27/2020 - 9/25/2020 Public Hearing: N/A	Site Cleanup Program	Los Angeles Regional Water Quality Control Board	Document reviewed - No comments sent for this document received
Waste and Water-related **LAC200818-03** Raytheon Company	The project consists of development of land use covenant to prohibit future sensitive land uses on 0.85 acres. The project is located at 2000 East El Segundo Boulevard on the southeast corner of El Segundo Boulevard and Sepulveda Boulevard in the City of El Segundo. Reference LAC200317-08 Comment Period: 8/17/2020 - 9/17/2020 Public Hearing: N/A	Draft Land Use Covenant	Department of Toxic Substances Control	Document reviewed - No comments sent for this document 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **LAC200818-04** Bridge Point South Bay	The project consists of development of land use covenant to prohibit future sensitive land uses on nine acres. The project is located at 20846 Normandie Avenue on the southeast corner of Torrance Boulevard and Normandie Avenue in the City of Torrance. Reference LAC191227-09 and LAC190920-01 Comment Period: 8/14/2020 - 9/14/2020 Public Hearing: N/A	Draft Land Use Covenant	Department of Toxic Substances Control	Document reviewed - No comments sent for this document received
Waste and Water-related **RVC200813-04** Odor Mitigation Project	The project consists of covering, capturing, and routing of odors from wastewater treatment plant, consolidation and relocation of existing scrubber stacks 40 feet in height, and installation of odor ducting. The project is located at 14634 River Road near the southwest corner of River Road and Hall Road in the City of Eastvale. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/RVC200813-04.pdf Comment Period: 8/10/2020 - 9/8/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Western Riverside County Regional Wastewater Authority	South Coast AQMD staff commented on 9/8/2020
Waste and Water-related **RVC200820-04** Golden Triangle Sewer Pipeline Project	The project consists of construction of 3,717 linear feet of sewer pipelines 15 inches in diameter. The project is located between Murrieta Hot Springs Road and Madison Avenue in the City of Murrieta. Comment Period: 7/24/2020 - 8/24/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Eastern Municipal Water District	Document reviewed - No comments sent for this document received
Utilities **ORC200811-03** Bay Bridge Pump Station and Force Main Rehabilitation Project	The project consists of demolition of an existing pump station, and construction of a 14,500-square-foot pump station and 1,500 linear feet of force mains 32 inches in diameter. The project is located on the northwest corner of North Bayside Drive and East Coast Highway in the City of Newport Beach. Reference ORC190703-02, ORC170621-05, ORC170224-04, and ORC161110-08 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/ORC200811-03.pdf Comment Period: 8/7/2020 - 9/21/2020 Public Hearing: 9/3/2020	Notice of Availability of a Recirculated Draft Environmental Impact Report	Orange County Sanitation District	South Coast AQMD staff commented on 9/17/2020

- 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Transportation **LAC200818-01** Lakewood Boulevard at Florence Intersection Improvement Project	The project consists of construction of roadway improvements to the Lakewood Boulevard and Florence Avenue intersection. Comment Period: 8/10/2020 - 9/11/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Downey	Document reviewed - No comments sent for this document received
Transportation **LAC200825-04** Westside Purple Line Extension Wilshire/Rodeo Station North Portal Project	The project consists of construction of a transit station ranging in size 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. Reference LAC190905-01 Comment Period: 8/21/2020 - 10/5/2020 Public Hearing: N/A	Draft Environmental Impact Report	City of Beverly Hills	Document reviewed - No comments sent for this document received
Transportation **LAC200825-06** California High-Speed Rail Project: Los Angeles to Anaheim Section	The project consists of construction of a 30-mile rail track for freight and passenger services, an intermodal rail facility to accommodate 10 freight trains a day, and a freight train staging track facility. The rail track component of the project is located between Los Angeles Union Station in the City of Los Angeles and Anaheim Regional Transportation Intermodal Center in the City of Anaheim. The intermodal rail facility component of the project is located in the cities of Colton and Grand Terrace. The staging track component of the project is located along the existing Burlington Northern and Santa Fe main line tracks in the City of Barstow and unincorporated areas of San Bernardino County. Reference LAC080229-07 Comment Period: 8/25/2020 - 9/24/2020 Public Hearing: 9/10/2020	Revised Notice of Preparation	California High-Speed Rail Authority	Under review, may submit written comments

- Project has potential environmental justice concerns due to the nature and/or location of the project.
Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Institutional (schools, government, etc.) **LAC200820-01** Malibu Middle and High School Campus Specific Plan and Local Coastal Plan Amendment Project	The project consists of demolition of 147,556 square feet of existing buildings and construction of 431,717 square feet of school facilities on 9.9 acres. The project is located near the southeast corner of Via Cabrillo and Morning View Drive in the City of Malibu. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200820-01.pdf Comment Period: 8/20/2020 - 9/21/2020 Public Hearing: 9/9/2020	Notice of Preparation	Santa Monica-Malibu Unified School District	South Coast AQMD staff commented on 9/8/2020
Institutional (schools, government, etc.) **LAC200825-03** Taft Charter High School Comprehensive Modernization Project	The project consists of demolition of 33,142 square feet of existing buildings, modernization of three buildings totaling 63,586 square feet, and construction of three school facilities totaling 7,750 square feet on 32.4 acres. The project is located at 5461 Winnetka Avenue on the southwest corner of Ventura Boulevard and Winnetka Avenue in the community of Canoga Park-Winnetka-Woodland Hills-West Hills within the City of Los Angeles. Comment Period: 8/17/2020 - 9/16/2020 Public Hearing: 8/27/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	Los Angeles Unified School District	Document reviewed - No comments sent for this document received
Institutional (schools, government, etc.) **ORC200818-02** Chet Holifield Federal Building	The 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 in the City of Laguna Niguel. Reference ORC191001-08 Comment Period: 7/14/2020 - 9/5/2020 Public Hearing: N/A	Draft Environmental Impact Statement	United States General Services Administration	Document reviewed - No comments sent for this document received
Retail **RVC200806-03** Pier Enterprises Alcohol Sales	This document includes request for the alcohol sales portion for the project. The project consists of construction of a car wash facility, restaurant uses, and a gasoline service station. The project is located at 4687 Pier Enterprise Way on the northeast corner of Interstate 15 and Cantu Galleano Ranch Road. Reference RVC160805-03 Comment Period: N/A Public Hearing: N/A	Site Plan	City of Jurupa Valley	Document reviewed - No comments sent for this document 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Retail **RVC200818-05** Costco/Vineyard II Retail Development	Staff provided comments on the Draft Environmental Impact Report for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/July/RVC200626-01.pdf. The project consists of construction of a 153,362-square-foot warehouse, 16,000 square feet of retail uses, 3,600 square feet of restaurant uses, a 37,000-square-foot fitness center, and a gasoline service station with 32 pumps on 16.4 acres. The project is located on the northeast corner of Clinton Keith Road and Antelope Road. Reference RVC200626-01 and RVC180628-03 Comment Period: N/A Public Hearing: 8/26/2020	Response to Comments	City of Murrieta	Document reviewed - No comments sent for this document received
Retail **SBC200818-08** Alder/Renaissance Project	Staff provided comments on the Mitigated Negative Declaration for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200728-06.pdf. The project consists of construction of a 7,948-square-foot convenience store, a 2,542-square-foot restaurant, 11 fuel islands with 16 gasoline pumps and four diesel pumps, and 6,476 square feet of fueling canopies on 4.2 acres. The project is located on the southeast corner of Renaissance Parkway and Alder Avenue. Reference SBC200728-06 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Rialto	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC200804-06** Hollywood & Wilcox Project	The project consists of construction of a 278,892-square-foot building with 260 residential units and 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 LAC200303-01, LAC191022-05, and LAC170526-05 Comment Period: N/A Public Hearing: 8/12/2020	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC200820-05** Gardena Transit-Oriented Development Specific Plan Project	The project consists of demolition of a 24,990-square-foot building and construction of 265 residential units on 1.33 acres. The project is located near the southeast corner of El Segundo Boulevard and Crenshaw Boulevard. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200820-05.pdf Comment Period: 8/20/2020 - 9/18/2020 Public Hearing: 9/2/2020	Notice of Preparation	City of Gardena	South Coast AQMD staff commented on 9/8/2020

- 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **LAC200825-05** Vesting Tentative Tract Map No. 82985	The project consists of demolition of an existing building and subdivision of 56,460 square feet for future development of 18 residential units. The project is located at 20225 Valley Boulevard near the northwest corner of Valley Boulevard and Lemon Creek Drive. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200825-05.pdf Comment Period: 8/18/2020 - 9/20/2020 Public Hearing: N/A	Site Plan	City of Walnut	South Coast AQMD staff commented on 9/8/2020
General Land Use (residential, etc.) **ORC200804-01** 1 O'Hill Ridge - Garg Residence Project	The project consists of construction of a 36,914-square-foot residential unit on six acres. The project is located at 1 O'Hill Ridge near the southeast corner of Old Ranch Road and Upper Vintage. Comment Period: 7/30/2020 - 8/28/2020 Public Hearing: 9/22/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Laguna Niguel	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **ORC200804-02** Stadium District Sub-Area A Project	The project consists of modernization of an existing 1,132,567-square-foot sports stadium with 45,500 seats, and construction of 5,175 residential units, 1,709,172 square feet of commercial uses, 2,651,155 square feet of office uses, eight acres of public parks, and a fire station on a 152-acre portion of 820 acres. The project is located at 2000 East Gene Autry Way on the southeast corner of State College Boulevard and Katella Avenue. Comment Period: 7/30/2020 - 8/31/2020 Public Hearing: 9/9/2020	Notice of Availability of Sustainable Communities Environmental Assessment	City of Anaheim	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC200820-07** Murrieta Hills Specific Plan Amendment Project	The project consists of construction of 690 residential uses, 18 acres of commercial uses, 20 acres of roadway improvements, and 652 acres of open space on 972 acres. The project is located on the southwest corner of Interstate 215 and Keller Road. Reference RVC140318-06 Comment Period: 5/8/2020 - 6/22/2020 Public Hearing: N/A	Draft Environmental Impact Report (received after close of comment period)	City of Murrieta	Document reviewed - No comments sent for this document 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **SBC200806-01** Ferree Street 95 Unit Planned Residential Development	The project consists of construction of 96 residential units on 9.65 acres. The project is located near the southwest corner of Richardson Street and East Coulston Street. Comment Period: 8/4/2020 - 8/24/2020 Public Hearing: 9/8/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	City of San Bernardino	Document reviewed - No comments sent for this document received
Plans and Regulations **LAC200806-04** Globemaster Corridor Specific Plan	The project consists of development of land use policies, development standards, design guidelines, infrastructure systems, and implementation strategies with a planning horizon of 2045 on 437 acres. The project is generally located on the northeast corner of Cherry Avenue and East Spring Street. Reference LAC180913-01 Comment Period: 8/3/2020 - 9/17/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Long Beach	Document reviewed - No comments sent for this document received
Plans and Regulations **LAC200806-05** Downtown Community Plan Update	The project consists of development of land use policies, development standards, design guidelines, and zoning codes with a planning horizon of 2040 on 2,161 acres. The project is generally located on the northeast corner of Interstate 10 and Alameda Street. Reference LAC170208-01 Comment Period: 8/6/2020 - 10/20/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Los Angeles	Under review, may submit written comments
Plans and Regulations **LAC200812-01** Forestwide Fuelbreak Maintenance Strategy	The project consists of development of wildfire control strategies and vegetation management activities on 8,700 acres. The project is located at 56 locations in the Angeles National Forest within Los Angeles County. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200812-01.pdf Comment Period: 8/12/2020 - 9/15/2020 Public Hearing: N/A	Initial Project Consultation	United States Department of Agriculture Forest Service	South Coast AQMD staff commented on 9/8/2020

- 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **LAC200813-07** Golden State Specific Plan	The project consists of development of design guidelines and standards to guide future residential, commercial, retail, industrial, and airport projects with a planning horizon of 2035 on 643 acres. The project is located on the southwest corner of Interstate 5 and Cohasset Street. www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/September/LAC200813-07.pdf Comment Period: 8/12/2020 - 9/25/2020 Public Hearing: 8/26/2020	Notice of Preparation	City of Burbank	South Coast AQMD staff commented on 9/15/2020
Plans and Regulations **ORC200806-02** Santa Ana General Plan	The project consists of updates to the City's General Plan to develop design guidelines, policies, and programs to guide future development with a planning horizon of 2045. The project encompasses 27 square miles and is bounded by City of Orange to the north, cities of Irvine and Tustin to the east, City of Costa Mesa to the south, and cities of Garden Grove, Westminster, and Fountain Valley to the west. Reference ORC200303-03 Comment Period: 8/3/2020 - 9/16/2020 Public Hearing: N/A	Notice of Availability of a Draft Program Environmental Impact Report	City of Santa Ana	Document reviewed - No comments sent for this document received
Plans and Regulations **RVC200805-01** 2020 Integrated Natural Resource Management Plan	The project consists of development of policies and strategies to guide natural resources management on 2,162 acres. The project is located near the southeast corner of Cactus Avenue and Interstate 215 in Riverside County. Comment Period: N/A Public Hearing: N/A	Final Environmental Assessment	United States Department of the Air Force	Document reviewed - No comments sent for this document received
Plans and Regulations **RVC200825-09** San Jacinto Wildlife Area Land Management Plan Project	The project consists of development of programs and strategies to guide wildlife protection and habitats management on 20,126 acres. The project is located near the northeast corner of West Contour Road and David Road in the cities of Moreno Valley and Beaumont. Reference RVC171215-02 and RVC160616-01 Comment Period: N/A Public Hearing: N/A	Final Environmental Impact Report	California Department of Fish and Wildlife	Document reviewed - No comments sent for this document 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 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
Waste and Water-related **LAC200708-27** Biogas Renewable Generation Project	The project consists of construction of a 12-megawatt power generation facility, a one-mile natural gas pipeline, a one-mile water pipeline, and two 70,000-gallon water tanks on a 2.2-acre portion of 95 acres. The project is located at 3001 Scholl Canyon Road on the northwest corner of North Figueroa Street and Scholl Canyon Road. Reference LAC190320-02, LAC180309-01, LAC170927-01, and LAC170912-01 Comment Period: 7/2/2020 - 9/30/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Glendale	Under review, may submit written comments
Goods Movement **LAC200714-06** Pier B On-Dock Rail Support Facility Project	The project consists of reconfiguration and expansion of the Pier B on-dock rail support facility to move cargo via on-dock rail with a capacity of handling up to 35 percent of cargo containers by on-dock rail. The project is located on the northwest corner of Interstate 710 and Ocean Boulevard in the community of Wilmington-Harbor City. Reference LAC190705-04, LAC180112-01, LAC170127-01, and LAC161216-06 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200714-06.pdf Comment Period: 7/9/2020 - 8/31/2020 Public Hearing: 7/28/2020	Notice of Availability of a Draft Environmental Impact Statement	United States Department of Transportation, Maritime Administration	South Coast AQMD staff commented on 8/28/2020
Warehouse & Distribution Centers **RVC200728-04** Sycamore Hills Distribution Center Project	The project consists of construction of two warehouses totaling 603,100 square feet on 11.6 acres. The project is located on the northeast corner of East Alessandro Boulevard and Barton Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200728-04.pdf Comment Period: 7/28/2020 - 8/27/2020 Public Hearing: 8/12/2020	Notice of Preparation	City of Riverside	South Coast AQMD staff commented on 8/25/2020
Industrial and Commercial **SBC200716-01** Area Q Quarry Project	The project consists of expansion of existing mining operations to extract 42.1 million tons of materials with a planning horizon of 2050 on 187.6 acres. The project is located on the northwest corner of Devil Creek Diversion Channel and Cajon Boulevard in the community of Muscoy. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200716-01.pdf Comment Period: 6/30/2020 - 8/17/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of San Bernardino	South Coast AQMD staff commented on 8/14/2020

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

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

ATTACHMENT B
ONGOING ACTIVE PROJECTS FOR WHICH 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
Waste and Water-related **ORC200723-01** Zone 4 Landfill Construction Projects and Source Separated Organics Facility	The project consists of excavation and removal of up to 3.3 million cubic yards of hard rock material, import of 8,108 cubic yards of soil for liner installation, and construction of a recycling facility with a receiving capacity of 300 tons per day of organic wastes on a 680-acre portion of 1,530 acres. The project is located at 32250 Avenida La Plata on the southeast corner of Avenida La Plata and Prima Deshecha in cities of San Juan Capistrano and San Clemente and unincorporated areas of Orange County. www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/ORC200723-01.pdf Comment Period: 7/23/2020 - 8/21/2020 Public Hearing: 7/30/2020	Notice of Preparation	Orange County Department of Waste and Recycling	South Coast AQMD staff commented on 8/19/2020
Waste and Water-related **RVC200723-02** Southern California Edison San Jacinto	The project consists of development of cleanup actions to remove soil contaminated with polychlorinated biphenyls, arsenic, and lead on 0.14 acres. The project is located on the southwest corner of South San Jacinto Avenue and East Third Street in the City of San Jacinto. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200723-02.pdf Comment Period: 7/24/2020 - 8/22/2020 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 8/19/2020
Transportation **LAC200526-01** California High-Speed Rail Project: Burbank to Los Angeles Section	The project consists of construction of a 14-mile rail track for freight and passenger services between Hollywood Burbank Airport in the City of Burbank and Los Angeles Union Station in the City of Los Angeles. Reference LAC140729-04 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200526-01.pdf Comment Period: 5/29/2020 - 8/31/2020 Public Hearing: 7/8/2020	Notice of Availability of a Draft Environmental Impact Report/ Draft Environmental Impact Statement	California High-Speed Rail Authority	South Coast AQMD staff commented on 8/28/2020
Transportation **SBC200716-03** Interstate 10 Eastbound Truck Climbing Lane Improvement Project	The project consists of reconfiguration of a three-mile segment of Interstate 10 (I-10) between the I-10 and Live Oak Canyon Road interchange in the City of Yucaipa and the I-10 and County Line Road interchange near the border of San Bernardino County and Riverside County. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200716-03.pdf Comment Period: 7/3/2020 - 8/10/2020 Public Hearing: 7/15/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	California Department of Transportation	South Coast AQMD staff commented on 8/7/2020

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

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
Institutional (schools, government, etc.) **RVC200708-14** 2021 Long Range Development Plan	The project consists of development of strategies, actions, and programs to accommodate increases in enrollment capacity from 23,922 students to 35,000 students and 3.7 million square feet of academic buildings with a planning horizon of 2036 on 1,108 acres. The project is located on the southeast corner of Blaine Street and Watkins Drive in the City of Riverside. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200708-14.pdf Comment Period: 7/7/2020 - 8/6/2020 Public Hearing: 7/29/2020	Notice of Preparation	Regents of the University of California	South Coast AQMD staff commented on 8/4/2020
Retail **SBC200728-06** Alder/Renaissance Project	The project consists of construction of a 7,948-square-foot convenience store, a 2,542-square-foot restaurant, 11 fuel islands with 16 gasoline pumps and four diesel pumps, and 6,476 square feet of fueling canopies on 4.2 acres. The project is located on the southeast corner of Renaissance Parkway and Alder Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200728-06.pdf Comment Period: 7/18/2020 - 8/6/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Rialto	South Coast AQMD staff commented on 8/6/2020
General Land Use (residential, etc.) **LAC200708-06** The District NoHo Project	The project consists of construction of 1,527 residential units totaling 1,523,528 square feet, 645,499 square feet of retail uses, and 297,925 square feet of open space on 15.9 acres. The project is located near the southeast corner of Burbank Boulevard and Lankershim Avenue in the community of North Hollywood. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200708-06.pdf Comment Period: 7/7/2020 - 8/10/2020 Public Hearing: 7/15/2020	Notice of Preparation	City of Los Angeles	South Coast AQMD staff commented on 8/4/2020
General Land Use (residential, etc.) **LAC200716-06** 1688 West Garvey Avenue Residential Project	The project consists of construction of 16 residential units on 6.22 acres. The project is located on the southwest corner of Garvey Avenue and Abajo Drive. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200716-06.pdf Comment Period: 7/10/2020 - 8/10/2020 Public Hearing: N/A	Notice of Preparation	City of Monterey Park	South Coast AQMD staff commented on 8/4/2020
General Land Use (residential, etc.) **ORC200724-02** Brea Plaza Hotel and Apartments Expansion Project	The project consists of demolition of 25,950 square feet of existing buildings, and construction of a 92,538-square-foot hotel with 150 rooms, 194 residential units totaling 229,855 square feet, and 22,882 square feet of commercial uses on a 3.8-acre portion of 16 acres. The project is located on the northwest corner of East Imperial Highway and South Associated Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/ORC200724-02.pdf Comment Period: 7/27/2020 - 8/26/2020 Public Hearing: 8/12/2020	Notice of Preparation	City of Brea	South Coast AQMD staff commented on 8/25/2020

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

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
General Land Use (residential, etc.) **RVC200728-05** Porcupine Creek Retreat Specific Plan Project	The project consists of construction of 50 residential units totaling 183,500 square feet and a golf course with 18 holes on 191 acres. The project is located near the southwest corner of Highway 111 and Mirage Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200728-05.pdf Comment Period: 7/27/2020 - 8/27/2020 Public Hearing: N/A	Notice of Preparation	City of Rancho Mirage	South Coast AQMD staff commented on 8/25/2020
Plans and Regulations **LAC200616-01** Green Zones Ordinance	The project consists of development of a countywide zoning requirement, design standards, and strategies to enhance public health and land use compatibility. The project also establishes green zone districts in communities of Avocado Heights, East Los Angeles, East Rancho Dominguez, Florence-Firestone, South San Jose Hills, Walnut Park, West Athens-Westmont, West Carson, West Rancho Dominguez-Victoria, Whittier-Los Nietos, and Willowbrook within Los Angeles County. www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200616-01.pdf Comment Period: 6/16/2020 - 8/24/2020 Public Hearing: 7/13/2020	Notice of Preparation	County of Los Angeles	South Coast AQMD staff commented on 8/24/2020

- 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 AUGUST 31, 2020

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
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.	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 preliminary Draft EIR and has provided comments to the consultant.	Trinity Consultants
Sunshine Canyon Landfill is proposing to modify its South Coast AQMD permits for its active landfill gas collection and control system to accommodate the increased collection of landfill gas. The proposed project will: 1) install two new low emissions flares with two additional 300-hp electric blowers; and 2) increase the landfill gas flow limit of the existing flares.	Sunshine Canyon Landfill	Subsequent Environmental Impact Report (SEIR)	The consultant provided a preliminary air quality analysis and health risk assessment (HRA) which is undergoing review by South Coast AQMD staff.	SCS Engineers

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 15

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 Nastri
Executive Officer

PMF:SN:SR:AK:ZS

2020 MASTER CALENDAR

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, AB 617 BARCT, or Other. Rulemaking efforts that are noted for implementation of the 2016 AQMP, Toxics, and AB617 BARCT are either statutorily required and/or are needed to address a public health concern. Projected emission reductions will be determined during rulemaking.

Staff is moving forward with rulemaking, recognizing stakeholders' resource limitations due to COVID-19. To maintain social distancing while integrating public participation in the rulemaking process, staff is connecting with stakeholders using tele- and videoconferencing. Also, staff has increased the review time for working group materials to allow stakeholders additional time to prepare for meetings. Lastly, working group meetings have been restructured to be shorter in duration to better accommodate the tele- and video-conferencing format.

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.

The following table summarizes changes to the schedule since last month's Rule and Control Measure Forecast Report. Staff will continue to work with all stakeholders as these projects move forward.

Rule 219 **Rule 222** **Rule 461**	**Equipment Not Requiring a Written Permit Pursuant to Regulation II** **Filing Requirements for Specific Emission Sources not Requiring a Written Permit Pursuant to Regulation II** **Gasoline Transfer and Dispensing**
Proposed Amended Rules 219, 222, and 461 are being moved from December to second quarter of 2021 to allow staff more time to work with stakeholders to address retail mobile fueling operations, which is an emerging industry.	
442.1 **1107** **1124** **1136** **1145** **1171**	**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**
Proposed Amended Rules 442.1, 1107, 1124, 1136, 1145, and 1171 are being moved from December 2020 to To-Be-Determined due to resource constraints.	
445	**Wood Burning Devices (Ozone Contingency)**
Proposed Amended Rule 445 is being moved from December 2020 to a Special Board Meeting on October 27, 2020 to meet an impending U.S. EPA deadline for ozone contingency measures.	
1147 **1100**	**NOx Reductions from Miscellaneous Sources** **Implementation Schedule for NOx Facilities**
Proposed Amended Rules 1147 and 1100 are being moved from December to the second quarter of 2021 to allow staff additional time to continue working with stakeholders on the development of the amendments.	
1407.1	**Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations**
Proposed Rule 1407.1 is being moved from December 2020 to January 2021 to allow stakeholders more time to review draft rule language.	

Regulation XIII Regulation XX Regulation XXX	New Source Review RECLAIM Title V
Proposed Amended Regulations XIII, XX, and XXX are being moved from 2020 To-Be-Determined to December 2020. Amendments are needed to revise the thresholds for VOC and NOx Major Polluting Facility and Major Modifications for New Source Review, RECLAIM New Source Review, and Title V Permitting to address the re-classification of Coachella Valley from Severe to Extreme non-attainment with the federal 1997 8-hour ozone standard.	

2020 MASTER CALENDAR

Month	Title and Description	Type of Rulemaking
November		
1178	**Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities** Proposed Amended Rule 1178 will establish provisions for external floating roof tanks that exceed vapor pressure limits. *Michael Morris 909.396-3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 CERP
December		
1146[#]	**Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters** Proposed amendments to Rule 1146 are needed to remove the ammonia slip limit in the rule which is currently addressed under Regulation XIII New Source Review. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
Reg. XIII[*#] Reg. XX[*#] Reg. XXX	**New Source Review** **RECLAIM** **Title V** Proposed rule amendments are needed to reduce the Major Polluting Facility thresholds for VOC and NOx from 25 tons per year to 10 tons per year and the Major Modification threshold for VOC and NOx from 25 tons per year to 1 pound per day due to the re-designation of the Coachella Valley from Severe to Extreme nonattainment of the 1997 federal 8-hour ozone standard. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	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

2020	Title and Description	Type of Rulemaking
209	**Transfer and Voiding of Permits** Staff may propose amendments to clarify requirements for change of ownership and permits and the assessment of associated fees. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
218*# 218.1 218.2 (Added) 218.3 (Added)	**Continuous Emission Monitoring** **Continuous Emission Monitoring Performance Specifications** **Enhanced Requirements for Continuous Emission Monitoring System** **Enhanced Requirements for Continuous Emission Monitoring System Performance Specifications** Proposed Amended Rules 218 and 218.1 will include existing provisions for continuous emissions monitoring systems for non-RECLAIM facilities with minor revisions. The revised provisions that enhance requirements for Continuous Emissions Monitoring Systems (CEMS) will be included in separate rules, Proposed Rules 218.2 and 218.3, to streamline implementation. As a result, Proposed Rules 218.2 and 218.3 will incorporate the revised provisions for CEMS for non-RECLAIM and former RECLAIM facilities. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP
219 222 461	**Equipment Not Requiring a Written Permit Pursuant to Regulation II** **Filing Requirements for Specific Emission Sources not Requiring a Written Permit Pursuant to Regulation II** **Gasoline Transfer and Dispensing** Proposed Amended Rule 219 will modify permitting requirements for mobile fueling operations. Proposed Amended Rule 222 will require registration for mobile fueling operations meeting certain criteria. Proposed Amended 461 will revise requirements for mobile refueling operations. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
223	**Emission Reduction Permits for Large Confined Animal Facilities** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	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
407[#]	**Liquid and Gaseous Air Contaminants** Proposed Amended Rule 407 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT
425	**Odors from Cannabis Processing** Proposed Rule 425 will establish requirements for control of odors from cannabis processing. *Tracy Goss 909.396.3106; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
431.1[#]	**Sulfur Content of Gaseous Fuels** Proposed Amended Rule 431.1 will assess exemptions, including RECLAIM, and update other provisions, if needed. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT/ AB 617 CERP
431.2[#]	**Sulfur Content of Liquid Fuels** Proposed Amended Rule 431.2 will assess exemptions, including RECLAIM, and update other provisions, if needed. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT/ AB 617 CERP
431.3[#]	**Sulfur Content of Fossil Fuels** Proposed Amended Rule 431.3 will assess exemptions, including RECLAIM, and update other provisions, if needed. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT/ AB 617 CERP
442.1 1107 1124 1136 1145 1171	**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** 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. *Tracy Goss 909.396.3106; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other

* *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
462	**Organic Liquid Loading** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
463	**Organic Liquid Storage** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
468#	**Sulfur Recovery Units** Proposed Amended Rule 468 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT
469#	**Sulfuric Acid Units** Proposed Amended Rule 469 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT
1101#	**Secondary Lead Smelters/Sulfur Oxides** Proposed Amended Rule 1101 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	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[#]	**Fluid Catalytic Cracking Units SOx** Proposed Amended Rule 1105 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AB 617 BARCT/ AB 617 CERP
1109[*+#] 1109.1[*+#]	**Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries** **Reduction of Emissions of Oxides of Nitrogen from Refinery Equipment** 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. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 BARCT/ AB 617 CERP
1110.2*[+#]	**Emissions from Gaseous - and Liquid-Fueled Engines** 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. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 BARCT
1113	**Architectural Coatings** Amendments may be needed to clarify applicability of the rule with respect to distribution. *Dave DeBoer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
1118[*]	**Control of Emissions from Refinery Flares** 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. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 CERP
1119[#]	**Petroleum Coke Calcining Operations – Oxides of Sulfur** Proposed Amended Rule 1119 will update SOx emission limits to reflect Best Available Retrofit Control Technology, if needed, remove exemptions for RECLAIM facilities, and update monitoring, reporting, and recordkeeping requirements. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	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
1121*	**Control of Nitrogen Oxides from Residential Type, Natural-Gas-Fired Water Heaters** Proposed amendments may be needed further reduce NOx emissions from water heaters. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP
1133.3	**Emission Reductions from Greenwaste Composting Operations** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP
1134	**Emissions of Oxides of Nitrogen from Stationary Gas Turbines** 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. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 BARCT
1135	**Emissions of Oxides of Nitrogen from Electricity Generating Facilities** 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. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 BARCT
1138	**Control of Emissions from Restaurant Operations** Proposed Amended Rule 1138 will further reduce emissions from char boilers. *Tracy Goss 909.396.3106; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP
1142	**Marine Tank Vessel Operations** Proposed Amended Rule 1142 will address VOC and hydrogen sulfide emissions from marine tank vessel operations and provide clarifications. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
1146.1[#]	**Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters** Proposed amendments to Rule 1146.1 may be needed to clarify provisions for industry-specific categories and to incorporate comments from U.S. EPA. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other

* *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
1146.2[#]	**Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters** Proposed Amended Rule 1146.2 will be revised to lower the NOx emission limit to reflect Best Available Retrofit Control Technology. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 BARCT
1147[*+#]	**NOx Reductions from Miscellaneous Sources** Proposed Amended Rule 1147 will revise NOx emission limits to reflect Best Available Retrofit Control Technology for miscellaneous combustion sources and that will apply to RECLAIM and non-RECLAIM facilities.	AQMP/ AB 617 BARCT
1100[#]	**Implementation Schedule for NOx Facilities** Proposed Amended Rule 1100 will establish the implementation schedule for Rule 1147 equipment at NOx RECLAIM and former NOx RECLAIM facilities. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	
1147.1[*+#]	**NOx Reductions from Miscellaneous Sources** **NOx Reductions for Equipment at Aggregate Facilities** Proposed Rule 1147.1 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.	AQMP/ AB 617 BARCT
1147[*+#]	**NOx Reductions from Miscellaneous Sources** Proposed Amended Rule 1147 will remove equipment that will be regulated under Proposed Rule 1147.1. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244*	
1147.2[*+#]	**NOx Reductions from Metal Melting and Heating Furnaces** Proposed Rule 1147.2 will establish NOx emission limits to reflect Best Available Retrofit Control Technology for metal melting and heating furnaces and will apply to RECLAIM and non-RECLAIM facilities.	AQMP/ AB 617 BARCT
1147[*+#]	**NOx Reductions from Miscellaneous Sources** Proposed Amended Rule 1147 will remove equipment that will be regulated under Proposed Rule 1147.2. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	

* *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
1148.1*	**Oil and Gas Production Wells** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other/ AB 617 CERP
1148.2	**Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers** Proposed amendments to Rule 1148.2 may be needed to improve notifications of well working activities to the community. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other/ AB 617 CERP
1150.3*+	**NOx Emission Reductions from Combustion Equipment at Landfills** 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. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ AB 617 BARCT
1166	**Volatile Organic Compound Emissions from Decontamination of Soil** Proposed Amended Rule 1166 will update requirements, specifically concerning notifications and usage of mitigation plans (site specific versus various locations). *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
1173	**Control of Volatile Organic Compound Leaks and Releases from Components at Petroleum Facilities and Chemical Plants** Proposed revisions to Rule 1173 are being considered based on recent U.S. EPA regulations and CARB oil and gas regulations 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other/ 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
1176	**VOC Emissions from Wastewater Systems** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other/ AB 617 CERP
1180	**Refinery Fenceline and Community Air Monitoring** 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. *Michael Krause 909.396.2706; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
1403*	**Asbestos Emissions from Demolition/Renovation Activities** 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. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics
1407.1*	**Control of Toxic Air Contaminant Emissions from Chromium Alloy Melting Operations** Proposed Rule 1407.1 will establish requirements to reduce point source and fugitive toxic air contaminant emissions from chromium alloy metal melting operations. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics/ AB 617 CERP
1415 1415.1	**Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems, and Reduction of Refrigerant Emissions from Stationary Refrigeration Systems** 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. *David De Boer 909.396.2329; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
1420	**Emissions Standard for Lead** 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. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	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 To-Be-Determined (Continued)

2020	Title and Description	Type of Rulemaking
1420.2	**Emission Standards for Lead from Metal Melting Facilities** 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. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics
1426*	**Reduction of Toxic Air Contaminants from Metal Finishing Operations** 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. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics/ AB 617 CERP
1435*	**Control of Emissions from Metal Heat Treating Processes** 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. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics/ AB 617 CERP
1445	**Control of Toxic Emissions from Laser Arc Cutting** Proposed Rule 1445 will establish requirements to reduce toxic metal particulate emissions from laser arc cutting. *TBD; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics
1450*	**Control of Methylene Chloride Emissions** Proposed Rule 1450 will reduce methylene chloride emissions from furniture stripping and establish monitoring, reporting, and recordkeeping11 requirements. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; and Socio: Ian MacMillan 909.396.3244*	Toxics
1469*	**Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations** Proposed amendments to Rule 1469 may be needed to address use of chemical fume suppressants or other implementation issues. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	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 To-Be-Determined (Continued)

2020	Title and Description	Type of Rulemaking
1469.1*	**Spraying Operations Using Coatings Containing Chromium** Proposed Amended Rule 1469.1 will establish additional requirements to address hexavalent chromium emissions from spraying operations using chromium primers or coatings. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics/ AB 617 CERP
1470	**Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines** Proposed Amended Rule 1470 will establish additional provisions to reduce the exposure to diesel particulate from new and existing small (≤ 50 brake horsepower) diesel engines located near sensitive receptors. Proposed amendments may be needed to address use of engines during Public Safety Power Shutoffs. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics
1472	**Requirements for Facilities with Multiple Stationary Emergency Standby Diesel-Fueled Internal Combustion Engines** Proposed Amended Rule 1472 will remove provisions that are no longer applicable, update and streamline provisions, and assess the need for a Compliance Plans. *Michael Morris 909.396.3282; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Toxics
1480	**Toxics Monitoring** Proposed amendments to Rule 1480 may be needed to remove fee provisions if they are incorporated in Regulation III. *Jillian Wong 909.396.3176; CEQA: Jillian Wong 909.396.3176 and Socio: Ian MacMillan 909.396.3244*	Toxics/ AB 617 CERP
2202*	**On-Road Motor Vehicle Mitigation Options** 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. *Carol Gomez 909.396.3264; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
2305*+	**Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program** Proposed Rule 2305 will both reduce emissions and facilitate local and regional emission reductions associated with warehouses and the mobile sources attracted to warehouses. *Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	AQMP/ 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
Reg. III	**Fees** Staff recently proposed six minor amendments (including two that would raise fees) to Regulation III and Rule 1480. However, given the recent circumstances stemming from the COVID-19 pandemic, staff is no longer proposing the amendments to Regulation III or Rule 1480 this year. In addition, staff is proposing to credit back this year's automatic 2.8% CPI increase as a budget action so that facilities will not experience any new fee increases for this upcoming fiscal year (FY 2020-2021). *Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176; Socio: Ian MacMillan 909.396.3244*	Other
Reg. XXIII*+	**Facility-Based Mobile Sources** 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. *Ian MacMillan 909.396.3244; CEQA: Jillian Wong 909.396.3176 Socio: Ian MacMillan 909.396.3244*	AQMP/ Toxics/ AB 617 CERP
Reg. II, IV, XIV, XI, XIX, XXIII, XXIV, XXX and XXXV	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.	Other/ AQMP/ Toxics/ 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

Back to Agenda

BOARD MEETING DATE: October 2, 2020 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 item is to provide the monthly status report on major automation contracts and planned projects.

COMMITTEE: Administrative, September 11, 2020, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

RMM:MAH:XC:agg

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.

In light of COVID-19 and the related budget impact, we are evaluating all of our projects and delaying non-critical projects as long as possible.

Summary of Report
The attached report identifies 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
October 2, 2020 Board Meeting
Status Report on Major Ongoing and Upcoming Projects for Information Management

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Office 365 Implementation	Acquire and implement Office 365 for South Coast AQMD staff	$350,000	• Pre-assessment evaluation and planning completed • Board approved funding on October 5, 2018 • Developed implementation and migration plan • Acquired Office 365 licenses • Implemented Office 365 email (Exchange) and migrated all users • Trained staff in Office 365 Pro Plus desktop software • Implemented Office 365 Pro Plus, Office Web, and OneDrive for Business	• Implement Office 365 internal website (SharePoint) and migrate existing content
Permitting System Automation Phase 1	New Web application to automate the filing of permit applications with immediate processing and issuance of permits for specific application types: Dry Cleaners, Gas Stations, and Automotive Spray Booths	$694,705	• Automated 400A form filing, application processing, and online permit generation for Dry Cleaner, Automotive Spray Booth, and Gas Station Modules deployed to production • Enhanced processing of school locations with associated parcels • Deployed upgraded GIS Map integration and enhanced sensitive receptor identification and distance measurement work • Deployed new version of On Line Application Filing (OLAF) that includes Rule 212(c)(1) Implementation Guidance	• Continue Phase 1.1 project outreach support

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Permitting System Automation Phase 2	Enhanced Web application to automate filing of permit applications, Rule 222 equipment and registration for IC engines; implement electronic permit folder and workflow for internal South Coast AQMD users	$525,000	• Board approved initial Phase 2 funding December 2017 • Board approved remaining Phase 2 funding October 5, 2018 • Completed report outlining recommendations for automation of Permitting Workflow • Developed application submittals and form filing for first nine of 32 400-E forms • Completed application submittals and form filing for 23 types of equipment under Rule 222 ready for User Testing • Deployed to production top three most frequently used Rule 222 forms: Negative Air Machines, Small Boilers, and Charbroilers	• Complete User Testing for first nine 400-E forms • Complete User Acceptance Testing and Deployment to production of Emergency IC Engines Form (EICE-RE) • Complete User Acceptance Testing and Deployment of remaining 22 Rule 222 forms to production • Complete requirements gathering for Phase II of the project (an additional 10 400-E-XX forms)

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Replace Your Ride (RYR)	New Web application to allow residents to apply for incentives to purchase newer, less polluting vehicles	$301,820	• Phase 2 and 3 Fund Allocation, Administration, Management Reporting modules, VIN Number, Case Manager, Auto e-mail and document library updates deployed and in production • Implemented following modifications: Electric Vehicle Service Equipment, email templates, call center hours, additional incentive amounts, VIN Number scramble modifications and replacement option choices to allow staff to process application more efficient	• Implementation of RYR and PeopleSoft Financial integration module
South Coast AQMD Mobile Application Enhancements	Enhancement of Mobile application from SRA based map to grid map. This grid map will allow users to see AQI at a finer resolution.	$100,000	• Vision and scope completed • Project charter released • Task order issued, evaluated and awarded • Project kick off completed • User Interface design completed	• Code Development • Migrate Gridded Air Quality Calculation to enterprise architecture
Legal Division New System Development	Develop new web-based case management system for Legal Division to replace existing system	$500,000	• Task order issued, evaluated and awarded • Project charter finalized • Business Process Model completed • User Acceptance Testing completed • User Training completed • Parallel testing completed • Deployed to production	• Phase II requirements

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
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	• Project charter released • Task order issued, evaluated and awarded • Requirement gathering and design for Sprint 1, 2 and 3 completed • Sprint 4 and Public Portal implementation completed • Major incident notification deployed • Refinery user training completed • Application demo completed • Deployed to production on December 12, 2019 including major incident reporting on public portal • Phase I Bug fixes deployed to production after initial deployment • Phase II development on administrative and reporting pages completed	• Phase II User Acceptance Testing
PeopleSoft Electronic Requisition	South Coast AQMD is implementing an 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	• Project charter released • Task order issued, evaluated and awarded • Requirement gathering and system design completed • System setup and code development and user testing for Information Management completed • System setup and code development and User Acceptance Testing completed for Administrative and Human Resources completed • System setup for Technology Advancement Office completed	• Deployment to IM and AHR divisions • TAO training Integrated User Testing for other divisions

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	• Project charter released • Task order issued, evaluated and awarded • Business requirements gathering completed • System architecture, data storage, and design data ingestion completed • Data transformations, calculations and averaging completed • Dashboards, microsites and data migration completed • Release 2 User Acceptance Testing completed • Deployment to production completed	
Cybersecurity Assessment	Perform a cybersecurity risk assessment, maturity assessment, and penetration testing	$100,000 (not included in FY 2020-21 Budget)		• Release RFP December 4, 2020 • Award Contract February 5, 2021 • Complete Cybersecurity assessment May 31, 2021

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
VW Environmental Mitigation Action Plan Project	CARB has assigned South Coast AQMD to develop web applications for two projects: Zero-Emission Class 8 Freight and Port Drayage Truck Project and Combustion Freight and Marine Project. The agency is also responsible for maintaining a database that will be queried for reporting perspectives for CARB	$355,000	• Draft Charter Document issued • Project Initiation completed • Task order issued • Deployed Phase I to production on Dec. 6, 2019 • Initial deployment of Phase II to production – Messaging, Evaluation, and Administration functionalities completed March 3, 2020 • Development of evaluation module and calculation module completed • Deployment of Phase III – ZE Class 8 application submittal completed	• Development of Phase III - Contracting, and Inspection
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 meet the new rule requirements	$68,575	• Project charter released • Task order issued, evaluated and awarded • Business requirements gathering completed • Phase 1 Development completed • Phase 2 Development completed • System Integration Testing and User Acceptance Testing in Stage Environment completed • Deployed System to Production Environment	

Project	Brief Description	Estimated Project Cost	Completed Actions	Upcoming Milestones
Source Test Tracking System	South Coast AQMD will implement an Online Source Test Tracking System to keep track of timelines, as well as quantify the number of test protocols and reports received. The Source Test Tracking System will provide an external online portal to submit source testing protocols and reports, ability to track the review process, and provide integration to all other business units for all source test protocols and report submitted. It will also provide an external dashboard to review the status of a submittal	$250,000	• Project Charter approved • Project Initiation completed • Task Order issued • Project Kick-off completed • User requirements gathering for Source Testing and Engineering & Permitting Divisions completed • User requirements gathering for Compliance & Enforcement and Planning Divisions completed • Development of Full Business Process Model of the To-Be system completed	• Develop screens mock-ups for the system that will be developed
CLASS Database Software Licensing	Purchase Actian Ingres database software licensing, support and maintenance for the CLASS system for one-year period (November 30, 2020 through November 30, 2021)	$277,200		• Board approval October 2, 2020 • Execute contract November 30, 2020

Projects that have been completed within the last 12 months are shown below.

Completed Projects	
Project	Date Completed
Volkswagen Environmental Mitigation Administration Zero Emission Class 8	August 18, 2020
Rule 1403 Enhancement	July 1, 2020
Legal Office System	June 17, 2020
Document Conversion Services	June 30, 2020
Oracle PeopleSoft Software Support	June 5, 2020
Renewal of OnBase Software Support	May 1, 2020
Public Facing Permit Application Status Dashboard	May 1, 2020
Mobile Application Enhancement – Hourly Forecast	April 29, 2020
Renewal of HP Server Maintenance & Support	April 30, 2020
Rule 1180 Fence Line Monitoring Web Site Enhancements	April 3, 2020
Volkswagen Environmental Mitigation Administration and Communication Module	March 3, 2020
Data Cable Infrastructure Installation	February 31, 2020
Prequalify Vendor List for PCs, Network Hardware, etc.	February 7, 2020
Mobile Application Enhancements Including Spanish Language	January 23, 2020
Annual Emissions Reporting System	December 31, 2019
Rule 1180 Fence Line Monitoring Website	December 31, 2019
Online filing of Rule 222 – Negative Air Machines, Small Boilers, and Charbroilers Modules	December 13, 2019
Flare Notification System	December 12, 2019
Volkswagen Environmental Mitigation Application Filing Portal	December 7, 2019
CLASS Database Software Licensing and Support	November 30, 2019
Office 365 Suite Implementation of File Storage (OneDrive for Business)	November 22, 2019
Ingres Database Migration to Version 11	August 23, 2019

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 17

REPORT: South Coast AQMD 2019-2020 Why Healthy Air Matters Program End-of-Year Report

SYNOPSIS: The Why Healthy Air Matters (WHAM) Program is South Coast AQMD's high school air quality education program. The report summarizes activities and accomplishments of the WHAM Program for the 2019-2020 school year. These actions are to receive and file the 2019-2020 WHAM Program End-of-Year Report.

COMMITTEE: Administrative, September 11, 2020, Reviewed

RECOMMENDED ACTION:
Receive and file the attached 2019-2020 WHAM Program End-of-Year Report.

Wayne Nastri
Executive Officer

DJA:LTO:mjk

Background
South Coast AQMD has a long history of educational outreach to teachers and students in the South Coast Air Basin through programs and events, especially within environmental justice communities. These activities have been effective in raising awareness about South Coast AQMD and air quality issues among teachers and students, reaching several thousand program and event participants. Additionally, South Coast AQMD's outreach efforts to high school students has yielded exponential benefits as participants in programs have shared information with their families, communities and peers.

In 2019, per Board direction, South Coast AQMD sought to implement an air quality educational program at 100 high schools in environmental justice communities within

its jurisdiction. The program initially targeted 40 schools in Los Angeles County, and 20 schools each in Orange, Riverside, and San Bernardino Counties.

At the April 2019 meeting, the Board approved a one-year contract for consultant services with the Lee Andrews Group, with an option for two one-year contract renewals contingent on satisfactory performance and Board approval. The program now known as "Why Healthy Air Quality Matters" (WHAM) was successfully launched in school districts resulting in the confirmation of 100 schools to participate in the program.

The report summarizes activities and accomplishments of the WHAM Program for the 2019-2020 school year, as well as program adaptations and impacts due to the COVID-19 pandemic. Staff has also attached a list of schools with agreements to implement the WHAM program. This list includes information about the status of implementation.

Attachments
2019-2020 WHAM Program End-of-Year Report
List of Schools with Signed WHAM agreements 2019-20

WHAM

Why Healthy Air Matters

Air Quality Education by South Coast AQMD

Year 1 Report

Prepared by:
Lee Andrews Group

South Coast AQMD

2019-2020

June 29, 2020

Mr. Derrick Alatorre
Deputy Executive Officer - Office of Legislative, Public Affairs & Media
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

RE: Why Healthy Air Matters (WHAM) - South Coast AQMD High School Air Quality Educational Program

Dear Mr. Alatorre:

Lee Andrews Group is pleased to submit the attached program evaluation report for the 2019/2020 school year (Year One) of the Why Healthy Air Matters (WHAM) Program. This comprehensive report profiles the outreach plan developed to address all elements of the WHAM Program (Program) including: the planning and implementation process, procedures, tracking, evaluation, and recommendations for the future of the Program.

After being awarded the contract for consulting services in April 2019, Lee Andrews Group assisted South Coast AQMD with developing an outreach plan for the WHAM Program. We worked diligently to successfully introduce the Program to high schools in Los Angeles, Orange, Riverside, and San Bernardino counties.

Our firm's successful outreach and program development has paved the way for the establishment and cultivation of countless invaluable relationships with school district administrators, faculty, and teachers, which are critical to successful implementation. Lee Andrews Group is excited to continue to build from the momentum we have created by moving forward into the second year of program implementation, by expanding the Program's reach to even more high schools in environmental justice communities.

Within the following document, we have detailed the steps taken and the strategies developed to introduce and implement the WHAM Program throughout one hundred high schools. Due to the COVID-19 pandemic in recent months, there is an extreme need to extend flexibility and empathy to the circumstances of the teachers and students whom we are trying to reach. To address this, we have developed a plan for year two which features increased distance learning opportunities and resources for teachers to access. While this plan will continue to evolve based on the overall environment, we have ensured that the goals for the WHAM Program will be equally met.

Thank you for the opportunity to take on this important project. We look forward to supporting South Coast AQMD's mission to educate the youth to promote air quality awareness and protect the health of our region's residents.

Sincerely,

Stephanie Graves
President & CEO
sgraves@leeandrewsgroup.com

Lee Andrews GROUP
Moving your ideas forward

Table of contents

/// INTRODUCTION & BACKGROUND

The South Coast Air Quality Management District's (South Coast AQMD) high school air quality education program known as "Why Healthy Air Matters" (WHAM) aims to increase awareness of air quality issues within the South Coast and Coachella Air Basins, empowering youth to drive positive change during a time when they are developing and forming their own habits. The WHAM program utilizes Kids Making Sense®--a science, technology, engineering and math (STEM)-based educational curriculum that teaches students about air quality issues. The curriculum, which was created by Sonoma Technology, Inc., meets Next Generation Science Standards (NGSS) and was developed by air quality scientists and educators.

The South Coast AQMD brought the WHAM Program to environmental justice communities, within the urban portions of Los Angeles, San Bernardino and Riverside counties, and all of Orange County. These communities are disproportionately impacted by air pollution from freeways, goods movement corridors, industrial facilities, and other sources.

Figure 1:South Coast AQMD map of jurisdiction

On February 1, 2019, the South Coast AQMD Governing Board approved the release of a Request for Proposals (RFP) to solicit proposals from individuals and organizations to provide assistance to conceptualize, develop and implement an air quality educational program for high schools in environmental justice communities throughout the agency's jurisdiction. Subsequently, after completion of the RFP process including an in-person interview before the South Coast AQMD Administrative Committee, the Lee Andrews Group was ranked as the most qualified firm. On April 5, 2019, the South Coast AQMD Governing Board approved the Administrative Committee's recommendation to select Lee Andrews Group as the firm to assist with the WHAM Program.

Lee Andrews Group worked with the South Coast AQMD to create and implement a process and outreach plan to place the WHAM Program into one hundred (100) high school classrooms within environmental justice communities by the end of the academic school year. With less than five months to complete the goal, Lee Andrews Group developed an aggressive plan to ensure success. The project remained on track to be implemented in 100 schools; but in March 2020, the State of California implemented a stay-at-home order due to COVID-19, which affected all schools. South Coast AQMD with assistance from Lee Andrews Group, quickly pivoted to offer WHAM via distance learning options.

/// LEE ANDREWS GROUP ///

Lee Andrews Group, Inc. is a Public Affairs firm specializing in communications, crisis communications, community engagement, local and state government relations and media relations for public and private agencies. Founded in 1993 with over 35 employees, Lee Andrews Group's mission integrates equity into all aspects of its business to become a more diverse and inclusive community partner. We believe businesses compete on trust, on responsibility, and on creating and maintaining deep relationships with their stakeholders rooted in shared truths and values.

The Lee Andrews Group team has extensive experience developing, managing and implementing community participation programs for environmental projects, and leading multifaceted projects related to infrastructure, transportation, planning, and land use. Our team members have direct experience in positions in local, state and federal government, in addition to the nonprofit, education and business sectors. We have expertise in assessing what is most important toward meeting goals and objectives for projects and moving them forward. Lee Andrews Group utilizes the latest strategies and techniques to successfully implement the WHAM Program.

/// TEAM & RESUME SUMMARIES ///

Stephanie Graves

Lee Andrews Group has assembled an expert team of professionals to execute the South Coast AQMD High School Program. Our team features:

Stephanie Graves, Principal in Charge —
Stephanie lends her personal network and leadership expertise to the project. Stephanie serves as the direct liaison to the South Coast AQMD Board of Directors and Executive staff, as well as many Superintendents and School Board Members in all four counties.

Stephanie Graves is the CEO and President of the Lee Andrews Group. Since 2013, Stephanie has helped guide the growth and direction of the firm. In addition to her management responsibilities, she personally consults and strategizes with clients on public affairs, public relations, media strategy, crisis communication, outreach & engagement, and government relations. Stephanie has consulted for government officials for many years and is well versed in working with the California government at the local, regional, state and federal levels. Stephanie has led the company's major transportation, planning, strategic government relations, as well as, media and community relations strategy activities.

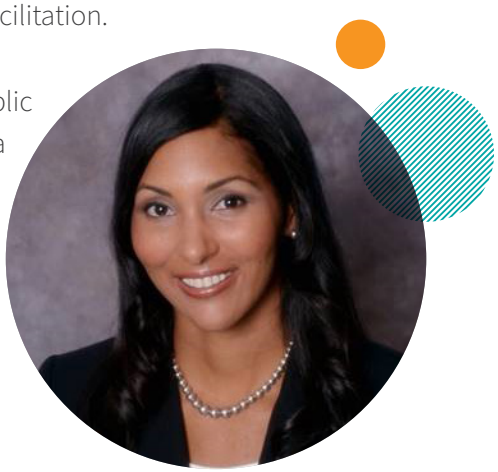
Stephanie holds a Bachelor of Science in Business Administration and a Juris Doctorate from the University of Southern California.

Eloy Morales, Strategic Advisor – Eloy provides leadership and strategic support to the project team. He has overseen the project as strategic advisor from the project start.

Eloy has over 20 years of experience working with government agencies and private companies within various positions. Mr. Morales has served at the executive level by working as Project Manager in Government Relations, and as Senior Strategic Advisor for environmental agencies and real estate development projects at Lee Andrews Group. He is accustomed to taking complex projects and developing a strategic plan that can be easily managed, while reaching a firm timeline. Mr. Morales specializes in understanding the perspective of elected and corporate leadership, allowing him the ability to establish the client's position without disturbing relationships.

Eloy received his Bachelor of Arts in History from Cal State, Northridge and holds a Juris Doctorate from Cal Western School of Law. He has served Inglewood City Council, 3rd District since 2003. Eloy is bilingual and biliterate in Spanish and English.

Krista Phipps, Project Manager – Krista brings management, economic development, and local government experience to the project. She offers expertise in staff development and project facilitation.



Krista has more than 18 years of experience in economic development, public policy, and public relations working within and around local governments. Krista has honed her experience by serving in local government elected offices, local government economic development agencies and the utility industry. She is a skilled professional specializing in community engagement, strategic visioning, economic development practices and leading project teams. She's adept in understanding core business objectives and processes, and translating those needs into clearly defined and easily implemented systems.

Krista holds a Master of Planning, Community & Economic Development Finance degree from the University of Southern California (USC) and a Bachelor of Art degree in Political Science from Rosemont College. She has served on several boards and has completed various continuing education leadership programs.

Chloe Lee, Assistant Project Manager – Chloe delivers superb research, analytical and data mining skills to the project.

Chloe is experienced in administering and executing communication and outreach programs for transportation agencies, environmental agencies and affordable housing developers for projects across the city and county of Los Angeles. She also works closely with school districts to secure participation and implementation for environmental education programs throughout Los Angeles, Orange, Riverside and San Bernardino Counties.

Ms. Lee is a skilled social media manager having developed and deployed social media and digital communication campaigns on behalf of several clients. She excels in Adobe Creative Suite programs and creates both digital and print collateral materials such as PowerPoint presentations, marketing and branding materials. She also produces communications pieces using the web, audio, video, and other digital media, which involve content creation, designing, production and programming.

Ms. Lee earned her Bachelor of Arts in Communications from California State University, Fullerton.

Melanie Wong, Outreach Specialist – Melanie brings community relations, marketing, outreach and project management experience to the project. She is skilled in identifying the appropriate contacts at the districts/schools to reach out to and in presenting the program in a way that resonates with teachers and results in participation and program implementation.

Melanie has nearly 10 years of project management, strategic communications and community relations experience. She has managed a diversity of multi-faceted projects and has executed integrated marketing, communications, and social media plans for public agencies in the transportation and environmental industries. Melanie is seasoned in leading multi-disciplinary teams and meeting project deadlines by managing schedules with comprehensive work plans and progress reports, budgets and other quality control measures to ensure services meet overall project goals. Melanie has worked extensively with environmental justice communities, and is proficient in meeting facilitation, strategic planning, digital marketing, strategic content development and meaningful public outreach.

Melanie studied public relations at Boston University and earned her Bachelor of Arts in Communication Studies from San Francisco State University. She fluently speaks Mandarin Chinese, Spanish and English.

Rosalba Gonzalez, Outreach Specialist – Rosalba brings political and community outreach experience to the project. She takes a hands-on approach to engaging teachers to ensure that they are prepared with what is needed to implement the WHAM Program.

Rosalba has 10 + years of experience in government relations, outreach and communications in the San Fernando Valley and in the greater Los Angeles County region. She has organized and managed programs and initiatives that promote community wellness, as well as coalition building and public policy development. Rosalba has worked in coalition with allied organizations, including the Los Angeles County Federation of Labor and other unions.

Ms. González studied Cultural Studies at Indiana University-Bloomington and graduated with a Bachelor of Arts from Mount Holyoke College. Rosalba has studied Labor Studies at the Los Angeles Labor Center. She is bilingual and biliterate in Spanish and English.

Joey Legaspi, Senior Account Associate – Joey has over 14 years of experience in government relations, strategic communications, and stakeholder engagement in Southern California. He is driven by a passion to serve and improve the quality of life for residents in our communities through engagement with elected officials, community leaders and the media. Joey has been responsible for the design and implementation of strategic stakeholder engagement initiatives, development of communications materials, and effective advocacy campaigns. This background will be key towards serving the goals of the WHAM Program.

Prior to joining the Lee Andrews Group, he served one of Southern California's largest water agencies working on key environmental issues such as water quality and water supply. This tenure included managing a team that was responsible for the agency's conservation and environmental education programs, which were designed to engage constituents on the importance of environmental stewardship. His tenure also included serving as the agency's representative to local, state and federal elected officials, where he worked to build awareness of water issues as well as seek support for the agency's programs and projects.

Mr. Legaspi holds a Bachelor of Science degree in Business Administration from California State University Los Angeles and a Master of Communication Management from the University of Southern California (USC). Joey is bilingual.

Andres Rodriguez, Outreach Support – Andres brings community outreach and engagement experience to the project. He meets with teachers one-on-one to train them on the Kids Making Sense® materials and provides support to the entire project team.

Andres is an Outreach Assistant at Lee Andrews Group. He specializes in Spanish-speaking communication strategy and community outreach for transportation agencies, environmental agencies, affordable housing developers, and projects. He utilizes engagement to empower stakeholders to increase their participation in local and regional planning processes. Andres works in environmental justice communities and with a range of community members and community leaders, including educators, seniors, non-profit organizations, religious groups, business owners, and youth. Andres is bilingual in English and Spanish both verbally and written.

Andres received his Bachelor of Arts degree in Urban Studies and Planning with an emphasis in Environmental Planning at California State University, Northridge.

/// ORGANIZATIONAL CHART ///

South Coast AQMD

STEPHANIE GRAVES
Principal in Charge

ELOY MORALES
Strategic Advisor

KRISTA PHIPPS
Project Manager

CHLOE LEE
Asst. Project Manager

MELANIE WONG
Outreach Specialist

ROSALBA GONZALEZ
Outreach Specialist

JOEY LEGASPI
Sr. Account Associate

ANDRES RODRIGUEZ
Outreach Support

Year 1

/// APPROACH ///

In order to reach at least 100 schools across four counties, Lee Andrews Group developed a comprehensive outreach plan to make contact with the appropriate school district leadership, administrators, faculty and teachers, introducing them to the program as an added resource, and ultimately generate their agreement for implementing the Program in their schools.

Team Model

Based on experience, research and discussions with school district administrators, Lee Andrews Group determined that approaching leadership was the most appropriate method to initiate outreach. Each member of the Lee Andrews Group team focused on a geographic region to maximize outreach and maintain consistency. This strategy proved successful, by allowing our team to provide individualized support to each school district and classroom teacher. Our team is trained and empowered to utilize the tactics that they deem most effective when implementing outreach measures and ultimately securing relationships. The team leverage these relationships to educate their audience about the benefits of the WHAM Program to students and their communities.

The Lee Andrews Group team met regularly with South Coast AQMD to provide recommendations and gather feedback and approvals for the Program. The South Coast AQMD team, led by Monika Kim, has been integral to our success. Monika ensured that we were given appropriate direction in order to carry out the South Coast AQMD's vision. We utilized our weekly opportunity to meet with South Coast AQMD to discuss goals, deliverables, key performance indicators and milestones to ensure that the project remained on track toward timely completion. Additionally, these weekly meetings allowed our team to have our questions addressed and present our recommendations for approval. We also held consistent internal meetings to discuss the progress of strategic and efficient planning, to further develop the internal infrastructure needed to implement the outreach plan, and to divide tasks as needed. Additionally, we regularly reported to our senior leadership on the status of the Program, and informed them of any elevated matters requiring their attention.

Research Based; Data Driven

As a leading environmental advocacy organization, South Coast AQMD is committed to research-based, data-driven strategies to inform the high school educational WHAM Program. Accordingly, when developing the outreach plan to implement the WHAM Program, Lee Andrews Group relied heavily on South Coast AQMD's data recommendations, and adapted when additional research was needed to find the best approaches. We conducted our own research when needed, both empirical and anecdotal, with the specific goal to use factual outcomes to improve our process. Quantifying our outcomes provided a better sense of the efficiency and effectiveness of the strategies that we employed, allowing improvement changes to be made where necessary. An example of this approach can be seen in section "K" below in our work with LAUSD.

/// DELIVERABLES ///

Per the scope of work, Lee Andrews Group was responsible for executing deliverables including: development, implementation, program evaluation and reporting. The following are specific deliverables during Year One:

Development

1. Developed an overall project tracking system to:
    a. Monitor tasks;
    b. Track all stakeholders (organizations and schools) contacted (including entities that decided not to participate), their contact information and the process for gaining participation by school;
    c. Track waitlisted schools interested in participating in the program; and
    d. Track Kids Making Sense® educational kits that list each item and establish a system to distribute, collect and replenish materials on an on-going basis.
2. Learned how the Kids Making Sense® curriculum by Sonoma Technology Inc. could be best utilized to achieve South Coast AQMD's goals.
3. Developed presentation materials, fact sheets and other outreach materials needed to present the Program.
4. Developed a detailed Program Implementation Plan that included:
    a. Overall outreach program description and guidelines;
    b. The best outreach approach including any requirements, limitations and/or restrictions;
    c. Outreach strategy;
    d. South Coast AQMD's air quality educational message (AB 617, AQ-SPEC, and other environmental justice related issues) and agency awareness;
    e. Criteria to identify and select 100 schools within environmental justice communities;
    f. Prioritization of a target list of high schools with a brief description of justification for selection;
    g. Scheduling based on academic and administrative calendars; and
    h. Methodology and materials to share with schools that were not participating in the Program and schools that would like to contact Sonoma Technology Inc. to purchase their own Kids Making Sense® educational kits.

Implementation

1. Implemented and executed outreach program at each school site;
2. Coordinated with the appropriate school contact and South Coast AQMD staff person;
3. Assisted with scheduling teacher training at schools;
4. Facilitated any other needed details for successful implementation; and
5. Provided support to teachers with regard to the kits, educational materials, and Program inquires.

Program Evaluation & Reporting

1

Created a program evaluation methodology, which includes a questionnaire and mechanism to collect data from school administrators, teachers and students;

2

Prepared report summarizing all elements of the High School Air Quality Education Program including:

a. *Planning process*
b. *Implementation*
c. *Procedures including any customization for particular schools*
d. *Full evaluation of the Program from administrators, teachers and students*
e. *Summary of reasons why schools did not participate*
f. *Recommendations for the future of the Program*

3

Regularly updated South Coast AQMD through project meetings.

/// PROGRAM ELEMENTS ///

In addressing the deliverables of the scope of work, in order to implement the WHAM Program, Lee Andrews Group determined that the following were key elements to be addressed:

Outreach

In coordination with South Coast AQMD, Lee Andrews Group developed an outreach plan with set deadlines, as well as specific messaging strategies to be used when introducing the Program. The levels of outreach included:

1. Initial engagement at the district level with superintendents and elected school board members;
2. School site engagement with principals and vice principals; and
3. Classroom teacher engagement.

Success at one level was necessary to move to the next level. The outreach plan served as a key for guiding the engagement strategies at each level. For example, after successfully garnering interest and agreement to participate at the school district level, our team was able to move on to individual school site engagement. Within this step it was important to turn to school principals and curriculum specialists at each high school to select the most appropriate classroom teacher to participate in the Program. This collaboration with the administrators at the school site level, ensured successful implementation in classrooms that were most receptive to the Program due to:

1. Teacher willingness to implement the Program in their classroom;
2. Classroom time and availability;
3. Classroom size (number of students); and,
4. Existing curriculum topics (i.e. air pollution unit in AP Environmental Science classes).

Although this sequential methodology was successful in most cases, Lee Andrews Group remained flexible when it became necessary to adjust. For example, after receiving approval from the school district, teachers were immediately engaged and Principals followed suit after teacher engagement.

Tracking System

South Coast AQMD provided Lee Andrews Group with a project tracking sheet template in order to log all accomplished deliverables throughout Year One of the Program. This allowed our team to track all aspects of the project from overall Program inception to the completion of weekly tasks. Lee Andrews Group found it best to assign one team member to serve as the Point of Information (POI) to oversee the accuracy and updating of the tracking sheet. This system ensured that all information could be tracked and accessed in one place, in order to avoid any confusion or misinformation amongst each Outreach Specialist. The Excel tracking sheet specified each task, who was assigned to complete the task, and the anticipated due date. This specified the responsible party for each deliverable in the beginning of the project. Please see attachment 4 for the Year One Project Tracking Checklist.

MONTHLY REPORT TEMPLATE

During the first two months of the Program, Lee Andrews Group and the South Coast AQMD team worked together to develop a mutually agreed upon monthly report format that effectively communicates the activities and outcomes for that month. Each monthly report included narrative regarding the goals met and how our team handled any hurdles that we faced in outreach and/or implementation. The reports also included data and statistics on deliverables, allowing us to continuously track progress throughout the Program and adjust strategies whenever necessary. Overall, it was important to Lee Andrews Group to provide a report each month that would be accurately informative, demonstrating the success of the Program and its process, equally highlighting any needs or concerns.

YEAR ONE CLOSING REPORT

A key deliverable of the scope of work required Lee Andrews Group to provide a comprehensive year end closing report which documents the key elements of the Program, the process required to implement the Program, key outcomes, and lessons learned. This report memorializes the experience of Year One's implementation and serves as a reference to support future Program improvements.

STANDARDIZED PROGRESS REPORTING

At the inception of the Program, South Coast AQMD and Lee Andrews Group determined that it would be efficient to conduct weekly conference calls for both teams to report on the progress of deliverables and time-sensitive tasks. In order to track progress and topics covered on weekly calls and in daily correspondence, agendas were created beforehand to guide discussions and track pending deliverables with respective deadlines. Additionally, minutes were completed and provided to both teams via email after each weekly call to track assigned tasks and responsibilities. South Coast AQMD and Lee Andrews group maintained daily correspondence by email and phone when necessary and if there was a project update that needed immediate attention.

Waitlist and Non-participant List

Lee Andrews Group developed a robust project database that tracked all progress throughout the outreach process and Program implementation. While the majority of the targeted schools were eager to participate in the Program, not all school districts were able to participate in year one for various reasons. For example, some high schools had rigorous onboarding requirements that could not be accommodate. Likewise, waitlisted and non-participant data was tracked in the outreach tracking database.

Lessons Learned

Lee Andrews Group established a variety of databases and systems to track the Program. This allowed our team to track the lessons learned for the 2019-2020 academic school year, and identify recommendations that would improve the Program for the future years. The lessons learned and recommendations were presented to South Coast AQMD at an in-person mid-program evaluation meeting. At this meeting, both teams reviewed the pros and cons of the program at that point and worked collaboratively to put new strategies and plans in place for the remainder of the program.

/// METHODOLOGY ///

The initial focus for Lee Andrews Group's work consisted of working with the South Coast AQMD team to determine primary objectives for the Program. The three primary objectives of South Coast AQMD were identified as: 1) Implementing the WHAM program in 100 high schools; 2) Engaging and developing relationships with school leadership, faculty and teachers; and 3) Promoting the South Coast AQMD's message.

Once the South Coast AQMD's objectives were clearly defined, Lee Andrews Group determined how to accomplish the objectives. We identified the following steps:

1. Identify high schools within the four regions and then narrow that list to a target list of high schools meeting the criteria established by the South Coast AQMD;
2. Identify high school administrators to reach out to in order to initiate relationships and collect contact information;
3. Determine the requirements needed in order for South Coast AQMD staff to enter schools, and how to meet those requirements;
4. Develop a process for scheduling and distributing materials; and
5. Determine reporting infrastructure, including KPIs, to track and report incremental results.

High School Standard Curriculum

The primary goal of the Why Healthy Air Matters Program is to reach students by using a leading scientifically-based educational curriculum, to expose students to the study of air quality and why it's important. The Kids Making Sense® curriculum aligns with many of the existing high school standards. Below are the eight units featured in the curriculum with the associated California state educational standards that are met within each unit.

WHAM Topic	Relevant High School Standards
Our Air and Pollution	*HS-ESS3-4, CCSS ELA*
Particle Pollution	*CCSS ELA and Math*
Particle Sources	*HS-ESS2-2, HS-ESS3-4, CCSS ELA and Math*
Health Effects of Particles	*HS-LS2-7, CCSS ELA and Math*
Measuring Particles	*CCSS ELA and Math*
Field Measurements	*HS-PS4-2, HS-PS4-5*
Interpret Your Data	--
Be Part of the Solution	*HS-ETS1-1, HS-ESS2-2, HS-ESS3-4, CCSS ELA & Math*

Participating in WHAM provides students with an additional option to learn about air quality which will help them not only with learning the curriculum, but with developing healthy environmental habits.

/// PROCESS ///

Implementation of the program was successful because it was based on a comprehensive process. After defining the primary objectives and developing an outreach framework, Lee Andrews Group developed a step-by-step process that outlined the actions necessary to achieve the project's goals. This process was devised and approved after multiple iterations. Figure 2 on the following page depicts the 10-step process for implementing the WHAM Program.

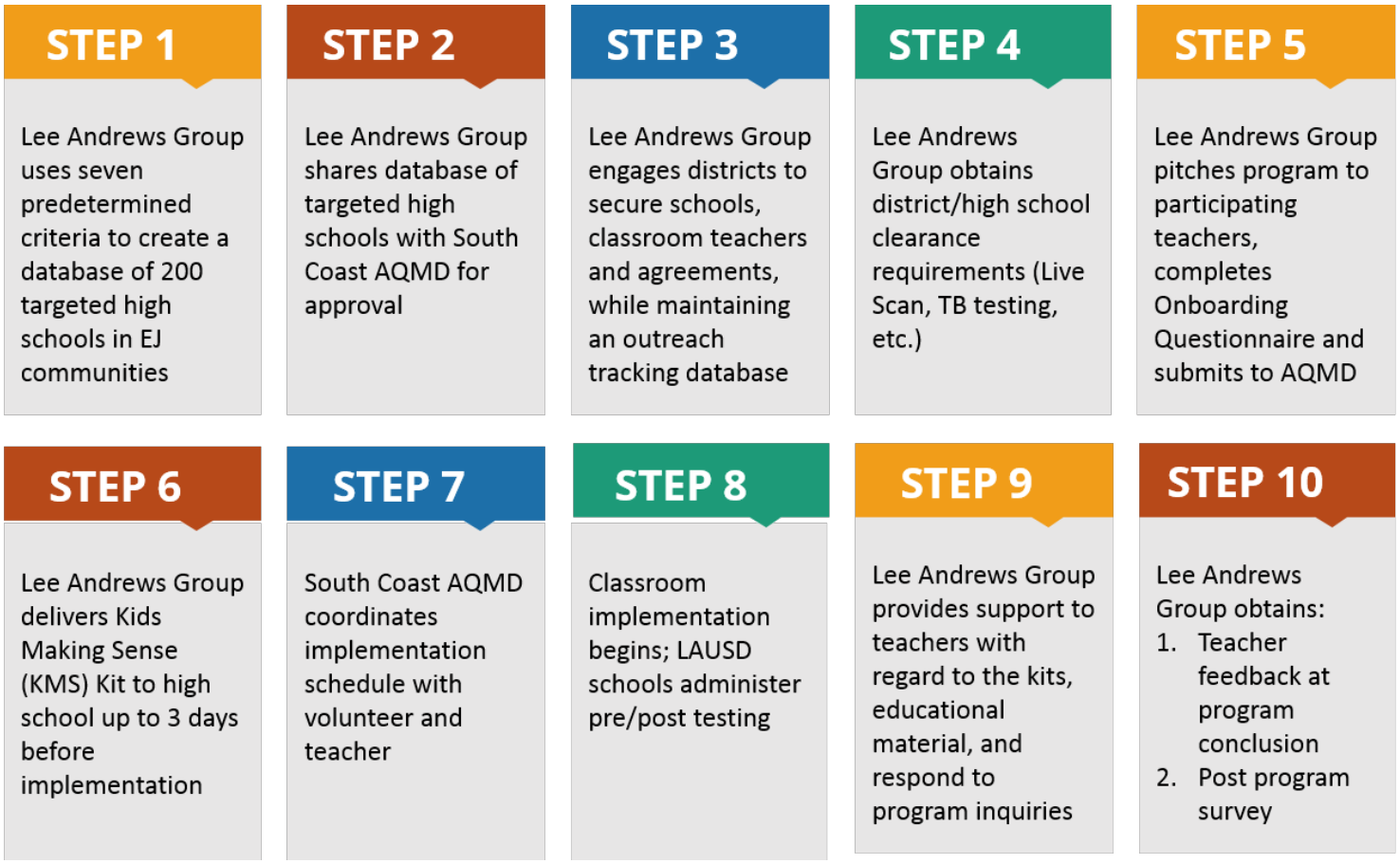


Figure 2: WHAM Implementation Process

Below are the additional areas of focus that Lee Andrews Group addressed in order to move toward implementation.

Familiarization & Training on the WHAM Program

In order to successfully introduce the WHAM Program and the Kids Making Sense® (KMS) curriculum to school districts and teachers, it was important for the Lee Andrews Group team to know and understand the curriculum thoroughly. Through partnership with Sonoma Technology Inc., South Coast AQMD coordinated a one-day curriculum training for the Lee Andrews Group team and South Coast AQMD volunteers. This training took place in July 2019. All attendees had the opportunity to go through each unit and activity for the entire curriculum. Attending this training session provided Lee Andrews Group with:

1. The ability to successfully introduce the Program at the district level and relay the importance of implementing the air quality curriculum in the classroom;
2. The ability to assist the teacher in selecting the most appropriate and relevant lessons to implement based on the structure and dynamics of the classroom; and
3. The ability to support the teacher with planning out each lesson, as well as using and troubleshooting the KMS kit materials

Research

When initially approaching this work, Lee Andrews Group was met with the need to conduct an abundance of research before any outreach planning or implementation could begin. Much of this research is outlined in the process that we developed. This included identifying all high schools within the four counties, gathering contact information for school district leadership, familiarizing ourselves with school requirements, and bringing volunteers on campus, the Kids Making Sense® curriculum and the selection criteria, which is enumerated below.

South Coast AQMD utilized GIS mapping systems to identify which criteria each high school met. They prioritized school districts and high schools based on geographic location using key indicators such as environmental justice factors, exposure to harmful air pollutants, proximity to toxic release facilities, and more. South Coast AQMD utilized several resources including legislative, the California Air Resources Board (CARB) and the California Office of Environmental Health Hazard Assessments (OEHHA), in addition to developing their own standards, and established the following six criteria as a basis for the high school selection process:

1

Assembly Bill (AB) 617 - identifies environmental justice communities that are disproportionately impacted by air pollution.

High schools falling within the parameters identified in AB617 and located within the South Coast AQMD jurisdiction were prioritized as primary targets for Year One implementation.

2

Assembly Bill (AB) 2588 - identifies high schools that are located within two miles of air toxics "hot spot" facilities.

Schools from the provided list were selected and prioritized as secondary targets for program implementation.

The two criteria mentioned above make up tier one of the selection process, while the following criteria make up tier two.

3. Senate Bill (SB) 535 - identifies disadvantaged and low-income communities that are "disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation."
4. Multiple Air Toxics Exposure Study IV (MATES IV) - interactive map that estimates carcinogenic risk from exposure to air toxics by geographic location.
5. Goods-Movement - high schools near rail yards, intermodal facilities, and the Ports of Los Angeles and Long Beach.

6. California Communities Environmental Health Screening Tool (CalEnviroScreen 3.0) - identifies communities that are disproportionately burdened by, and vulnerable to, multiple sources of pollution. Only data for air pollution is considered for the criteria category. The tool offers data for air, soil and water, but for the sake of the South Coast AQMD's High School Air Quality Educational program, we will focus only on air pollutants. Of the various indicator maps that are offered, the following will be used to select high schools that fall within the 50% and above percentile for the following:
    a. Exposure Indicators - Ozone, PM2.5, Diesel Particulate Matter, Pesticide use, toxic releases from facilities, traffic density
    b. Environmental Effect Indicator - cleanup sites, hazardous waste generators and facilities, solid waste sites and facilities

All six criteria categories were used to prioritize targeted high schools for implementation during Year One.

Contact Identification & Management

Using the list of over 100 targeted high schools and their respective districts, our team created a system for identifying the appropriate contacts. Initial research was conducted by school district and logging Superintendent and any additional relevant staff for each Superintendent' office. Lee Andrews Group established a database specifically for district contacts, allowing us to easily track and update contact information.

Figure 3 below displays an example of the contacts established for one high school district within the database, which was referred to as the "Outreach Contact List."

District	Name	Contact Title	Phone Number	Email Address	Responsible
Pomona Unified School District	Paul Knopf	Service Learning Coordinator	[redacted]	[redacted]	C. Antonelli
	Cindy Green	Assistant Principal at Garey High School	[redacted]	[redacted]	C. Antonelli
	Jennifer Francev	Principal at Ganesha High School	[redacted]	[redacted]	C. Antonelli
	Elizabeth Harper	Principal at Pomona High School	[redacted]	[redacted]	C. Antonelli
	Stacey Wilkins	Administrative Director, Innovation and Improvement Officer	[redacted]	[redacted]	J. Williams/D. Williams/C. Antonelli

Figure 3: Pomona Unified School District contacts taken from Outreach Contact List

Upon identifying the most appropriate high schools to target for outreach, Lee Andrews Group worked to secure approval from South Coast AQMD to target those schools. The next step was to identify the best contacts at the administrative and leadership level for outreach to begin. This allowed us to garner program participation and select the most appropriate classes and teachers to implement the program. Moreover, Lee Andrews Group senior staff reviewed the list and called Superintendents or School Board Members directly based on their prior relationships. Securing this support from school leadership was an essential first step in moving the Program forward as generating interest in the Program, and support from the top is more likely to encourage teachers to participate. Lee Andrews Group approached this task by conducting intense internet and telephone research, contacting each school district and working the phones until we got to the right contact.

High School Academic Year Schedule

After finalizing the list of 100 participating high schools for the Year One Program, our team located the 2019-2020 academic calendars for each district within the four counties. By visiting each district website, we tracked the important semester start and end dates. Our team also conducted phone outreach to each high school, to confirm when high school administrative staff would be on break, and when they would return throughout the school year. This was necessary for determining the best times to reach out to principals and teachers, as well as setting outreach deadlines before we would no longer be able to reach school staff due to recesses. Attachment 6 displays one database in which we tracked who would be available on campus in order to effectively plan outreach after the summer break.

School Policies & Procedures

One of the main features of the WHAM program is offering classroom teachers the option to have a South Coast AQMD volunteer conduct the desired lesson plans in the classroom. With this, it was our responsibility to work with districts and school sites to determine the requirements for South Coast AQMD representatives to visit each campus. Lee Andrews Group conducted initial research to determine the requirements and prepare accordingly. The research showed that at a minimum, South Coast AQMD volunteers would most likely be required to complete Live Scan fingerprinting and TB testing.

Upon working with the school districts and individual school sites, our team learned that there were more rigorous requirements in some cases. Below are a few requirements that were requested, but could not be accommodated by South Coast AQMD:

1. Sexual Abuse and Molestation (SAM) insurance coverage;
2. Subsequent arrest notifications; and
3. Live Scan fingerprinting through the school district rather than a third-party vendor.

In the cases where requested requirements could not be met, our team worked with the school district to have the requirements waived or loosened. If there was no way to lift the requirements, our team encouraged the participating teacher to implement the curriculum independently, and we served the teacher with support every step of the way.

Implementation

After completing all clearance requirements for volunteers to visit participating classrooms, Lee Andrews Group assisted South Coast AQMD with the scheduling process. Our team worked with each teacher to match up their classroom schedule with the availability of the South Coast AQMD volunteer. It was our team's responsibility to maintain communication with teachers and obtain the following details:

1. Specific course (i.e. AP Environmental Science, Earth Science, Biology, etc.);
2. Class period details, such as the days of the week and time of the day for implementation; and
3. Desired implementation frequency (i.e. twice a week on Mondays and Wednesdays).

This information allowed South Coast AQMD to select the most appropriate volunteer for each classroom, based on availability and expertise. Through the process of confirming scheduling details, our team assisted South Coast AQMD with maintaining a calendar, known as the WHAM Staff Assignment Calendar. Lee Andrews Group notified South Coast AQMD of any scheduling or availability changes on the teacher's side, in order to keep the calendar up to date. See a snapshot of implementations for the month of January 2020 on the next page.

January 2020

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
			1	2	3	4
5	6	7 Danielle Soto - Cabrillo HS - 7:50 am (1)	8	9	10	11
12	13	14 -Danielle Soto - Cabrillo HS - 7:50 am (2) -Victor Yip - South El Monte HS - 8 am (3)	15 -Marvin Ignacio - Redlands East Valley HS - 7:30 am (1)	16	17 -Hannea Cox - Beaumont HS - 8:55 am (1) -Kevin Chiu - Jordan HS - 7:45 am (5)	18
19	20	21 -Jeanette Short - Edgewood HS - 10:01 am (1) -Jimmy Li - Theodore Roosevelt HS - 9:15 am (1)	22 -Kathryn Higgins - Washington Prep HS - 2:15 pm (1) -Marvin Ignacio - Redlands East Valley HS - 7:30 am (2&3)	23 -Steve Tsumura - Boyle Heights STEM - 7:50 am (1) -Alberto Jasso - Bell Gardens HS - 10:23 am (2) -Derrick Alatorre - Garfield HS - 8 am (2)	24 Monika Kim - Downtown Business Magnet HS - 8:35 am (1) -Rezvan Ramezani - Science Academy STEM - 10:30 am (1) -Jimmy Li - Theodore Roosevelt HS - 9:15 am (2&3)	25
26	27	28 Victor Yip - South El Monte HS - 8 am (4)	29 -Alberto Jasso - Bell Gardens HS - 10:23 am (3) -Marvin Ignacio - Redlands East Valley HS - 7:30 am (4)	30 -Debra Ashby - Cypress HS - 10:20 am (1) -Jimmy Li - Theodore Roosevelt HS - 9:15 am (5) -Steve Tsumura - Boyle Heights STEM - 7:50 am (2)	31 Stephano Padilla - Downtown Business Magnet HS - 8:35 am (2)	

Figure 4: WHAM Staff Assignment Calendar

/// PROGRAM DEVELOPMENT ///

Key elements led by Lee Andrews Group to support implementation of the WHAM program included:

1. Development of marketing materials to present program to school districts and schools;
2. Development of classroom etiquette and school procedures guide for South Coast AQMD staff;
3. Recruiting and hands-on training for South Coast AQMD staff and volunteers
    a. One-day comprehensive training session;
    b. Teacher meetings prior to South Coast AQMD staff visiting each campus;
4. Evaluation and modifications to Kids Making Sense® curriculum to align with air quality issues and programs important to South Coast AQMD;
    a. Work with Sonoma Technology Inc. to modify and print teacher and student workbooks;
5. Development of South Coast AQMD WHAM web page;
6. Drafting and facilitation of execution of Agreements with schools;
7. Creation and administration of onboarding questionnaires;
8. Creation of tracking and monitoring database that allows for viewing of an immediate snapshot of each participating school status and place within the process. Other variables monitored in the tracking system included:
    a. relationship management information -including emails, memos, phone calls, etc.
    b. kit delivery/collection
    c. South Coast AQMD volunteer assignments
    d. onboarding questionnaire/survey distribution/collection;
9. Creation of a waitlist for schools interested in future participation in the program; and
10. Tracking of schools that expressed interest in purchasing their own Kids Making Sense® kit.

School	County	District	School Address	Criteria
Benjamin Franklin High School	LA	LAUSD	820 N Ave 54, Los Angeles, CA	2, 4, 6

Teacher	Onboarding Questionnaire	Desire AQMD Volunteer in Clas	Kit Delivered	Student Workbooks
Name Jomel Villamil Email: jxv0362@lausd.net	✓	Yes	#50	Received 10

Assigned AQMD Volunteer	First Implementation	Kit Retrieved	Program Survey Received
Ryan Banuelos	10/30/2019	2/14/2020	✓

Figure 5: Benjamin Franklin High School program tracking, taken from WHAM "Activity Database"

/// OUTREACH ///

In its first year of implementation, this Program required an intense system to introduce the goals, objectives, and benefits of the Program to each school district, school administrator, and teacher. The primary components of the outreach strategy included: relationship management, messaging, tracking, monitoring and evaluation.

Relationship Management

From the outset of this project, Lee Andrews Group team members availed their existing personal relationships with key decision makers in many of the targeted school districts and high schools. We leveraged our relationships to develop and foster new personal relationships where existing personal relationships did not yet exist. These relationships helped us become more familiar with school cultures and procedures which paved the way for Lee Andrews Group to cultivate meaningful relationships with decision makers possessing the authority to approve the Program participation.

Lee Andrews Group team members developed and executed a plan which consisted of the following steps:

1. Recommended 33 school districts for participation in the Program;
2. Secured in-person meetings with school district superintendents whose schools met South Coast AQMD criteria for Program implementation;
3. Created a presentation and talking points for South Coast AQMD staff to introduce the Kids Making Sense® Program; and
4. Developed a package of South Coast AQMD branded outreach materials.

These first meetings generated enough interest in the Program for further conversations with key school district staff and administrators to garner support and district buy-in. This process set a path to school administrators and teachers.

Once the school district superintendent approved South Coast AQMD's WHAM Program, Lee Andrews Group moved on to the second stage in its outreach strategy.

Lee Andrews Group obtained approval from administrators to work with principals and vice principals to identify classroom teachers best suited for participation in the Program. Our team then commenced direct outreach to recommended teachers to introduce the Program goals, expectations and Sonoma Technology Inc. Kids Making Sense® materials.

Our team engaged in regular communication with participating teachers that helped build a trusting working relationship. Our check-ins encouraged teachers to reach out with any questions or concerns before, during, and after they implemented their first lessons. We wanted to ensure that participating teachers felt support throughout the Program.

Our Lee Andrews Group team solicited and captured teacher feedback by following up with the teacher after the initial lesson and by distributing a survey to those who completed the Program.

Messaging

Just as it is important to the South Coast AQMD that the WHAM Program curriculum is absorbed by students, branding and messaging is also critically important. Lee Andrews Group worked with South Coast AQMD to develop collateral outreach materials designed to introduce potential participants to and evoke interest in the Program. Key messaging was designed to explain:

1. South Coast AQMD's mission involving environmental justice and why the school sites were chosen for potential participation, as well as the specific environmental justice issues pertaining to each school site;

2. How the Program reinforces a Science, Technology, Engineering and Math (STEM)-based educational curriculum that offers specific examples introducing disciplinary core ideas (DCIs), specific experiments that reinforce science and engineering practices (SEPs) and crosscutting concepts (CCCs) that reinforce DCIs when linked together;

3. The accessibility of the Program to students of all learning modalities (visual, auditory, kinesthetic and tactile), and that each lesson in the Program is designed with multiple access points for learning by using a diversity of experiments and activities; and

4. The use of applied science and Bloom's Taxonomy of cognitive skills for students to draw larger social justice implications surrounding the issue of clean air.

Collateral materials served individual purposes throughout the outreach process, starting from the district level and working down to the classroom teacher. The following is a list of outreach materials that were prepared by our team with South Coast AQMD's guidance and approval every step of the way:

- Program brochure
- Program introduction PowerPoint presentation
- Agreement template
- Volunteer etiquette guide
- Welcome packet
- Onboarding questionnaire
- Program exit survey

See attachment 2 for collateral material samples.

Upon securing classroom teacher participation, onboarding materials were distributed including a KMS Teacher's Guide and an onboarding questionnaire. Based on responses to the onboarding questionnaire, our team set a schedule and record of tentative dates for the first classroom implementation. Lee Andrews Group worked closely with South Coast AQMD to schedule the staff volunteer classroom sessions.

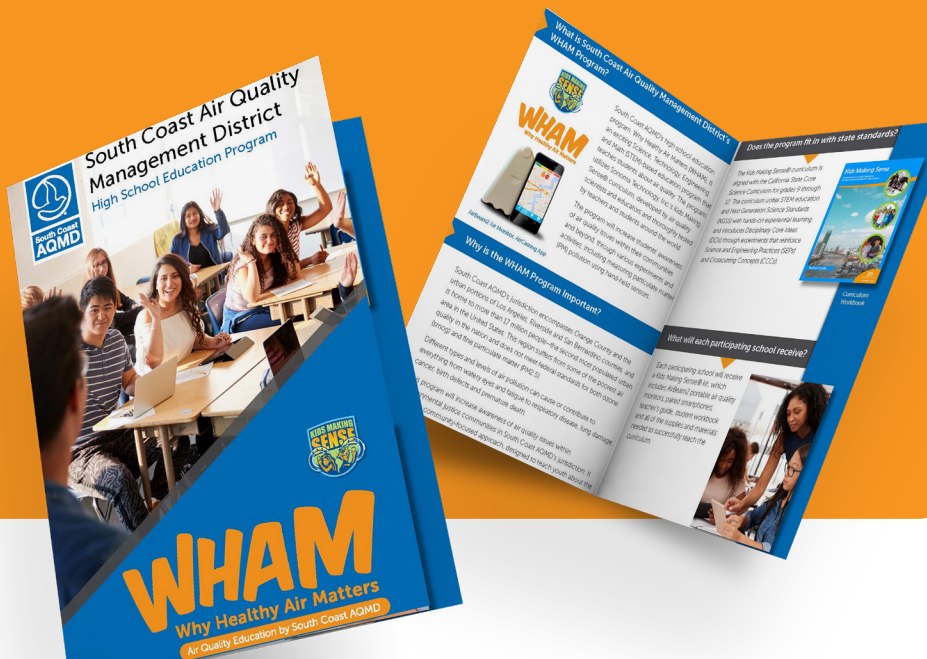
Tracking, Monitoring and Evaluation

Over the course of the first year, Lee Andrews Group developed an in-depth database that tracked all engagement data and activities with all stakeholders including administrators, faculty, teachers and South Coast AQMD staff.

Lee Andrews Group worked with South Coast AQMD staff to develop the following tracking mechanisms to assist with monitoring progress and recording data:

- An onboarding questionnaire to gain a better understanding of the teacher's needs, what topics they were interested in teaching, when they wanted to implement the Program and whether they were interested in working with a South Coast AQMD volunteer.
- A teacher evaluation form after completion of the Program to assess the teacher's reaction to the Program and to collect any suggestions for improvement.
- Records were kept of all communication, regardless of school participation.

Attachment 5 illustrates the data tracked throughout the process.



/// OUTCOMES ///

South Coast AQMD's key objective for the WHAM Program was to introduce the air quality curriculum to 100 high schools in Los Angeles, Orange, Riverside and San Bernardino counties. In order to help South Coast AQMD achieve this goal, Lee Andrews Group developed and carried out an outreach plan that led to the implementation of the program in 44 classrooms during the first year.

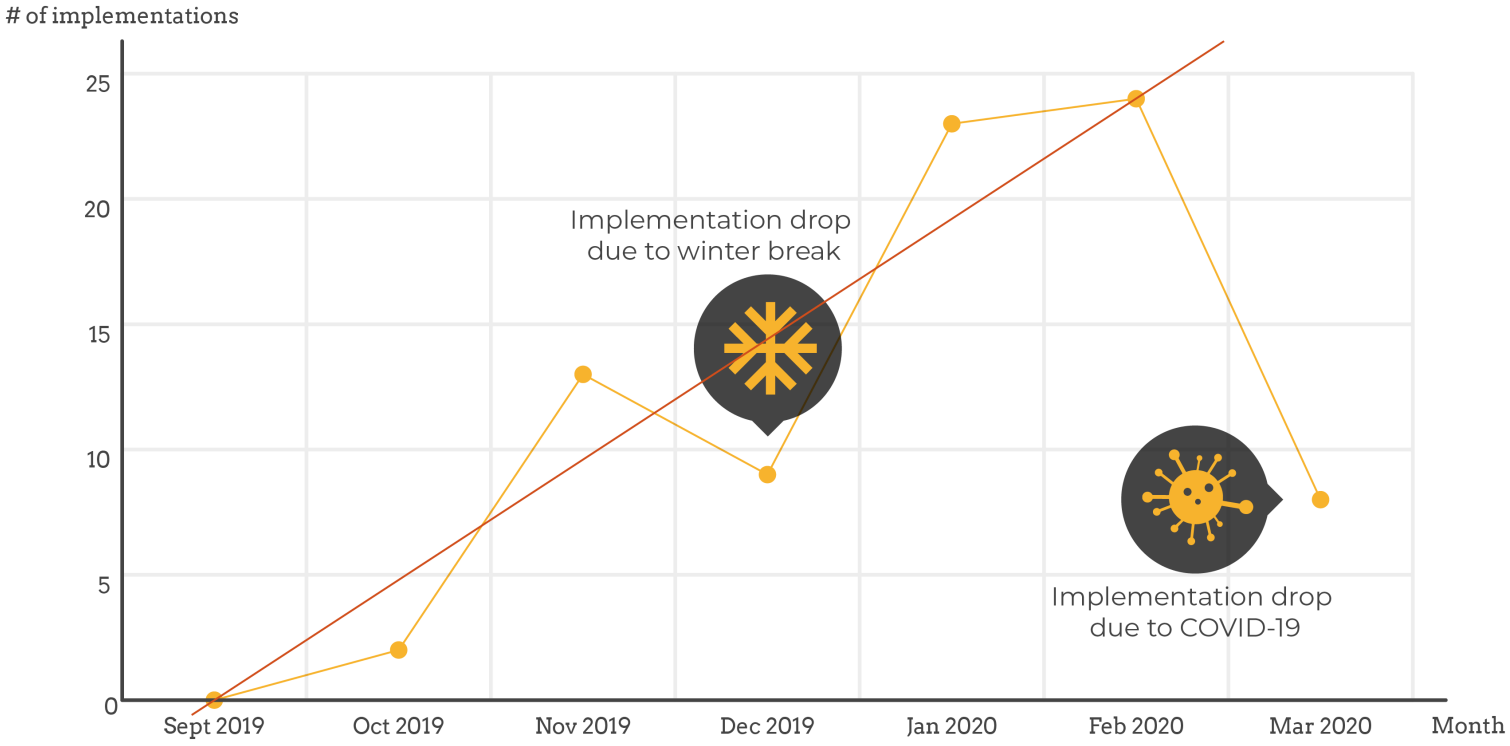


Figure 6: Implementations trending over Year 1

The line graph displayed above reflects the number of implementations that took place between September 2019 - March 2020. There was a consistent increase in the number of implementations each month during this 7-month time period. There was a decrease in implementations in the month of December due to losing 3 weeks during Winter Break, as well as a decrease beginning in March due to the COVID-19 pandemic. Aside from these two exceptions, implementations were on a consistent rise. See the data that makes up the line graph below:

- September 2019 – 0 implementations
- October 2019 – 2 implementations
- November 2019 – 13 implementations
- December 2019 – 9 implementations
- January 2020 – 23 implementations
- February 2020 – 24 implementations
- March 2020 – 8 implementations

For tracking purposes, our team has aggregated a number of Program outcomes into the following categories.

Outreach

Lee Andrews Group accomplished the following objectives during the outreach phase:

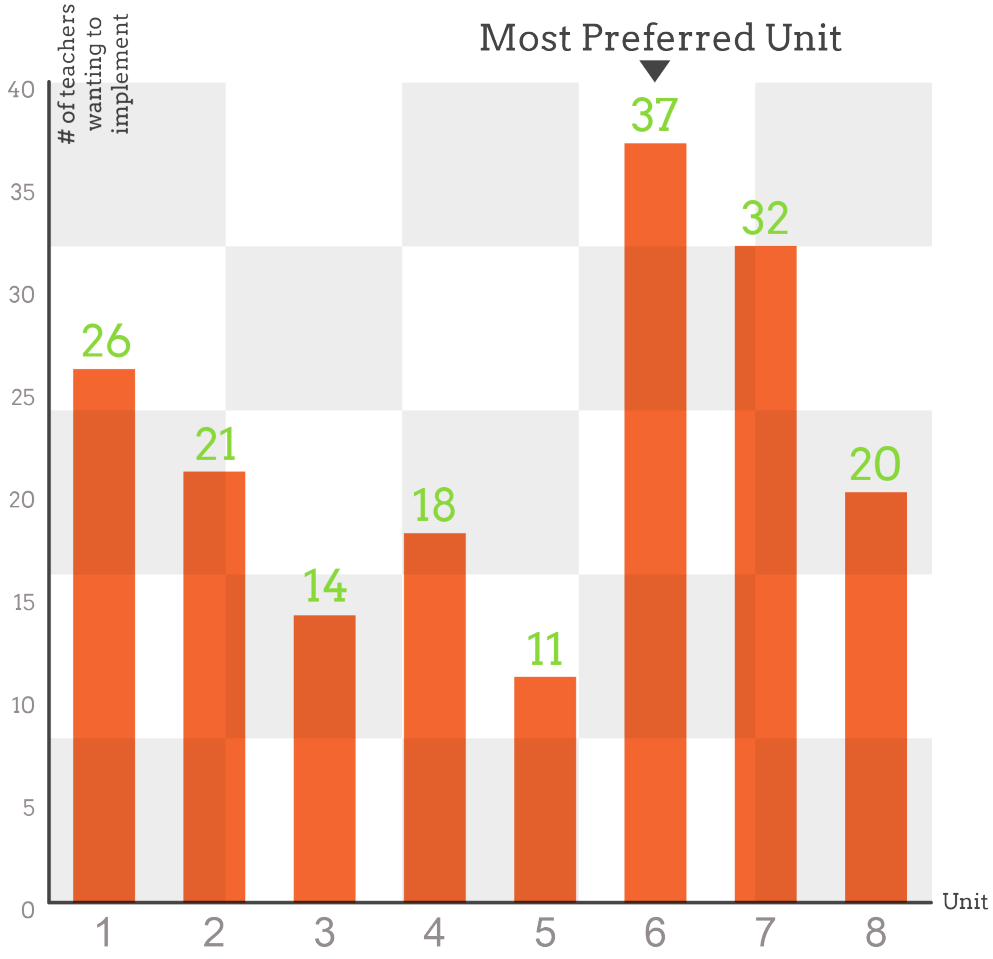
- Conducted approximately 166 meetings with district administrators and school site staff
- Executed 32 program Agreements
- Received 84 Onboarding Questionnaires

Implementation

Lee Andrews Group accomplished the following objectives during the implementation phase:

- Delivered approximately 74 KMS kits to participating classrooms
- Provided implementation support to 34 classroom teachers
- Maintained consistent communication with 100 classroom teachers

There was a large tip in the scale for desired implementations in the second semester. Of the 84 onboarding questionnaires received, 73 classroom teachers requested to begin the program in the second semester (86%). Many of these anticipated implementations were scheduled, or in the process of being scheduled, before the unexpected COVID-19 pandemic.



As mentioned in section G above, part of the outreach process included obtaining an onboarding questionnaire from each participating teacher. In this questionnaire, teachers were asked which units of the curriculum they wanted to implement in their classroom. In many cases, teachers were not able to implement all eight units of the curriculum. With that in mind, our team felt it was important to track which units were chosen when teachers had to be more selective, showing us which units they found most valuable. The bar graph to the left depicts each unit and how many teachers desired to implement that unit in their classroom.

Figure 7: Teacher preferred units

Using the data displayed on the bar graph, our team ranked the eight units from most desired to least desired:

- Unit 6 - Field Measurements – 37
- Unit 7 - Interpret Your Data – 32
- Unit 1 - Our Air and Pollution – 26
- Unit 2 - Particle Pollution – 21
- Unit 8 - Be Part of the Solution – 20
- Unit 4 - Health Effects of Particles – 18
- Unit 3 - Particle Sources – 14
- Unit 5 - Measuring Particles – 11

These numbers show us that teachers felt the most valuable unit was the hands-on activity of collecting air quality samples in their community. Lee Andrews Group can use this information to better guide new potential participants in the future. For example, if a teacher was only able to implement three lessons, we can recommend units 1, 6 and 7 which have proven popular with previous participating teachers.

Evaluation

Lee Andrews Group accomplished the following objectives during the evaluation phase:

- Reached over 1,300 students (44 classrooms multiplied by an assumed 30 students in each classroom)
- Obtained 6 post-implementation teacher surveys
- Conducted approximately 4,000 hours of outreach and project work collectively

Testimonials

Lee Andrews Group received an overwhelming amount of positive feedback from teachers who participated in the program. This feedback allowed our team to evaluate the successful components of the Program and focus on furthering those efforts for others participating in the Program to have similar experiences. Not only do testimonials allow us to learn the successful aspects of the Program, they also help us promote the Program by giving us something to share with potential participants in the future. See Attachment 3 for the testimonials table.

Featured Testimonial

STEM Academy of Boyle Heights High School – LAUSD
Classroom teacher – Leo Magallon
South Coast AQMD volunteer – Steve Tsumura

Mr. Leo Magallon

"STEVE HAS BEEN GREAT SO FAR. HE HAS A CONNECTION TO THE NEIGHBORHOOD, SO THE STUDENTS APPRECIATE WHEN HE BRINGS UP LOCAL LANDMARKS AND PLACES OF INTEREST...AFTER SESSION 1, STUDENTS WERE ASKING ME QUESTIONS ABOUT THE WORKSHOP, SO THEY WERE VERY INTERESTED."

/// Year One Lessons Learned ///

The first year for the implementation of the WHAM Program was fast paced and shortened by the school year. While the year was an overall success in terms of remaining on trend to meet South Coast AQMD's objectives, there were several lessons learned that if addressed during future iterations, will improve the Program. The following lists the key lessons learned that Lee Andrews Group will address during Year Two (2020/2021):

Secure buy-in for WHAM Program at the Superintendent and School Board (decision makers) levels, first.

During the first year of the Program, Lee Andrews Group found that initially introducing the Program to the district at the leadership level proved beneficial. This allowed our team to more efficiently reach school site administrators and staff through personal referrals. Receiving a referral from a Superintendent or School Board member made individual school sites more open to the program, and allowed our team to reach them in a faster and more efficient manner.

Learn if high schools require securing special onboarding preconditions, such as Sexual Abuse and Molestation (SAM) insurance, School District facilitated Live Scan fingerprinting, and subsequent arrest notification.

There were a number of districts that requested onboarding requirements that could not be accommodated. Our team tracked the various requirements throughout the first year of the Program, in order to better address them moving forward. Lee Andrews Group is prepared to offer alternatives, such as support for independent implementation, if a school district requests the South Coast AQMD volunteers to undergo rigorous screening processes, or requires insurance coverages that cannot be obtained.

Complete Live Scan and TB assessments at least 60 days before anticipated implementation. Outcomes for testing must also be provided to each school district in a timely manner to avoid expiration of documentation such as clearances; Plan adequate timing for testing scheduling and results return.

Our team learned that the Live Scan and TB testing processes were more time intensive than originally anticipated. For example, it took longer than expected to schedule testing and receive results. We also learned that specific documentation needs to be provided to school districts in a timely manner for consideration at the time of submission. For example, districts require that a confirmed negative TB test be submitted no later than 30 days after it is received.

Provide adequate supplies to participating classrooms.

There were a number of participating teachers who expressed challenges due to lack of adequate supplies, such as student workbooks. Lee Andrews Group worked with South Coast AQMD to accommodate teachers, on a case by case basis, who requested additional supplies. We learned that it is important to provide participants with the supplies and support they need up-front, in order to successfully implement the Program. This increases the likelihood that they will have a positive experience and share that experience with their colleagues, thereby promoting South Coast AQMD's brand, the WHAM Program and encouraging more participation.

Frame the Program as having South Coast AQMD "volunteers" instead of "co-teachers" to limit the number of requirements placed upon agency staff to allow for easier participation.

Lee Andrews Group learned that referring to the South Coast AQMD staff as "co-teachers" is what prompted the onset of strict onboarding requirements in many cases. In order to mitigate this issue, we recommend that South Coast AQMD staff be referred to as "volunteers" to allow more flexibility in the onboarding process.

Provide a South Coast AQMD volunteer to each participating classroom when requested.

Within the outreach process, our team works to obtain an onboarding questionnaire from each participating teacher. This questionnaire asks if the teacher desires a South Coast AQMD staff member to co-teach the curriculum. We hope to remain consistent in offering volunteers to benefit each classroom's participation, however, if a volunteer cannot be provided, our team will accommodate each teacher with alternative resources.

/// NON-PARTICIPANT & WAITLISTED SCHOOLS ///

Lee Andrews Group tracked school districts and high schools that met the criteria, but did not participate in the Program during the Year One due to many factors. The following is a list of those school districts and high schools:

1. Centinela Valley Union High School District - This district preferred to review the outcomes of the first year of the Program by evaluating feedback from participants before committing to participation. Lee Andrews Group will work to share that feedback with the Centinela Valley for Year Two.
2. Capistrano Unified School District - Capistrano had no dedicated ESS course model at the time the Program was introduced, and therefore no place to insert the WHAM Curriculum.
3. Huntington Beach Union High School District - This district prioritized NGSS for the 2019-2020 school year.
4. Hacienda La Puente Unified School District – The district was interested in the program, but did not have the capacity to implement in a timely manner. They are interested in having the program proceed in year two.
5. Santa Margarita Catholic High School - There were no teachers that expressed interest in participating during the 2019-2020 school year. There is a possibility that an environmental/earth science teacher will participate in the 2020-2021 school year.
6. Rialto Unified School District - Rialto already has a robust air quality education program that began at the middle school level. The district is also participating in South Coast AQMD's AQ-SPEC sensor library program.

Lee Andrews Group recommends re-engaging these schools during Year Two of the Program as the Program has great outcomes to share. We will consult with South Coast AQMD regarding approval and next steps.

/// Los Angeles Unified School District (LAUSD) ///

The Los Angeles Unified School District is the second largest school district in the nation. As such, there are several unique factors that were necessary to consider when introducing the WHAM program that significantly differed from many of the smaller districts in the region. Some of these considerations included but were not limited to: volume, requirements, bureaucracy, diagnostics, demographics, language and other variables.

Our CEO's relationship with the LAUSD Superintendent allowed Lee Andrews Group to bring them in early and engage in the Program. Securing LAUSD could have taken months with meetings, calls and wait time due to the size of district. A meeting with LAUSD's Superintendent was set within one week of initial outreach.

From there, in collaboration with the Superintendent's office, we planned a lunch at LAUSD for all six local district superintendents on May 23, 2019. Along with South Coast AQMD, we arranged for a representative of Sonoma Technology, Inc. to fly down from Northern California and present the Program along with Lee Andrews Group and South Coast AQMD. Monika Kim and Lisa Tanaka-O'Malley were very helpful and key players at this luncheon, which was a huge success allowing us to implement the Program at LAUSD.

Due to targets of 40 schools to implement the Program in Los Angeles County, 20 schools in Riverside County, 20 schools in San Bernardino County and 20 schools in Orange County, we could only give LAUSD 20 schools to implement, but they requested and wanted more schools in the Program. Additionally they remain committed to accept the WHAM Program in their schools throughout year two.

Once LAUSD agreed to the Program, the mammoth project of getting an Agreement signed between LAUSD and South AQMD began. After back and forth with both agency's legal departments, an Agreement was signed. After which, our team worked with each school's administration and faculty to educate them about the benefits of the Program to students, and begin implementation of the WHAM Program into LAUSD's earth sciences curriculum. Below are key highlights from LAUSD's participation in the WHAM program.

Key Highlights:

- *Championed program with LAUSD Superintendent*
- *Hosted luncheon to pitch Local District Superintendents*
- *Secured school site referrals from Local District Superintendents*
- *Planned and executed opening day presser at Gardena Bus Yard*
    - » ***Other Media Events -*** *Lee Andrews Group assisted in planning the press event at Carson High (ESET) Academy featuring Wayne Nastri, Executive Officer, South Coast AQMD at the start of the implementation of the Program. The event was scheduled to take place on February 6, 2019 but was cancelled due to timing constraints. Lee Andrews Group is prepared to assist when the event is to be rescheduled for Mr. Nastri's alma mater.*

LAUSD included the WHAM Program as part of the first day of school with a press release that included Superintendent Austin Beutner and school board members at the Gardena Bus Yard. Lee Andrews Group arranged for Vice Chair Ben Benoit to attend and be interviewed by Good Day LA. Later, Chair Benoit was photographed and took a tour alongside the Superintendent. Deputy Executive Officer Derrick Alatorre was also in attendance, and was instrumental in arranging the event.

Of the 40 high schools targeted within Los Angeles County, the following 19 schools fall within the Los Angeles Unified School District (LAUSD):

Scheduled or Implemented (13 or 68%)	Not Scheduled or Implemented (6 or 32%)
Benjamin Franklin High School	*Bravo Medical Magnet High School*
Carson High School ESET Academy	*Cesar E. Chavez Learning Academies*
Downtown Magnets High School	*Edward Roybal Learning Center*
Helen Bernstein High School	*Phineas Banning High School*
Hilda L. Solis Learning Academy	*Rancho Dominguez Preparatory School*
James A. Garfield High School	*South East Senior High*
James Monroe High School	
Manual Arts Senior High	
MSTMA at Roosevelt High School	
San Pedro High School	
Science Academy STEM Magnet	
STEM Academy of Boyle Heights High School	
Washington Preparatory High School	

Sixty-eight percent of those schools implemented the WHAM Program. While significantly more than 50% of the LAUSD schools targeted successfully participated in the Program, Lee Andrews Group will continue to work with LAUSD to determine how to increase implementation rates within LAUSD to 100%.

IN-PERSON IMPLEMENTATION TRANSITION TO DISTANCE LEARNING

/// COVID-19 RESPONSE ///

In March 2020, the COVID-19 pandemic presented unprecedented challenges to our local communities and counties at large. This presented the team with unexpected and extraordinary changes with distance and on-line learning. On March 16, 2020 schools in all four counties closed their doors to students. During this time, teachers and families were forced to create distance learning lesson plans and simultaneously make arrangements for teachers to work remotely.

Lee Andrews Group worked with South Coast AQMD to develop and offer distance learning options to participate in the WHAM Program that included online resources such as PowerPoint presentations and videos, Live Zoom lectures, and technical support.

While the world was adapting to this new normal, schools lost students due to non-equitable matters (i.e. no internet at home, at-home problems, moving). Lee Andrews Group immediately adjusted to the circumstances and worked with and informed teachers of the suspension of South Coast AQMD volunteers, due to stay at home orders throughout the State of California. Teachers were encouraged to implement the WHAM Program independently. Lee Andrews Group also conveyed the message to schools that we remain available and ready to assist them with their questions, concerns, and technical support.

Lee Andrews Group proactively designed distance learning options and presented them to South Coast AQMD in an effort to keep teachers and students engaged, taking into account those students who do not have digital access. This resulted in South Coast AQMD developing a robust distance learning program by offering volunteers for lectures via Zoom, updating their website with PowerPoint presentations, video lectures, and other useful resources that can be accessed at the teacher's leisure. Lee Andrews Group was pivotal in delivering this information to teachers through our personal relationships.

Prior to COVID-19, there were a number of teachers who elected to begin implementation during the second semester. We received a total of 84 onboarding questionnaires. At the time of the program shift, 16 questionnaires were outstanding. Of the 84 onboarding questionnaires received, 73 or 86% of classroom teachers requested to begin the Program during the second semester. This is commonly the time of year when most air quality lessons are taught. Below illustrates the results of the 73 implementations planned to take place during the second semester:

- Twenty-four were completed with at least one lesson conducted.
- Six were scheduled and posted on the WHAM calendar, but were cancelled due to the suspension of volunteers in response to COVID-19.
- Ten were in the process of being scheduled, but were impacted by COVID-19 pandemic.

Before the Program was adjusted due to COVID-19, 40 of the 73 second semester implementations were either completed, scheduled, or in the process of being scheduled.

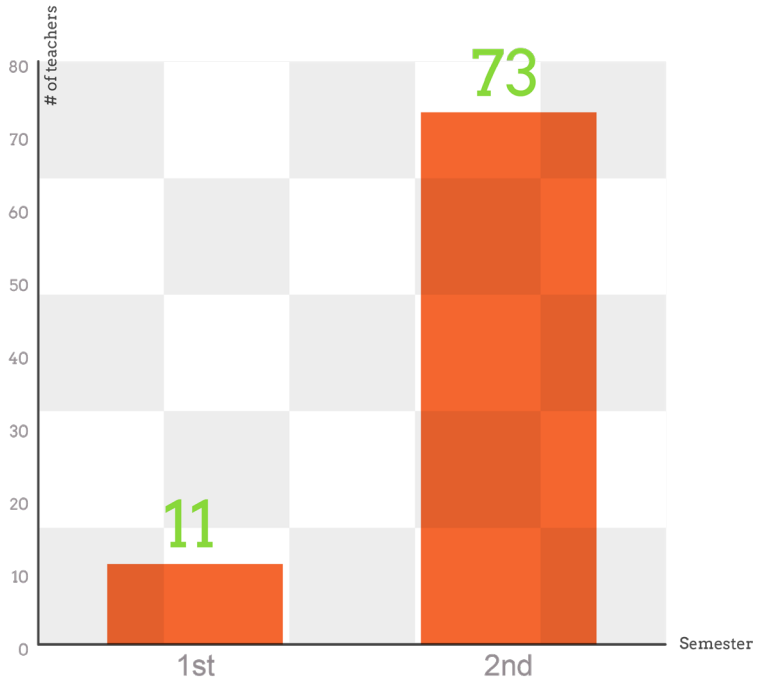


Figure 9: Illustration of teacher semester preference

The Lee Andrews Group team views the opportunity of distance learning as an added benefit, allowing the South Coast AQMD to reach even more students. With this in mind, Lee Andrews Group will remain flexible and will continue to maintain open lines of communication with the teachers who had intended to implement the Program this school year.

/// YEAR ONE CONCLUSION ///

Overall, the first year of the Program introduced South Coast AQMD's healthy air message to over 30 school districts' leadership within 4 four counties across the southern California region. Whether implementations occurred or not, school administration and teachers received the WHAM message through the outreach and engagement process.

Ultimately, first year efforts resulted in the development of an implementation infrastructure and a process, including outreach, tracking, monitoring and evaluation. These efforts culminated with 44 classrooms successfully participating in the Program, and teachers and students learning about air quality and the South Coast AQMD's message regarding the importance of healthy air, and the community's role in it.

Importantly, students were also exposed to air quality professionals and career paths in environmental fields. South Coast AQMD can utilize this model to continue to build upon the success of the Program's first year, and continue its reach throughout the South Coast AQMD's territory and southern California region. The WHAM program opened opportunities for South Coast AQMD to further develop relationships with local environmental justice communities, and has allowed students to learn more about air quality awareness and its impacts to their communities.

It is undeniable that the inaugural year of South Coast AQMD's High School Air Quality Educational Program produced useful benefits to the southern California region's high school student body. The program exposed them not only to fun ways of learning the curriculum, but also to new career paths in the sciences, healthy habits to promote better air quality, an introduction to regulatory climate control and the tools to become environmental stewards within their communities. Lee Andrews Group assisted South Coast AQMD with transforming a well-intentioned idea and operationalizing it into a comprehensive program to meet intended objectives complete with metrics.

The first year of the WHAM program engaged a large number of students across the four counties and provided additional opportunities to expand the program with the school districts that participated. Overall, the WHAM program led to an increased understanding of the importance of good air quality for the participating schools. As we learned from participant feedback, it is understood that air can only improve if significant changes occur not just with static pollutants, but with mobile sources of pollution. The measured progress of the Program in all four counties can be found further in figure 10.

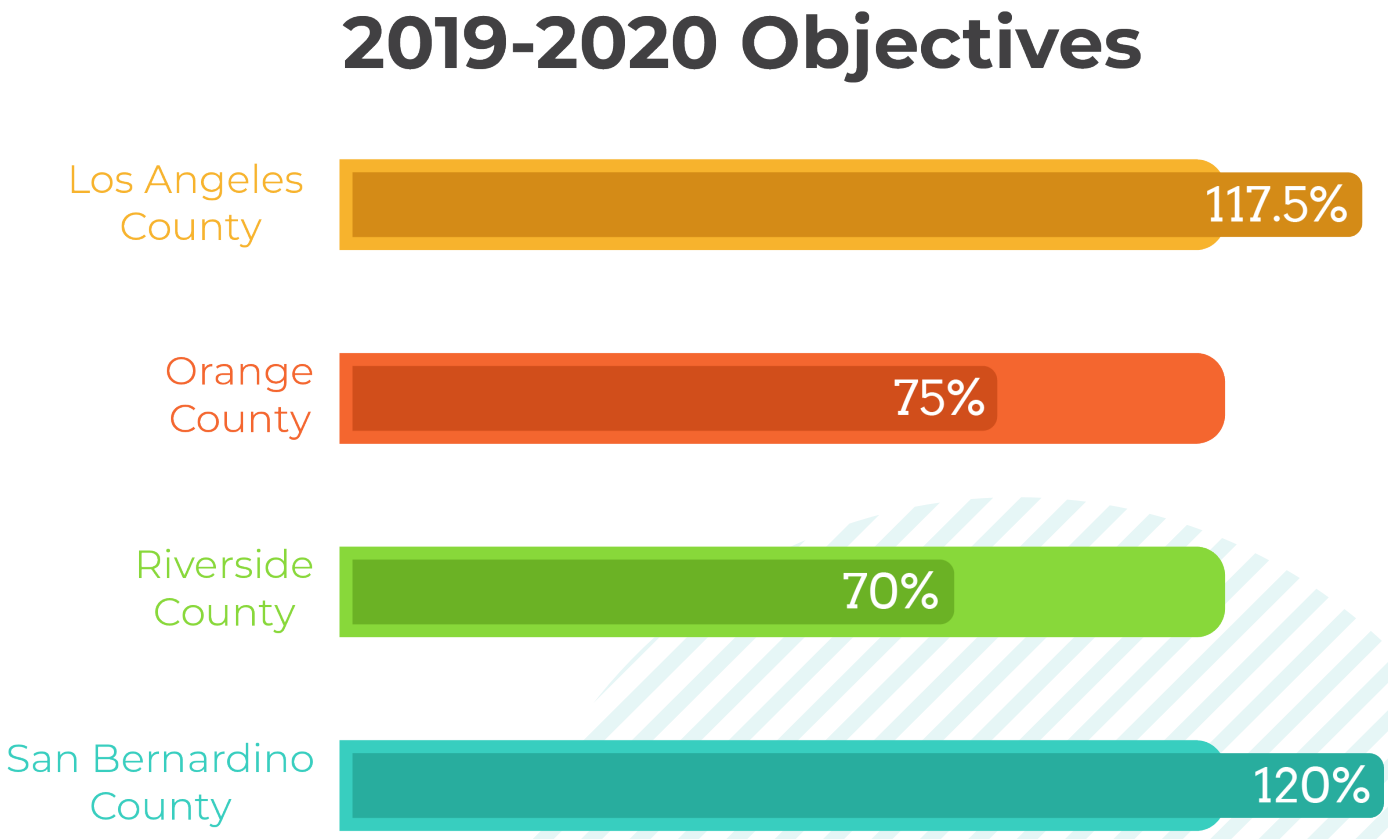


Figure 10: 2019-2020 Objectives

Year 2

/// APPROACH ///

As we move into a second year (2020/2021) of the WHAM Program, Lee Andrews Group intends to continue improving the Program by leveraging successful tools and accomplishments to encourage positive growth, and we intend on expanding South Coast AQMD's message. The team continues to develop their relationships with teachers, principals and staff to make implementation of the Program a smooth transition.

In Year Two, the Lee Andrews Group team will implement a similar outreach strategy as in Year One to engage districts and schools as we work toward securing participation in the WHAM program. With our massive tracking sheet, we will begin with schools that fit the criteria. Equipped with efficient process modeling and informed by lessons learned during the pilot program, our team will make modifications to our strategy to improve program effectiveness. Key recommended modifications include: eliminate board approved participation Agreements, revise program talking points and collateral materials, implement distance learning, and develop more tailored approaches when presenting the Program to teachers for the first time.

While these modifications are important, we aim to continue developing what we have successfully designed, because it is working. Teachers know and trust us, they have become better aware of South Coast AQMD's mission, and many, along with their students, are now partners in disseminating the agency's message.

Board Approved Agreements

At the beginning of Year One, there was little infrastructure in place to guide the process. We now have the model in place along with relationships. Lee Andrews Group was entrusted to develop the requisite infrastructure, while keeping South Coast AQMD's mission and message top of mind. Lee Andrews Group was careful to ensure that anything we recommended for implementation received the express approval of South Coast AQMD. Therefore, a bilateral process for documenting school district participation in the Program was developed, which included an Agreement among participating school districts and the South Coast AQMD Board. In all, Lee Andrews Group secured 100 percent participation from each of the 32 targeted school districts. However, drafting, editing, obtaining legal, administrative and board approval for these Agreements proved to be a laborious and gratuitous undertaking. After careful analysis, Lee Andrews Group recommended to the agency that the agreement process be deformalized and addressed at the teacher level. Moving forward, Lee Andrews Group will work directly with teachers to negotiate the terms of their participation and will memorialize those Agreements via email. We anticipate that eliminating the formal Agreements will increase the participation rate during the second year of the Program.

Marketing Materials

As experts in the field of outreach and engagement, Lee Andrews Group has an acute appreciation for the value of a strong marketing campaign. In order to convey South Coast AQMD's key messages, we recognized the need to create marketing materials that promoted the Program and its importance. That is how we introduced, encouraged, and ultimately secured program implementation.

During Year One, Lee Andrews Group worked closely with the South Coast AQMD to determine and design the collateral materials that would best help schools administrators, faculty and teachers understand and accept the WHAM Program. Continuing with the proven strategy of building upon what works, in Year Two, Lee Andrews Group will either update or create the following collateral materials to aid in disseminating key information about the WHAM Program, ultimately generating support for and participation in the Program:

- Welcome letter to existing school districts and teachers;
- Welcome letter for new school districts/high schools;
- Introductory leadership PowerPoint presentation:
- WHAM brochure;
- Frequently Asked Questions (FAQs);
- WHAM web page;
- Onboarding questionnaire;
- Teacher post implementation evaluation survey;
- Student post participation evaluation survey; and
- AQMD volunteer guide.

In addition to improving collateral, we also recommend increasing WHAM's digital presence on popular platforms and currently trending applications. This approach will bookend our engagement efforts toward teachers with students' colloquial interests in the Program. Students won't only be introduced to the Program through their class curriculum, but they will also be exposed within their preferred communication environment.

Tailored Approaches

Through our engagements with teachers during Year One, we learned that understanding our audience is paramount; and that while a standardized process can be helpful, a one-size-fits-all approach does not lend itself to maximum positive outcomes. The best approach is one that is flexible, yet tailored to the specific teacher to whom we are presenting the Program. We learned that we must be agile enough in our approach to accommodate teachers' preferred communication methods. For example, not all teachers had time or wanted to meet in person for the initial presentations, for a number of reasons, such as school starting, parent teacher conferences, and other priorities. Some teachers preferred receiving information through phone calls and via emails. By accommodating teacher schedules and communication preferences, our team members secured participation of teachers that would not have agreed to participate if we required the meeting to be conducted in person.

The following illustration depicts the updated recommended engagement process for Year Two:

Figure 11: 2020-2021 Step-by-step Outreach Process

Flexible Program Options

The COVID-19 pandemic necessitated the implementation of additional virtual options through which the program may be consumed. This opened a new outreach mechanism to promulgate South Coast AQMD's message through the WHAM Program. In Year Two, Lee Andrews Group will focus efforts on maximizing virtual options. For those schools and students with the resources, virtual group meetings, prepared and/or recorded lessons and technical support, extend a whole new channel through which students may access the WHAM experience. Lee Andrews Group anticipates that this added benefit will increase student participation in the Program by a significant margin. Lee Andrews Group will monitor enhancements and new developments in the virtual arena and continue to adapt to changing environments and resources.

/// GOALS ///

In Year Two, the South Coast AQMD's primary objectives for the WHAM Program will remain to implement in high schools across four counties within the region; engage with and develop relationships with school leadership, faculty and teachers; and promote the South Coast AQMD's message. During Year Two, Lee Andrews Group has identified the following specific goals to help accomplish the primary objectives:

- Implement the WHAM Program within 100 additional high schools (200 total);
- Increase social media presence of the WHAM Program;
- Continue offering distance learning options; and
- Promote air quality awareness to participating students.

/// METHODOLOGY ///

Lee Andrews Group will facilitate the expansion of the Why Healthy Air Matters Program from 100 schools to 200 schools in the South Coast Air Basin. We will achieve this by incorporating additional school districts that have not yet taken part in the implementation of the Program. Lee Andrews Group proposes an outreach engagement strategy that dovetails the new school districts with the returning participating school districts. We will approach the new school district administrators with the same three-tier approach we created for the initial year. Our presentations to superintendents, district staff, and school site administrators will highlight the pilot program's successes and outcomes, and our team will continue to create working relationships with the teachers to ensure that the Program is implemented. For returning school districts and schools, we will work with South Coast AQMD WHAM staff to schedule meetings with each district to highlight the program's first year achievements.

We will work with South Coast AQMD WHAM staff to create a toolkit for new and returning participating schools that will introduce the WHAM Program. We envision the toolkit to contain an introductory video to South Coast AQMD and the Kids Making Sense® kit, training materials, technical assistance and direct support resources that would be readily available online. This toolkit would be in addition to the Welcome Letter, Onboarding Questionnaire and other collateral materials that are presented to school district administrators, principals, and teachers.

From the implementation of the program in its initial year, we want to ensure that school principals and teachers understand the significance of the WHAM program and the benefits for the students. Our team will work with South Coast AQMD WHAM staff to incorporate the feedback received by the first year teachers to develop and update existing diagnostic tests.

Additionally, these uncertain times lead us to propose an outreach plan that takes into account the possibility that not all school districts will return to a normal academic schedule in the Fall of 2020. We want to take a proactive role with South Coast AQMD WHAM staff to develop additional distance learning tools that would be easily adopted by participating teachers, as well as continue to provide teachers with support and new resources as they become available.

New Tactics

Lee Andrews Group finds value in leveraging the successful aspects of the Program that were created during the first year of the program. We also understand the importance of making adjustments where necessary, to account for the lessons learned. Keeping in mind primary objectives and specific goals for the Program, Lee Andrews Group recommends employing the following new tactics during Year Two:

- Remove Agreement requirement;
- Update collateral materials and develop new materials as needed;
- Update AQMD website and app;
- Monitor Sonoma Technology Inc. for new developments;
- Research school district clearance requirements (i.e. eliminate requirement of TB testing and Live Scan for South Coast AQMD volunteers, when possible);
- Develop and update diagnostic tests for all schools;
- Create a toolkit for participating schools that will introduce the WHAM Program to initiate engagement (i.e. introductory video, training materials, technical assistance and direct support resources);
- Develop innovative engagement strategies that reflect best practices identified in Year One and feedback from teachers;
- Incorporate enhanced digital learning options (i.e. live video conference and recorded lectures, PowerPoint presentations, videos);
- Use social media to promote and generate buzz for the Program;
- Reach out to media outlets and secure press coverage of WHAM Program; and
- Add new resources as they become available.

/// CONCLUSION ///

The creation of the WHAM Program presented an opportunity for South Coast AQMD to create a link between our youth and the well-being of their environment. Through the WHAM Program, South AQMD was able to help increase students' awareness of air quality issues within their communities and beyond, ultimately empowering the youth to become changemakers and take matters into their own hands for a future with clean air. The South Coast AQMD is to be commended for delivering additional resources to communities experiencing environmental justice challenges. The Program educates the students, allowing them to bring the conversation home, making a greater impact throughout all communities.

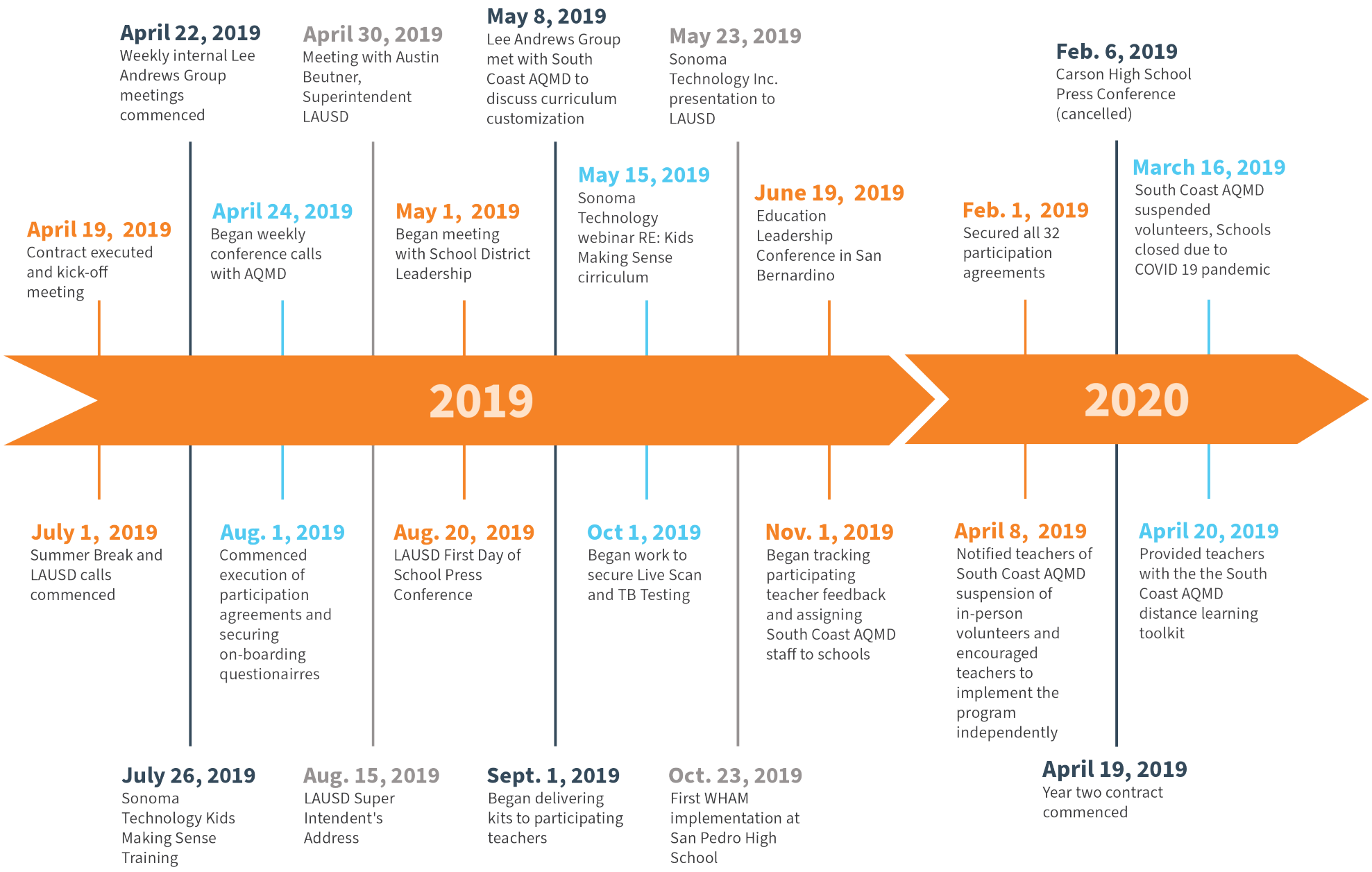
South Coast AQMD is shining a light on those communities experiencing environmental justice issues by investing in the delivery of resources to students, schools, and the community through education. South Coast AQMD aims to inform students about the importance of doing one's part, and developing healthy habits to contribute to clean air. The Kids Making Sense® curriculum, which is the main feature of the Program, allows students to learn aspects of air quality and how it ties into the environment and overall health. The schools targeted for outreach through the WHAM Program have been identified as being acutely impacted by dirty air, lower income and educational attainment, higher instances of health disparities and other environmental justice factors. The WHAM Program offers these students:

- ***Exciting environmental education curriculum that teaches students about air quality;***
- ***Unique experience for students to measure air pollution using hand-held sensors and mobile phones;***
- ***Engaging and fun science experiments that teach students about healthy air; and***
- ***Empowers students to drive positive change in their homes and communities.***

Lee Andrews Group will continue to work alongside South Coast AQMD to reach every goal. Thank you for the opportunity to be your partners in educating the youth of our communities. We look forward to the future of the WHAM Program.

Attachment 1

2019-2020 TIMELINE


April 19, 2019
Contract executed and kick-off meeting
April 22, 2019
Weekly internal Lee Andrews Group meetings commenced
April 24, 2019
Began weekly conference calls with AQMD
April 30, 2019
Meeting with Austin Beutner, Superintendent LAUSD
May 1, 2019
Began meeting with School District Leadership
May 8, 2019
Lee Andrews Group met with South Coast AQMD to discuss curriculum customization
May 15, 2019
Sonoma Technology webinar RE: Kids Making Sense cirriculum
May 23, 2019
Sonoma Technology Inc. presentation to LAUSD
June 19, 2019
Education Leadership Conference in San Bernardino
2019
Feb. 1, 2019
Secured all 32 participation agreements
Feb. 6, 2019
Carson High School Press Conference (cancelled)
March 16, 2019
South Coast AQMD suspended volunteers, Schools closed due to COVID 19 pandemic
2020
July 1, 2019
Summer Break and LAUSD calls commenced
July 26, 2019
Sonoma Technology Kids Making Sense Training
Aug. 1, 2019
Commenced execution of participation agreements and securing on-boarding questionairres
Aug. 15, 2019
LAUSD Super Intendent's Address
Aug. 20, 2019
LAUSD First Day of School Press Conference
Sept. 1, 2019
Began delivering kits to participating teachers
Oct 1, 2019
Began work to secure Live Scan and TB Testing
Oct. 23, 2019
First WHAM implementation at San Pedro High School
Nov. 1, 2019
Began tracking participating teacher feedback and assigning South Coast AQMD staff to schools
April 8, 2019
Notified teachers of South Coast AQMD suspension of in-person volunteers and encouraged teachers to implement the program independently
April 19, 2019
Year two contract commenced
April 20, 2019
Provided teachers with the the South Coast AQMD distance learning toolkit

Attachment 2

COLLATERAL MATERIALS

WHAM
Why Healthy Air Matters

Curriculum Roadmap

1. Our Air and Pollution
(50-100min.)

2. Particle Pollution
(50-100min.)

3. Particle Sources
(50min. or more)

4. Health Effects of Particles
(50-100min.)

5. Measuring Particles
(50min.)

6. Field Measurements
(100min. or more)

7. Interpret Your Data
(50min.)

8. Be Part of the Solution
(50min. or more)

Kids Making Sense® Kit

For more information about the program or to refer a school for potential participation, please contact:

Monika Kim
Phone: (909) 396-2342
Email: mkim@aqmd.gov

South Coast Air Quality Management District
www.aqmd.gov
1-800-CUT-SMOG

Stay connected with us
@SouthCoastAQMD

South Coast Air Quality Management District

High School Education Program

KIDS MAKING SENSE

WHAM

Why Healthy Air Matters

Air Quality Education by South Coast AQMD

What is South Coast Air Quality Management District's WHAM Program?

South Coast AQMD's high school education program, Why Healthy Air Matters (WHAM), is an exciting Science, Technology, Engineering and Math (STEM)-based education program that teaches students about air quality. The program utilizes Sonoma Technology, Inc.'s Kids Making Sense® curriculum, developed by air quality scientists and educators and thoroughly tested by teachers and students around the world.

The program will increase students' awareness of air quality issues within their communities and beyond, through various experiments and activities, including measuring particulate matter (PM) pollution using hand-held sensors.

AirBeam2 Air Monitor, AirCasting App

Does the program fit in with state standards?

The Kids Making Sense® curriculum is aligned with the California State Core Science Curriculum for grades 9 through 12. The curriculum unites STEM education and Next Generation Science Standards (NGSS) with hands-on experiential learning and introduces Disciplinary Core Ideas (DCIs) through experiments that reinforce Science and Engineering Practices (SEPs) and Crosscutting Concepts (CCCs).

Curriculum Workbook

Why is the WHAM Program Important?

South Coast AQMD's jurisdiction encompasses Orange County and the urban portions of Los Angeles, Riverside and San Bernardino counties, and is home to more than 17 million people—the second most populated urban area in the United States. This region suffers from some of the poorest air quality in the nation and does not meet federal standards for both ozone (smog) and fine particulate matter (PM2.5).

Different types and levels of air pollution can cause or contribute to everything from watery eyes and fatigue to respiratory disease, lung damage, cancer, birth defects and premature death.

This program will increase awareness of air quality issues within environmental justice communities in South Coast AQMD's jurisdiction. It utilizes a community-focused approach, designed to teach youth about the science of air quality, public policy and technology-based solutions.

What will each participating school receive?

Each participating school will receive a Kids Making Sense® kit, which includes AirBeam2 portable air quality monitors, paired smartphones, teacher's guide, student workbook and all of the supplies and materials needed to successfully teach the curriculum.

South Coast Air Quality Management District

High School Air Quality Education Program

Presented by Lee Andrews Group in partnership with South Coast AQMD
818 W. 7th Street, Ste. 880, Los Angeles, CA 90017 | (213) 891-2965
SBE, DBE, MBE and VSBE Certified.

- Air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino Counties.
- South Coast AQMD has a long history of educational outreach to teachers and students in the South Coast Air Basin through programs and events.
- These activities have been effective in raising awareness about South Coast AQMD and air quality issues among teachers and students reaching several thousand program and event participants.

Kids Making Sense® developed by Sonoma Technologies, Inc.

Exciting environmental education curriculum that teaches students about air quality.

Opportunity for students to measure air pollution using hand-held sensors and mobile phones.

Empowers students to drive positive change in their communities.

Kids Making Sense®

Aligns with California State Core Science Curriculum for Grades 9-12.

Unites STEM (Science, Technology, Engineering, and Math) education and NGSS (Next Generation Science Standards) with an air sensing system.

Introduces Disciplinary Core Ideas (DCIs) through specific air sensing experiments that reinforce Science and Engineering Practices (SEPs) and Crosscutting Concepts (CCCs).

Kids Making Sense® incorporates different learning modalities: Visual, Auditory, Kinesthetic and Tactile Learners.

Each participating school will receive a Kids Making Sense® Kit, including Airbeam2 portable air quality monitors, five paired smartphones, a teacher's guide, student workbook and all of the supplies and materials needed to successfully teach the curriculum.

In-Person classroom instruction from South Coast AQMD staff during each session.

Students will learn practical and occupational uses for science which may inspire potential environmental science careers.

Why is this program important to high schools?

South Coast AQMD's High School Air Quality Educational Program will help increase students' awareness of air quality issues within their communities and beyond through hands-on experiential learning that will reinforce essential concepts in alignment with the California State Core Science Curriculum Framework.

This program will empower youth to become changemakers and take matters into their own hands for the future of their air.

Next Steps…

- Receive a Memorandum of Understanding to secure participation;
- Identify school sites where this Program is most appropriate;
- Coordinate Fall/Spring rollout schedule and deliver Kids Making Sense® kits for August/September.

For more information and questions please contact:
Monika Kim
South Coast Air Quality Management District
(909) 396-2342
mkim@aqmd.gov

AGREEMENT BETWEEN SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AND [SCHOOL/SCHOOL DISTRICT]

BACKGROUND:
South Coast Air Quality Management District (South Coast AQMD) is the air pollution control agency for all of Orange County and the urban portions of Los Angeles, Riverside and San Bernardino Counties. South Coast AQMD engages in a number of community-based approaches to educate residents on air quality issues in the South Coast and Coachella Air Basins. In 2019, South Coast AQMD established the Why Healthy Air Matters (WHAM) High School Air Quality Education program.

PROGRAM GOAL:
South Coast AQMD seeks to partner with school district officials and administrators by providing high schools with the opportunity to participate in the WHAM program to provide teachers and students information on local air quality issues through a hands-on curriculum developed by Sonoma Technology Inc., called Kids Making Sense®. South Coast AQMD will provide the air quality curriculum as deemed appropriate by South Coast AQMD, through the WHAM Program, to inform and educate students on topics related to air pollution including technology, data analysis and analytical thinking. The program will achieve its goals by partnering with schools and school districts in each county within South Coast AQMD's jurisdiction (Los Angeles, Orange, Riverside and San Bernardino) to implement the WHAM Program in selected classroom(s) within participating schools,

South Coast AQMD will provide **[School/School District]** ("**Partnering School/School District")** with one South Coast AQMD staff volunteer to assist in the teaching of one class period per unit at each participating school. **Partnering School/School District** may choose to teach the Kids Making Sense® curriculum in additional classrooms at each participating school without the assistance of a South Coast AQMD staff volunteer, if desired. The curriculum contains several units to provide educational information to instructors and students, as deemed appropriate by South Coast AQMD, on air pollution, air monitoring technology, data analysis, how pollution affects public health, discussion on solutions and on South Coast AQMD's responsibilities as the air pollution control agency for the South Coast and Coachella Air Basins.

This Agreement between South Coast AQMD and **Partnering School** outlines the common goals for this partnership, which is to provide an educational opportunity for students of **[School District]**. This Agreement is intended to provide for the coordination of South Coast AQMD to implement the WHAM Program within schools at **[School District]**. South Coast AQMD and Partner agrees to the following details:

TERMS OF AGREEMENT:

The Partnering School District will support South Coast AQMD's efforts by completing the following:

- Allowing South Coast AQMD to approach high schools in their district;
- Participate in conference calls with South Coast AQMD and/or South Coast AQMD contractor to assist in the implementation of the WHAM Program at schools within the school district, as requested by South Coast AQMD.

The Partnering School will support South Coast AQMD's efforts by completing the following:

- Select instructor and class to host the WHAM program;
- Require that a credentialed classroom teacher remain in the classroom at all times when the South Coast AQMD staff volunteer is present;
- Allow instructor to view the WHAM training video on Kids Making Sense® , for up to six hours, to be completed before the start of the program;
- Upon conclusion of the program, require instructor to complete a written evaluation of the program;
- Upon conclusion of the program, facilitate the return of the Kids Making Sense® Kit to South Coast AQMD; and
- Participate in conference calls with South Coast AQMD and/or South Coast AQMD contractor to assist in the implementation of the WHAM Program at schools within the school district, as requested by South Coast AQMD.

In Case Partnering Schools are affected by COVID-19 restrictions, Partnering School agrees to:

- Participate in live Zoom lecture with a South Coast AQMD staff volunteer to present to your students on air quality.
- Incorporated online resources including lesson plans, PowerPoint presentations and videos to class curriculum.

As consideration for these efforts, South Coast AQMD agrees to:

- Provide one South Coast AQMD staff volunteer to assist in the teaching of one class period per unit at each selected school, not to exceed 10 hours total of classroom time over a period of one academic year;
- Not collect, access or use students' personal data during the course of the WHAM program;
- Provide school instructors with a training video on the WHAM program on Kids Making Sense®;
- Lend each participating school one Kids Making Sense® Kit; and
- Provide the supplies and materials needed to successfully implement the program, as determined by South Coast AQMD.

In Case Partnering Schools are affected by COVID-19 restrictions, South Coast AQMD agrees to:

- Provide live Zoom lecture with a South Coast AQMD staff volunteer to present to your students on air quality.
- Provide online resources including lesson plans, PowerPoint presentations and videos.
- Provide technical support with online resources.

This Agreement may be terminated upon 10-days written notice without cause or penalty, by either party. Upon termination by either party, the Kids Making Sense® Kit should be returned to South Coast AQMD by means agreeable to both parties within 10-days.

As agreement to these terms, Partnering School/School District will complete this form by email it to Monika Kim at mkim@aqmd.gov or by mail to Attn: Monika Kim, South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, CA, 91765. Should you have any questions, please contact Monika Kim, Senior Public Information Specialist, at 909-396-2342.

Name: _____Title: _____

School: _____

Address: _____

Telephone: _____ Email: _____

Signature: _____ Date: _____

South Coast AQMD

WHAM
Why Healthy Air Matters
Air Quality Education by South Coast AQMD

KIDS MAKING SENSE

CLASSROOM ETIQUETTE GUIDE

South Coast AQMD

Questions?
Please Contact:
Monika Kim
Phone: 909-396-2342
Email: mkim@aqmd.gov

THANK YOU FOR PARTICIPATING IN THE WHY HEALTHY AIR MATTERS (WHAM) PROGRAM

This Guide Will...

Provide tips on how to successfully navigate campuses and classrooms as you begin co-teaching the Kids Making Sense® curriculum. Throughout the program, you will always be accompanied by a classroom teacher who will handle all classroom management and disciplinary activities. Remember: you are representing South Coast AQMD. Your actions are a reflection of the agency.

Prior to Arriving onto Campus

Be sure to confirm the date, time, class period and lesson plan that will be taking place when you are expected to co-teach.

Day of Lesson Plan

Arrive early and come prepared by knowing the day's lesson in its entirety. Have all necessary supplies for the activity ready. Always check in with administration at the front office before reporting to the classroom, and wait outside if the previous class has not yet been dismissed.

Before Beginning the First Lesson

After the classroom teacher introduces you to the class, please provide the students with a brief introduction that includes your purpose for being there, your brief professional background, and your role at South Coast AQMD.

Quick Tips

Below are a few tips to keep in mind as you directly engage with students at each classroom visit.

1. Be Respectful

Always treat the students in each classroom with respect in order to successfully deliver the curriculum in a positive environment.

2. Ask, Don't Order

Approach goes a long way. Students will be more willing to participate if they are asked in a polite manner. "Do you want to try solving the problem?" can be more effective than "Tell me the answer."

3. Keep Your Cool

Remember that the teacher will handle all classroom management and disciplinary actions, so refer to the teacher if a student misbehaves.

Do's and Don'ts

- Do recommend that students address you by your last name.
- Do be friendly, but firm.
- Do wear your South Coast AQMD shirt.
- Do follow all school site rules and directives.
- Do shake hands if a student offers, and **DON'T** hug or touch students in any other fashion.
- Do ask the teacher if there are adult restroom facilities and avoid student restroom facilities.
- Do use positive and appropriate language at all times when addressing students.
- Do educate students on the curriculum and related topics.
- Do be courteous and respectful toward all school site staff and administration.
- Do enjoy yourself! Positivity is contagious.

- Do not use profanity under any circumstances.
- Do not provide students with personal contact information or add them on social media networks.
- Do not engage in discussion about students' personal information.
- Do not interject in any student altercations.
- Do not bring or sell tobacco products, prescription drugs, alcohol, illicit drugs or weapons on campus.
- Do not harass students, teachers, administrators or other volunteers.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Office of the Executive Officer
Wayne Nastri
909.396.2100, fax 909.396.3340

Dear Educator:

The South Coast Air Quality Management District (South Coast AQMD) would like to thank you for your participation in the Why Healthy Air Matters (WHAM) Program.

The WHAM program seeks to increase students' awareness and knowledge of air quality issues and empower them to make positive changes in their communities. The program also strives to inspire students' interest in air quality and science.

The South Coast AQMD's mission is to clean the air and protect the health of all residents living in the region. We have a long history of educational outreach to residents through programs and events, all of which have been effective in raising awareness about air quality issues within the region.

Please complete the attached questionnaire and return it to Monika Kim at mkim@aqmd.gov at least 30 days prior to your anticipated program start date or as soon as possible. Once we receive your documents, a staff member will reach out to coordinate next steps.

If you have any questions or concerns, please contact Monika Kim at 909-396-2342 or mkim@aqmd.gov.

Thank you again for participating in the WHAM Program.

Sincerely,

Wayne Nastri
Executive Officer

DJA:MJK-072019

Onboarding Questionnaire

Thank you for your participation in the South Coast Air Quality Management District's **Why Healthy Air Matters (WHAM) Program**. The questionnaire below will help us match a South Coast AQMD staff member with your classroom. Please complete and return this form to Monika Kim at mkim@aqmd.gov at least 30 days prior to your anticipated start date or as soon as possible.

Instructor Name: _____

School: _____

E-mail Address: _____

Phone Number: _____

Which grade(s) and class(es) are participating in the WHAM program?

_____

_____

Do you have a computer with internet access in your classroom? ☐ **Yes** ☐ **No**

If you have a computer in your classroom, does the computer have a firewall? ☐ **Yes** ☐ **No**

Do you have Wi-Fi in your classroom? ☐ **Yes** ☐ **No**

Do you want a South Coast AQMD staff member to co-teach the curriculum in your classroom? *Please note that the staff member will be available for one class period per unit only.* ☐ **Yes** ☐ **No**

The WHAM program consists of eight units. Teachers may select the units they wish to teach based on best fit with their classroom objectives and time availability. Please indicate which units you are most likely to teach and the most important aspect of the unit for your classroom (for example: math, chemistry, civic duty, etc.)

1. **Our Air and Pollution** ☐
   This section provides background information on air pollution.
   What aspect of this unit is most important? _____
2. **Particle Pollution** ☐
   This section gives students the opportunity to look at particles under a microscope or a hand lens.
   What aspect of this unit is most important? _____
3. **Particle Sources** ☐

This section covers sources of particle pollution and identification of particle sources. Students look at particles under a microscope or a hand lens and identify the sources of the pollution.
What aspect of this unit is most important? _____

4. **Health Effects of Particles** ☐
   This section covers how particles can affect human health. Students measure their FEV1 and FVC ranges to determine their lung capacity.
   What aspect of this unit is most important? _____
5. **Measuring Particles** ☐
   This section covers how particles are measured. Students use a vacuum cleaner to collect and measure particles.
   What aspect of this unit is most important? _____
6. **Field Measurements** ☐
   This section gives students the opportunity to measure particles using the AirBeam2 monitor.
   What aspect of this unit is most important? _____
7. **Interpret Your Data** ☐
   This section covers finding trends in collected data to reach conclusions on how to clean up the air.
   What aspect of this unit is most important? _____
8. **Be Part of the Solution** ☐
   This section covers how students can get involved, what they can do to help reduce emissions and how they can effect positive change.
   What aspect of this unit is most important? _____

When do you expect to teach the WHAM program in your classroom? Over what period of time, and how frequently will you be teaching the WHAM program? (For example: once a week in the month of May.)

_____

_____

Why Healthy Air Matters (WHAM) Program Teacher Survey

The following questions will ask you about your overall experience with South Coast AQMD's WHAM Program.

1. How many classes participated in the WHAM Program?

2. How many students participated in the WHAM Program?

3. What grade(s) participated in the WHAM Program?

4. How many units did you teach?

5. Which unit was most beneficial to your students?

6. Which unit was least beneficial to your students

7. Any additional comments/concerns?

Please select the number that most closely reflects your opinion on the statements below.

1 = Strongly Disagree 2 = Disagree 3 = Neutral
4 = Agree 5 = Strongly Agree 6 = Does not apply/I don't know

8. The WHAM Program meets high school science standards.
   1☐ 2☐ 3☐ 4☐ 5☐ 6☐
9. The Kids Making Sense® Kits and accompanying tools were functional and reliable.
   1☐ 2☐ 3☐ 4☐ 5☐ 6☐
10. The coursework was appropriate for my students' grade level.
    1☐ 2☐ 3☐ 4☐ 5☐ 6☐
11. The program increased my students' awareness of air quality, environmental justice, and/or other related issues.
    1☐ 2☐ 3☐ 4☐ 5☐ 6☐
12. The program increased my students' awareness of the South Coast AQMD.
    1☐ 2☐ 3☐ 4☐ 5☐ 6☐
13. I would like to participate in this program again.
    1☐ 2☐ 3☐ 4☐ 5☐ 6☐

Attachment 3

TESTIMONIALS

Teacher Name	**High School**	**Feedback**
Jennifer Cheng	San Pedro High School	“Hi All, I would like to acknowledge Britney's flexibility[2] and helpfulness today… our class was not able to do the walking activity so Britney just improvised and did what she can do. Our class time was extended as well for 25 minutes, in high school that's forever but she saw it through by opening Q and A about getting into college… am just grateful.”
Jomel Villamil	Benjamin Franklin High School	“Ryan has been great to work with and he is awesome with the students. Love the program!”
Kelly Meade	Jordan High School	“The lesson went well, the students were engaged, working, and contributing to the discussion.”
Dolores Bravo	South El Monte High School	“The students were happy to have a fresh face at the front of the class.”
Andrea Contreras	Manual Arts Senior High	“All was great! Thank you for the experience.”
Armando Ponce	Colton High School	“It went great. I really like the program.”
Ted Ducey	Redlands East Valley High School	“Very happy with the first lesson.”
Vance Thompson	Washington Preparatory High School	“It [the first lesson] went well, looking forward to the rest of the program.”
Leo Magallon	STEM Academy of Boyle Heights High School	“Steve has been great so far… He has a connection to neighborhood, so the students appreciate when he brings up local landmarks and places of interest… After session 1,

		students were asking me questions about the workshop, so they were very interested.”
Erin Doherty	Cypress High School	“[The first lesson was] Awesome! She [AQMD volunteer] had great energy and shared specific information which my students didn’t previously know.”

Attachment 4

PROJECT TRACKING CHECKLIST

High School Education Program Checklist					
Task	**Assigned To**	**Due By**	**Completion Date**	**Completed By**	**Notes**
Develop project tracking system to monitor tasks				AQMD	
Attend Kids Making Sense® training sessions	AQMD/LAG	7/26/2019	7/26/2019	AQMD/LAG	
Develop outreach materials	LAG	Ongoing	4/16/2020	LAG with AQMD approvals	
Develop Program Implementation Plan	LAG	N/A	6/10/2019	LAG	
Confirm approvals to implement program at school sites					
Distribute Kids Making Sense® kits	LAG	Ongoing	3/10/2020	LAG	
Retrieve and inventory kits	LAG/AQMD	Ongoing	TBD		Covid-19 restrictions
Prepare summary and final report of program	LAG	4/30/2020		LAG	

Program Implementation Plan Checklist					
Task	**Assigned To**	**Due By**	**Completion Date**	**Completed By**	**Notes**
Develop program description	AQMD	N/A	6/12/2019	AQMD	
Develop program guidelines	AQMD	Ongoing	Ongoing	AQMD	
Conduct research & verify the best approach to working with schools	LAG	Ongoing	6/19/2019	LAG	
Develop recommended strategy	LAG	4/26/2019	6/10/2019	LAG	
Develop specific recommendations on promoting AQMD's air quality message	LAG	4/26/2019	6/10/2019	LAG	
Develop criteria for school identification and selection	LAG	4/26/2019	6/10/2019	LAG	
Create prioritization and target list of schools	LAG	Ongoing	N/A	LAG	Additional schools were added to targeted list throughout the school year
Develop implementation schedule	AQMD	Ongoing	4/10/2020	AQMD	Implementations ceased on 3/10/2020 due to Covid-19
Create system to track all stakeholders contacted	LAG	Ongoing	4/16/2020	LAG	
Create waitlist for schools interested in participating in program	LAG	Ongoing	4/16/2020	LAG	
Create materials to share with nonparticipating schools/schools that want to purchase their own kits	N/A	N/A	N/A	N/A	
Create tracking system for Kids Making Sense® kits	LAG	7/17/2019	7/17/2019	LAG	
Establish system to distribute, collect & replenish materials in Kids Making Sense® kits	N/A	N/A	N/A	N/A	
Create methodology to evaluate program/collect data from school admins, teachers & students	LAG/AQMD	N/A	12/17/2019		

Weekly Tasks					
Task	**Assigned To**	**Due By**	**Completion Date**	**Completed By**	**Notes**
Update project tracking system	LAG	Ongoing	4/16/2020	LAG	
Weekly update call	LAG/AQMD	Every Wednesday	Ongoing	LAG/AQMD	
Send AQMD Meeting Minutes after weekly calls	LAG	ay after Wednesday Call		LAG	
Update implementation schedule	AQMD	Ongoing	3/10/2020	AQMD	Implementations ceased on 3/10/2020 due to Covid-19
Inspect, maintain and replenish Kids Making Sense kits®	AQMD	N/A	N/A		LAG stopped retreiving kits due to Covid-19
Update contacted stakeholder list	LAG	Ongoing	Ongoing	N/A	
Update school waitlist	LAG	Ongoing	4/16/2020	LAG	

Attachment 5

PROGRAM "ACTIVITY DATABASE"

School	County	District	School Address	City	Zip Code	Criteria	Assigned Consultant	Reached Out	Made Contact	Participation (YES, NO or WAITLIST)	Agreement STATUS	Teacher	Onboarding Questionnaire	Desire AQMD Volunteer in Class?	Kit Delivered	Student Workbooks	Assigned AQMD Volunteer	First Implementation	Kit Retrieved	Program Survey Received	Notes
Benjamin Franklin High School	LA	LAUSD	820 N Ave 54, Los Angeles, CA	Los Angeles	90042	2, 4, 6	A. Rodriguez	✓	✓	Yes	Complete	Name Jomel Villamil Email: jxv0362@lausd.net	✓	Yes	#50	Received 10	Ryan Banuelos	10/30/2019	2/14/2020	✓	
Bravo Medical Magnet High School	LA	LAUSD	1417, 1200 Cornwell St, Los Angeles, CA	Los Angeles	90033	1, 2, 3, 4, 5, 6	C. Lee	✓	✓	Yes	Complete	Name Deidre Ericksen Email: deidre.ericksen@lausd.net	✓	Yes	#27	Received 10					
Carson High School - Environmental Science, Engineering and Technology (ESET) Academy	LA	LAUSD	22328 S Main St, Carson, CA	Carson	90745	1, 2, 3, 4, 5, 6	R. Gonzalez	✓	✓	Yes	Complete	Name: Tammy Bird Phone:310.707.6277 Email: tbirdbea@lausd.net	✓	Yes	#96	Received 10	Ryan Stromar	2/6/2020			
Cesar E. Chavez Learning Academies-Academy of Scientific Exploration	LA	LAUSD	1001 Arroyo Ave, San Fernando, CA	San Fernando	91340	2, 6	R. Gonzalez	✓	✓	Yes	Complete	Name: Christopher Moon (Previously Melissa Portillo) Email: christopher.moon@explorease.org	✓	Yes	#46	Received 10					
Downtown Magnets High School	LA	LAUSD	1081 W Temple St, Los Angeles, CA	Los Angeles	90012	2, 3, 4, 5, 6	C. Lee	✓	✓	Yes	Complete	Name: Kara Gordon Email: kara.e.montgomery@gmail.com	✓	Yes	#84	Received 10	Monika Kim	1/24/2020			
Edward Roybal Learning Center	LA	LAUSD	1200 Colton St, Los Angeles, CA	Los Angeles	90026	2, 3, 4, 5, 6	R. Gonzalez	✓	✓	Yes	Complete	Name: Kuo-yu Ho Phone:213.580.6400 Email: kuo-yu.ho@lausd.net	✓	No	#75	Received 10	None				
James Monroe High School	LA	LAUSD	9229 Haskell Ave, North Hills, CA	North Hills	91343	2, 3, 4, 6	R. Gonzalez	✓	✓	Yes	Complete	Name: Lourdes Quevedo (Science Teacher) Email: ljr2340@lausd.net	✓	Yes	#41	Received 10		3/24/2020			
Manual Arts Senior High	LA	LAUSD	4131 S Vermont Ave, Los Angeles, CA	Los Angeles	90037	2, 3, 4, 5, 6	A. Rodriguez	✓	✓	Yes	Complete	Name: Andrea Contreras Phone: 323.846.7301 Email: yogi_1000@yahoo.com or axc9563@lausd.net	✓	Yes	#18	Received 10	None	11/15/2019		✓	
Rancho Dominguez Preparatory School	LA	LAUSD	4110 Santa Fe Ave, Long Beach, CA	Long Beach	90810	1, 2, 3, 4, 5, 6	R. Gonzalez	✓	✓	Yes	Complete	Name: Michelle Moulton Email: michelle.moulton@lausd.net	✓	No	#66	Received 10	None	TBD			
San Pedro High School	LA	LAUSD	1001 W 15th St, San Pedro, CA	San Pedro	90731	2, 3, 4, 5, 6	R. Gonzalez	✓	✓	Yes	Complete	Name: Jennifer Cheng Email: jsc9980@lausd.net	✓	Yes	#39	Received 10	None	10/23/2019			

Attachment 6

"WHO IS ON CAMPUS" DOCUMENT

	School Site Administrators Back	Teachers Back	First Day of School
Compton USD-	August 8th	August 14th	August 15th
Pomona USD-	Back	August 6th	August 12th
Redlands USD-	Back	August 5th	August 7th
San Bernardino City USD-	Back	Back	August 5th
Colton Joint USD-	Back	Back	August 7th
Moreno Valley USD-	Back	August 12th	August 14th
Corona Norco USD-	Back	August 7th	August 12th
Coachella Valley USD-	Back	August 13th	August 15th
Desert Sands USD-			August 22nd
Riverside USD-	Back	August 8th	August 12th
Garden Grove USD-	August 12th	August 23rd	August 28th
LAUSD-	Back	August 19th	August 20th
Long Beach USD-	August 19th	August 27th	August 28th
Alhambra USD		August 8th	August 9th
Azusa USD	August 19th	August 20th	August 22nd
Baldwin Park USD		August 8th/12th (new/returning)	August 15th
Charter Oak USD			August 15th
School of Arts (Charter)	Back	Back	August 12th
El Monte USD	Back	August 15th	August 20th
West Covina USD	August 14th	August 14th	August 20th
Montebello USD	August 15th	August 15th	August 19th
Bassett USD		August 12th	August 13th
Whittier USD		August 9th	August 12th
St. Mary's (Parochial)			
Pacific Harbor (Parochial)		August 28th	September 4th
Bishop Mora (Parochial)	August 14th	August 14th	August 14th

Cantwell-Sacred Heart (Parochial)	August 9th	August 9th	August 13th
Garden Grove USD		August 26th	August 28th
Placentia – Yorba Linda USD			August 27th
Tustin USD	Back	August 12th	August 13th
Adv. Learning (Charter – Santa Ana USD)	August 7th	August 7th	August 12th
Nova Academy (Charter)	August 7th	August 7th	August 7th
Magnolia Science Academy (Charter)			August 20th
Beaumont USD	August 7th	August 7th	August 7th
Santa Ana USD	Back	Back	August 12th
Fullerton Joint Union HSD	Back	Back	August 12th
Anaheim Union HSD	Back	Back	August 08th
Alliance Morgan McKinzie	Back	Back	August 12th
Alliance Alice M. Baxter	Back	Back	August 12th

Year 1 Report

2019-2020

Lee Andrews GROUP
Moving your ideas forward

700 S. Flower Street, Suite
1275, Los Angeles, CA 90017

213-891-2965

info@leeandrewsgroup.com

Schools with Signed WHAM Agreements 2019-20

School Name	County	Implemented During 2019-20 School Year	Did Not Implement During 2019-20 Due to COVID-19
Arroyo High School	Los Angeles	X	
Beaumont High School	Riverside	X	
Bell Gardens High School	Los Angeles	X	
Benjamin Franklin High School	Los Angeles	X	
Boyle Heights STEM High	Los Angeles	X	
Buena Park High School	Orange County	X	
Cabrillo High School	Los Angeles	X	
Carson High School - Environmental Science, Engineering and Technology (ESET) Academy	Los Angeles	X	
Citrus Hill High	Riverside	X	
Citrus Valley High School	San Bernardino	X	
Coachella Valley High School	Riverside	X	
Colton High School	San Bernardino	X	
Cypress High School	Orange County	X	
Desert Mirage High School	Riverside	X	
Downtown Business Magnet	Los Angeles	X	
Edgewood High School	Los Angeles	X	
Ganesha High School	Los Angeles	X	
Helen Bernstein High School	Los Angeles	X	
James A. Garfield High School	Los Angeles	X	
Jordan High School	Los Angeles	X	
Kennedy High School	Orange County	X	
Manual Arts Senior High	Los Angeles	X	
Montebello High School	Los Angeles	X	
Paramount High (West/Senior) Campus	Los Angeles	X	
Pomona High School	Los Angeles	X	
Redlands East Valley High School	San Bernardino	X	
Roosevelt High School - Math, Science, and Technology Magnet	Los Angeles	X	
Ruben S. Ayala High	San Bernardino	X	
San Pedro High School	Los Angeles	X	

Schools with Signed WHAM Agreements 2019-20

School Name	County	Implemented During 2019-20 School Year	Did Not Implement During 2019-20 Due to COVID-19
Science Academy STEM Magnet	Los Angeles	X	
South El Monte High School	Los Angeles	X	
St. John Bosco	Los Angeles	X	
Washington Preparatory High School	Los Angeles	X	
A.B. Miller High School	San Bernardino		X
Alliance Alice M. Baxter College-Ready High School	Los Angeles		X
Alliance Morgan McKinzie High School	Los Angeles		X
Alta Loma High School	San Bernardino		X
Applied Technology Center (ATC)	Los Angeles		X
Arroyo Valley High School	San Bernardino		X
Baldwin Park High School	Los Angeles		X
Banning High School	Riverside		X
Bravo Medical Magnet High School	Los Angeles		X
Cajon High School	San Bernardino		X
California High School	Los Angeles		X
Centennial High School	Los Angeles		X
Centennial High School	Riverside		X
Cesar E. Chavez Learning Academies- Academy of Scientific Exploration	Los Angeles		X
Chino High School	San Bernardino		X
Chino Hills High	San Bernardino		X
Compton High School	Los Angeles		X
Corona High School	Riverside		X
Dominguez High School	Los Angeles		X
Don Antonio Lugo High	San Bernardino		X
Edward Roybal Learning Center	Los Angeles		X
El Monte High School	Los Angeles		X
Eleanor Roosevelt High School	Riverside		X
Fontana High School	San Bernardino		X
Garden Grove High School	Orange County		X

Schools with Signed WHAM Agreements 2019-20

School Name	County	Implemented During 2019-20 School Year	Did Not Implement During 2019-20 Due to COVID-19
Garey High School	Los Angeles		X
Godinez Fundamental High School	Orange County		X
Henry J. Kaiser High School	San Bernardino		X
Hilda L. Solis Learning Academy	Los Angeles		X
Indian Springs High School	San Bernardino		X
Indio High School	Riverside		X
James Monroe High School	Los Angeles		X
John F. Kennedy Middle College High School	Riverside		X
Jurupa Hills High School	San Bernardino		X
Katella High School	Orange County		X
Loara High School	Orange County		X
Lorin Griset Academy	Orange County		X
Magnolia High School	Orange County		X
Montclair High School	San Bernardino		X
Mountain View High School	Los Angeles		X
Norco High School	Riverside		X
Ontario High School	San Bernardino		X
Orange Vista High School	Riverside		X
Pacific High School	San Bernardino		X
Palomares Academy of Health Sciences	Los Angeles		X
Phineas Banning High School	Los Angeles		X
Rancho Alamitos High School	Orange County		X
Rancho Cucamonga High School	San Bernardino		X
Rancho Dominguez Preparatory School	Los Angeles		X
Rancho Verde High School	Riverside		X
Redlands High School	San Bernardino		X
Rosemead High School	Los Angeles		X
San Bernardino High School	San Bernardino		X
San Gorgonio High School	San Bernardino		X
Santa Fe High School	Los Angeles		X
Santiago High School	Orange County		X

Schools with Signed WHAM Agreements 2019-20

School Name	County	Implemented During 2019-20 School Year	Did Not Implement During 2019-20 Due to COVID-19
Santiago High School	Riverside		X
Savanna High School	Orange County		X
Schurr High School	Los Angeles		X
Segerstrom High School	Orange County		X
Servite High School	Orange County		X
Sierra Vista High School	Los Angeles		X
South East Senior HS	Los Angeles		X
Summit High School	San Bernardino		X
The School of Arts and Enterprise	Los Angeles		X
Upland High School	San Bernardino		X
Valley High School	Orange County		X

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 18

PROPOSAL: Annual Progress Report for AB 617 Community Emissions Reduction Plans

SYNOPSIS: This report summarizes the results and actions taken from September 2019 to June 2020 to further reduce emissions in AB 617 communities designated in 2018.

COMMITTEE: Stationary Source, September 18, 2020

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

PF:JKG:DG:NS

Assembly Bill (AB) 617 was signed into law in July 2017, requiring new community-focused and community-driven action to reduce air pollution and improve public health in communities experiencing disproportionate burdens from exposure to air pollutants. Three of the ten statewide communities selected by the CARB in the first year of the AB 617 program are in the South Coast Air Basin. These communities, commonly referred to as 2018–designated AB 617 communities, are:

- East Los Angeles, Boyle Heights, West Commerce (ELABHWC);
- San Bernardino, Muscoy (SBM); and
- Wilmington, Carson, West Long Beach (WCWLB)

Following input from Community Steering Committees (CSCs) in each of the 2018-designated AB 617 communities, the Board adopted Community Emissions Reduction Plans (CERPs) on September 6, 2019. The CERPs identify actions to reduce emissions and exposures to criteria air pollutants and toxic air contaminants in each community. Additionally, staff developed Community Air Monitoring Plans (CAMPS) that provided detail about the air monitoring in those communities.

AB 617 and the CARB Community Air Protection Blueprint require air districts to prepare annual progress reports summarizing the results of implementing CERPs.[1, 2] The attached report is based on the CARB Community Air Protection Blueprint Guidelines. It summarizes CERP implementation progress in 2018-designated AB 617 communities in the South Coast Air Basin from September 6, 2019 to June 30, 2020. The report covers information on incentive funds distributed in the communities from July 26, 2017 to June 30, 2020 and air monitoring activities initiated by staff since June 2019, a part of the Community Air Monitoring Plans. The report also summarizes the status (e.g., implementation milestones and completed elements) of the actions, goals, and strategies implemented during the reporting periods identified above.

Staff will update the report annually with available information regarding the community profile on each 2018-designated community, metrics for tracking progress, qualitative assessments for CERP implementation, and key plan adjustments. The annual progress reports will address the status of actions, goals, and strategies for each CERP. Future progress reports will also address additional actions recommended and approved by the CARB Board on September 10, 2020.

The attached report will be submitted to CARB staff in October 2020 and presented to the CARB Board as part of its review and assessment of statewide AB 617 implementation in December 2020.

Attachment
2019 – 2020 Annual Progress Report for AB 617 Community Emissions Reduction Plans

[1] Health and Safety Code Section 44391.2 (C)(7)
[2] California Air Resources Board "Community Air Protection Blueprint", 2018, https://ww2.arb.ca.gov/capp-blueprint.

ANNUAL PROGRESS REPORT FOR AB 617 COMMUNITY EMISSIONS REDUCTION PLANS

October 2020

South Coast Air Quality Management District

[THIS PAGE IS INTENTIONALLY LEFT BLANK]

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

Chairman: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT
Council Member, Wildomar
Cities of Riverside County

MEMBERS:

KATHRYN BARGER
Supervisor, Fifth District
County of Los Angeles

LISA BARTLETT
Supervisor, Fifth District
County of Orange

JOE BUSCAINO
Council Member, 15th District
City of Los Angeles Representative

MICHAEL A. CACCIOTTI
Council Member, South Pasadena
Cities of Los Angeles County/Eastern Region

VANESSA DELGADO
Senate Rules Committee Appointee

GIDEON KRACOV
Governor's Appointee

LARRY MCCALLON
Mayor, Highland
Cities of San Bernardino County

JUDITH MITCHELL
Council Member, Rolling Hills Estates
Cities of Los Angeles County/Western Region

V. MANUEL PEREZ
Supervisor, Fourth District
County of Riverside

CARLOS RODRIGUEZ
Council Member, Yorba Linda
Cities of Orange County

JANICE RUTHERFORD
Supervisor, Second District
County of San Bernardino

EXECUTIVE OFFICER:

WAYNE NASTRI

[THIS PAGE IS INTENTIONALLY LEFT BLANK]

INTRODUCTION

Assembly Bill (AB) 617 was signed into law in July 2017, requiring new community-focused and community-driven action to reduce air pollution and improve public health in communities experiencing disproportionate burdens from exposure to air pollutants. Three of the ten statewide communities selected by the California Air Resources Board (CARB) in the first year of the AB 617 program are in the South Coast Air Basin. These communities are commonly referred to as 2018–designated AB 617 communities and include:

- East Los Angeles, Boyle Heights, West Commerce (ELABHWC)
- San Bernardino, Muscoy (SBM)
- Wilmington, Carson, West Long Beach (WCWLB)

Following input from Community Steering Committees (CSCs) in each of the 2018-designated AB 617 communities, the South Coast AQMD Governing Board adopted Community Emissions Reduction Plans (CERPs) on September 6, 2019. The CERPs identify actions to reduce emissions and exposures to criteria air pollutants and toxic air contaminants in each community.

BACKGROUND AND PURPOSE

AB 617 and the CARB Community Air Protection Blueprint require air districts to prepare annual progress reports summarizing the results of implementing CERPs.[1, 2] This report summarizes the progress of CERP implementation in 2018-designated AB 617 communities in the South Coast Air Basin from September 6, 2019 to June 30, 2020. Additionally, the report covers information on incentive funds distributed in the communities from July 26, 2017 to June 30, 2020. The report also includes air monitoring activities initiated by staff since June 2019, a part of the Community Air Monitoring Plans (CAMPs). The report is based on the guidelines set forth in the CARB Community Air Protection Blueprint and includes the following:

- Community profile updates
- An overview of the CERP framework
- Status of CERP actions, goals and strategies
- Metrics for tracking progress
- A qualitative assessment of CERP progress
- A summary of key plan adjustments

COMMUNITY PROFILE UPDATES

The community profile used to develop the CERPs established a baseline for each AB 617 community based on the types of pollution impacting each community, public health data, and

[1] Health and Safety Code Section 44391.2 (C)(7)
[2] California Air Resources Board "Community Air Protection Blueprint", 2018, https://ww2.arb.ca.gov/capp-blueprint. Accessed June 18, 2020.

socioeconomic factors. Data from CalEnviroScreen 3.0, Multiple Air Toxics Exposure Study (MATES) IV, and Southern California Association of Governments (SCAG) were used to inform the community profile. Since the adoption of the CERPs these data sources have not been updated; therefore, no changes to the established community profile are required.

Since the adoption of the CERPs by the South Coast AQMD Governing Board, the onset of the pandemic caused by COVID-19 has significantly altered the daily lives of communities around the world. However, mounting evidence indicates that community strategies to slow the spread of COVID-19 may cause unintentional harm, such as lost wages, reduced access to services, and increased stress, for some racial and ethnic minority groups.[3] South Coast AQMD staff is closely monitoring this information and its impacts on the data used to develop the CERPs.

OVERVIEW OF CERP FRAMEWORK

The air quality priorities for each 2018–designated AB 617 community was determined by the CSCs and identified in the CERPs. The air quality priorities focused the CERPs on addressing local air quality concerns from residents, community groups, and local businesses. The air quality priorities are below.

East Los Angeles, Boyle Heights, West Commerce

- Neighborhood and Freeway Traffic from Trucks and Automobiles
- Railyards (On-site Emissions)
- Metal Processing Facilities
- Rendering Facilities
- Auto Body Shops
- Schools, Childcare Centers, Community Centers, Libraries, and Public Housing Projects
- General Concerns about Industrial Facilities, including Waste Transfer Stations

Wilmington, Carson, West Long Beach

- Refineries
- Ports
- Neighborhood Truck Traffic
- Oil Drilling and Production
- Railyards
- Schools, Childcare Centers, and Homes

San Bernardino, Muscoy

- Neighborhood Truck Traffic
- Warehouses
- Omnitrans

[3] Centers for Disease Control and Protection, Health Equity Considerations and Racial and Ethnic Minority Groups. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/race-ethnicity.html, Accessed August 4, 2020.

- Railyards (On-site Emissions)
- Concrete Batch, Asphalt Batch, and Rock and Aggregate Plants
- Schools, Childcare Centers, Community Centers, and Homes

To address the air quality priorities listed above, each CSC developed a set of actions and goals to achieve emissions and exposure reductions. The CERPs call for actions and goals to be implemented through six types of strategies including: rules and regulations, enforcement, air monitoring, collaboration, incentives, and public information and outreach. Figure 1 – Overview of Community Emissions Reduction Plans demonstrates the relationship between actions, goals, strategies, and emission and exposure reductions.

Figure 1: Overview of Community Emissions Reduction Plans

STATUS OF CERP ACTIONS, GOALS AND STRATEGIES

As described in the background and purpose section above, this report focuses on CERP implementation progress from September 6, 2019 to June 30, 2020. This report also includes the various air monitoring activities initiated by staff since June 2019, a part of the Community Air Monitoring Plans (CAMPs) developed for the 2018-designated AB 617 communities. The CAMPs support the actions and goals in each respective CERP and are available at http://www.aqmd.gov/nav/about/initiatives/community-efforts/environmental-justice/ab617-134/ab-617-community-air-monitoring#. Additionally, the report covers information on incentive funds distributed in the communities from July 26, 2017 to June 30, 2020. South Coast AQMD staff developed a table (see Attachment A) for each community summarizing the status (e.g.,

implementation milestones and completed elements) of the actions, goals, and strategies requiring implementation during the reporting periods identified above.

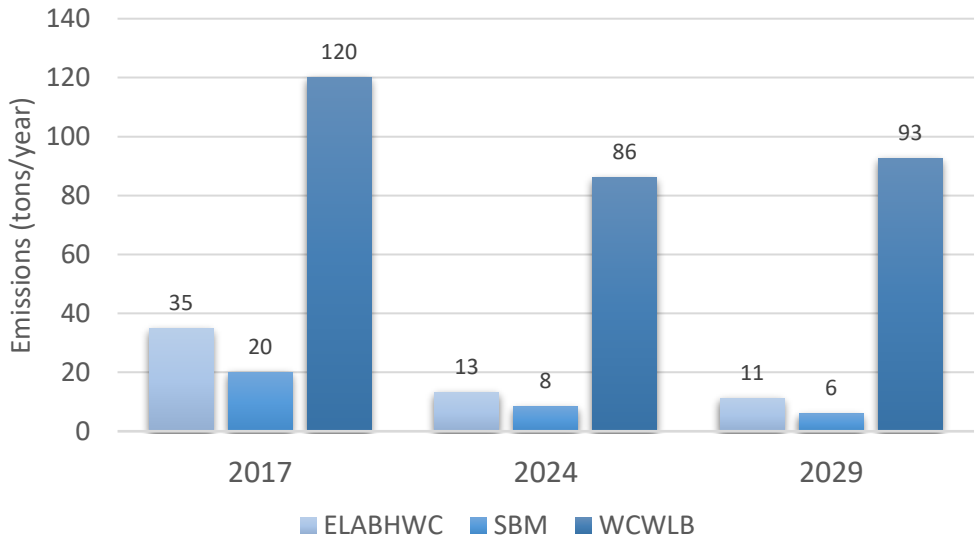
The CARB Board formally approved the CERPs for the 2018-designated AB 617 communities on September 10, 2020. Future progress reports will address all other actions approved by the CARB Board and actions, goals, and strategies requiring implementation after June 30, 2020.

Metrics for Tracking Progress

Baseline Emissions

Per CARB Guidance, CERP emissions baselines are 2017 and include milestone years 2024 and 2029. South Coast AQMD staff worked with CARB staff, the AB 617 Technical Advisory Group (TAG), and the CSCs to develop the baseline and forecasted emissions inventories for the milestone years 2024 and 2029. Diesel particulate matter (DPM) is the largest contributor to toxic air contaminants in each community. Figure 2 – DPM Emissions by Community shows the DPM emissions for the baseline year and milestones years in 2018-designated AB 617 communities. These charts reflect emission reductions from rules already adopted prior to the CERPs, and do not reflect any additional emission reductions that would result from the CERP actions. Additional baseline and milestone year emissions data for other pollutants are available in Chapter 5a: Actions to Reduce Community Air Pollution in the CERPs.

Figure 2 – DPM Emissions by Community



Emission Reduction Targets

The actions, goals, and strategies in the CERPs define a path to reduce air pollution from sources and provide additional protections at schools that reduce harmful air pollution exposure for the children who spend time at those schools. In some instances, the actions, goals, and strategies reaffirm ongoing rule development efforts and provide new commitments for localized reductions, sharing emissions data, timelines, and other related information. Further, the actions, goals and

strategies in the CERPs prioritize emission reductions and set forth emission reduction targets for the milestone years 2024 and 2029 summarized in Table 1 – Overview of Emissions Reduction Targets by 2029.

Table 1 – Overview of Emissions Reduction Targets by 2029* (tons/year)

AB 617 Community	NO_X	SO_X	VOC	DPM
ELABHWC	377	--	--	1.4
SBM	127.9	--	--	0.91
WCWLB [4]	3,207[5]	11	64	20

*Estimated emission reductions from regulations are subject to future assessments and regulatory analyses.

The reporting period for this annual progress report is limited to less than nine months from the date the South Coast AQMD Governing Board adopted the CERPs. As implementation continues, South Coast AQMD staff will work with CARB staff, the AB 617 TAG, and CSC's to quantify future emission reductions achieved by the CERP. For example, CARB recently adopted the Advanced Clean Trucks Rule requiring truck manufacturers to transition from producing diesel trucks and vans to electric zero-emission trucks, including heavy-duty vehicles beginning in 2024. The Advanced Clean Trucks Rule is a strategy in the CERPs and accounted for in the emission reduction targets. Therefore, South Coast AQMD staff will work with CARB staff, the AB 617 TAG, and the CSC to quantify the emissions reductions from each CERP, based on the rule implementation schedule beginning in 2024.

Additionally, staff will work with the CSCs and TAG to refine emission reduction targets and provide information about community level exposures to ambient air toxics when new information becomes available from community air monitoring efforts. For example, continuous metals air monitoring recently deployed at Resurrection Church in the ELABHWC community will provide information about community levels of air toxics and help track ambient air toxics levels.

[4] Per CARB guidance, the emissions baseline was estimated for 2017, and milestone years 2024 and 2029. However, the emission reductions for WCWLB in this table target a 2030 completion date, due to the complexity of the efforts. While the baseline emissions were not calculated for 2030, staff expect the emissions to be similar to the 2029 estimates.

[5] Based on maximum NOx emission reductions that may be reduced from Action 5 of WCWLB CERP Chapter 5b that is designed to achieve further reductions from refinery equipment through adoption of Proposed Rule 1109.1 – Refinery Equipment

Qualitative Assessment

As discussed above, the reporting period for this annual progress report is limited to less than nine months from the date the South Coast AQMD Governing Board adopted the CERPs. Although South Coast AQMD staff will work with CARB staff, the AB 617 TAG, and CSC's to quantify future emission reductions achieved by the CERP, this section provides a qualitative assessment of the CERP strategies (e.g., enforcement and air monitoring) implemented through June 30, 2020.

Incentives

Incentives are a strategy to achieve emission reductions for numerous actions in all three CERPs for the 2018-designated AB 617 communities. For mobile source incentives, South Coast AQMD staff adheres to the Carl Moyer Program and Prop 1B guidelines, both of which are the framework used for AB 617 project evaluations.

South Coast AQMD prioritizes eligible projects in AB 617 communities based on a process that identifies and prioritizes zero-emission projects followed by projects using the cleanest available technologies. The total investments in incentives in 2018-designated AB 617 communities from July 16, 2017 to June 30, 2020 for mobile sources and resulting emissions reductions are in Table 2 – Mobile Source Incentives in 2018-designated AB 617 Communities, below.

Table 2 – Mobile Source Incentives in 2018-designated AB 617 Communities

Community	Total Incentives Distributed (millions of dollars)	NOX	PM	VOC
		tons per year		
ELABHWC	20.7	48.1	0.6	2.0
SBM	9.6	79.7	1.3	2.3
WCWLB	53.6	179	4.1	8.6

Additionally, on April 22, 2020, South Coast AQMD staff submitted a disbursement request for Community Air Protection Program (CAPP) incentive funds to CARB for community-identified project categories, including school air filtration systems in all three 2018-designated AB 617 communities and hexavalent chromium plating facility projects in the ELABHWC community. CARB approved the disbursement request in the second quarter of 2020. The South Coast AQMD staff will begin to work with local school districts to install air filtration systems that reduce children's exposure to DPM at schools. Additionally, South Coast AQMD staff will pursue projects in the ELABHWC community to reduce emissions from hexavalent chromium plating facilities beyond regulatory requirements.

Enforcement

For all CERP actions, the South Coast AQMD Office of Compliance and Enforcement (OCE) staff has made progress in conducting field activities and taking enforcement action. Field activities

include community-specific complaint responses, evaluating and addressing notifications (e.g., equipment breakdowns or flaring), facility inspections, surveillance operations, and other daily functions carried out by OCE staff. An overview of the types of enforcement activities in the 2018-designated AB 617 communities are below.

ELABHWC

- Industrial/Autobody Facilities – Inspections have been conducted regularly at industrial facilities
- Rendering Facilities – Inspectors have regularly conducted compliance activities in and around rendering facilities to ensure compliance with Rule 415, relevant orders of abatement, and all other applicable air quality rules and regulations
- Metals Facilities – Inspections are conducted regularly and partnerships with the Monitoring Division have ensured that any elevated emissions are identified and investigated
- Idling Trucks – All quarterly idling truck sweeps committed to in the CERP to date have been conducted, and these operations incorporate community input, fleet data, and historical locations where idling tends to occur (see Table 3 below)

SBM

- Cement/Asphalt Facilities – All the cement/asphalt facilities were inspected in 2019
- Omnitrans – Both Omnitrans facilities have been inspected within the last year
- Idling Trucks – All quarterly idling truck sweeps committed to in the CERP to date have been conducted, and these operations incorporate community input, fleet data, and historical locations where idling tends to occur (see Table 3 below)

WCWLB

- Oil Wells – Inspections have been conducted regularly at oil wells, initiated by both mobile monitoring and compliance staff
- Oil Refineries – In addition to regular surveillance with the FLIR camera, OCE staff continues to conduct inspections, respond to all notifications, audits emissions, and facility inspections
- Oil Tankers – During the COVID-19 period, inspectors conduct daily surveillance along the shoreline and inner Long Beach Harbor. In the course of these and past investigations, multiple oil tankers have been boarded and inspected once docked at the port
- Idling trucks – All quarterly idling truck sweeps committed to in the CERP to date have been conducted, and these operations incorporate community input, fleet data, and historical locations where idling tends to occur (see Table 3 below)

Table 3 – Idling Truck Sweeps Conducted within 2018-designated AB 617 Communities[6]

Inspection Date	Number of Trucks Inspected	Certified Clean Idle Stickers	Notice of Violation
ELABHWC			
10/17/2019	24	0	0
10/18/2019	11	0	0
2/25/2020	17	10	1
5/19/2020	62	36	0
SBM			
9/26/2019	24	0	2
11/10/2019	11	7	0
3/31/2020	8	2	0
6/4/2020	18	16	0
WCWLB			
9/26/2019	75	2	0
1/28/2020	59	40	0
2/4/2020	0	0	0
4/29/2020	85	65	4
Totals:	**394**	**178**	**7**

Air Monitoring

AB 617 Community Air Monitoring continued to be conducted in all three South Coast AQMD 2018-designated communities as part of the AB 617 program. The locations and types of pollutants monitored are unique to each community and are determined through collaboration with the CSCs and guided by the Community Air Monitoring Plans (CAMPs). Data collected from air monitoring provides valuable information about air pollution sources, types of pollutants, and air quality impacts in AB 617 communities. Monitoring data resulting from the implementation of the CAMPs also supports CERP implementation.

To keep CSC's informed of monitoring conducted for the CAMP and CERP, South Coast AQMD staff developed infographics that track the progress of monitoring activities. The infographics have been provided to the CSC and are available on the AB 617 community webpages listed below. Additionally, the infographics are in Attachment B – Community Air Monitoring Updates.

- ELABHWC – http://www.aqmd.gov/ab-617/CAMP/infographics/ELABHWC
- SBM – http://www.aqmd.gov/ab-617/CAMP/infographics/SBM
- WCWLB – http://www.aqmd.gov/ab-617/CAMP/infographics/WCWLB

[6] Truck idling inspection locations were selected based on complaints received, CARB data sources, and locations prioritized by each respective CSC during the truck idling location prioritization activities conducted in October 2019.

Additionally, South Coast AQMD staff created an Air Monitoring Data Display for the public to view monitoring data collected at the community level for each 2018-designated AB 617 community. The Air Monitoring Data Display is available at http://xappprod.aqmd.gov/AB617CommunityAirMonitoring/Home.

Rules and Regulations

Each CERP also includes a regulatory strategy to achieve emission reductions for mobile and stationary sources. Table 4 – Status of Rules Required to be Considered for CERPs from September 6, 2019 to June 30, 2020, provides a status update of rules that are identified in the CERPs as part of the strategy to achieve emission reduction targets.

Table 4 – Status of Rules Required to be Considered for CERPs from September 6, 2019 to June 30, 2020

Regulation	Purpose	Agency	CERP Community	Expected Public Hearing Date	Updated Public Hearing Date	Status of Development
Control Measure for Ocean-Going Vessels At-Berth (At-Berth Regulation)	The Proposed Regulation would take effect in 2021 and is designed to achieve further emissions from vessels at berth to reduce adverse health impacts to communities surrounding ports and terminals throughout California.	CARB	WCWLB	December 2019	8/27/2020	Regulation was approved by CARB's Board.
Advanced Clean Truck Regulation	The Advanced Clean Truck Regulation is a requirement for truck manufacturers to sell zero-emission trucks in California and a one-time requirement for large entities to report about their facilities, types of truck services used, and fleet of vehicles.	CARB	ELABHWC, SBM, WCWLB	Early 2020	6/25/2020	Regulation was approved by CARB's Board.
Proposed Rule 2305 - Warehouse Indirect Source Rule (ISR) - Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program	This rule would establish a new regulatory program applicable to warehouses greater than 100,000 square feet. This rule would provide a menu of potential	South Coast AQMD	ELABHWC, SBM, WCWLB	Early 2020	First Quarter 2021	In response to COVID-19, public hearing dates have been delayed to allow more time to work with stakeholders and to incorporate modifications to the rulemaking process.

Regulation	Purpose	Agency	CERP Community	Expected Public Hearing Date	Updated Public Hearing Date	Status of Development
	compliance options for industry.					
Rail Yard Indirect Source Rule (ISR)	The proposed new regulation would reduce regional and local emissions from rail yards, consistent with the 2016 AQMP and the AB 617 CERPs.	South Coast AQMD	ELABHWC, SBM, WCWLB	December 2020	Second Quarter 2021	In response to COVID-19, public hearing dates have been delayed to allow more time to work with stakeholders and to incorporate modifications to the rulemaking process.
Memorandum of Understanding (MOU) for Marine Ports	Following Board's direction, staff has been pursuing a MOU with the Ports based on the San Pedro Bay Ports Clean Air Action Plan (CAAP) measures.	South Coast AQMD	WCWLB	December 2019	TBD	The Ports MOU is under development and will be based on the CAAP measures.

Collaboration

Collaboration with other public agencies and community groups is key to implementing the CERP. Examples of collaboration with other public entities and community groups initiated during this reporting period are outlined below.

- CARB and South Coast AQMD conducted joint workshops within the SBM and ELABHWC communities to discuss Railyard ISR development
- In addition to enhanced mobile source regulation enforcement within each community, South Coast AQMD and CARB enforcement are working together to receive approval from schools, and municipalities to install "no idling" signs near these sensitive receptors to prevent idling
- South Coast AQMD and Los Angeles County Department of Public Health initiated discussions to develop outreach material for various actions for the WCWLB and ELABHWC CERPs
- South Coast AQMD initiated discussions with WCWLB community-based organizations to develop and plan asthma related outreach that will discuss air quality impacts in the community and identify the benefits of air filtration systems at schools
- South Coast AQMD and Los Angeles County Department of Regional Planning initiated discussions during the ELABHWC CERP development regarding the county's proposed Green Zones Ordinance (GZO) and continued collaboration efforts through interagency participation during CSC meetings and GZO working group meetings
- South Coast AQMD and CARB are working together to deploy Automated License Plate Reader (ALPR) systems in SBM and ELABHWC communities and Portable Emissions Acquisitions System (PEAQS) within the ELABHWC community.

The Air Grants Program[7] and Supplemental Environmental Projects[8] (SEPs) can support CERP implementation. The Air Grants Program supports for community-based organizations to participate and build capacity to become active partners in the AB 617 process. SEPs fund community-based projects from a portion of the penalties received during the settlement of enforcement actions. Several community-based organizations in South Coast AQMD 2018-designated AB 617 communities are awardees of the Air Grants Program and SEPs. Future annual progress reports will summarize the contributions of community-led projects funded by the Air Grants Program and SEPs to the CERPs for 2018–designated AB 617 communities.

Public Information and Outreach

A list of key public outreach events conducted from September 6, 2019 to June 30, 2020 for CERP implementation is in Table 5 – Key Public Outreach Efforts.

[7] CARB Community Air Grants: Proposed Awardees. https://ww2.arb.ca.gov/our-work/programs/community-air-protection-program/community-air-grants/proposed-awardees. Accessed August 14, 2020.

[8] CARB Supplemental Environmental Projects (SEPs). https://ww2.arb.ca.gov/our-work/programs/supplemental-environmental-projects-seps/about. Accessed September 1, 2020.

Table 5 – Key Public Outreach Efforts

AB 617 Community	Outreach Efforts
WCWLB	Staff presented at the Wilmington Neighborhood Council Meeting in January 2020 to provide an overview of the AB 617 program, training on filing an air quality complaint, and truck idling enforcement within the community.
WCWLB	As part of the Why Air Quality Matters (WHAM) High School Education Program, staff met with students at Carson High School in February 2020 and provided an overview of South Coast AQMD, an introduction to air pollution, and AB 617 efforts within the community.
SBM	As part of the SBConnect Series: Why Healthy Air Matters, staff provided two virtual presentations to San Bernardino area high school students on April 22, 2020 and provided an overview of South Coast AQMD, an introduction to air pollution, and a dry ice experiment.
SBM	In coordination with Safe Routes Partnership, a presentation was made to the SBM CSC on May 21, 2020. The presentation highlighted the work being done in San Bernardino, Muscoy to create safer and healthier walkable neighborhoods for students and families.
ELABHWC	As part of the Why Heathy Air Matters (WHAM) High School Education Program, staff taught 11 classes from November 2019 to March 2020 that focused on air quality at schools within the community boundary, which included Boyle Heights STEM High, James A. Garfield High School, and Roosevelt High School - Math, Science, and Technology Magnet.

Since March 2020, South Coast AQMD outreach efforts have mostly transitioned to a virtual format in response to COVID-19 and related health orders. For example, in May of 2020, outreach for Carl Moyer funding opportunities was conducted via webcast in place of public workshops in the community. The workshops were posted to South Coast AQMD's website, sent to email subscribers, and shared with CSC members.

SUMMARY OF KEY PLAN ADJUSTMENTS

South Coast AQMD staff is actively working on Proposed Rule 2305 Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) Program. South Coast AQMD staff released the first draft rule in May 2020. The purpose of the draft rule is to reduce local and regional NOx and DPM emissions and facilitate local and regional emission reductions associated with warehouses larger than 100,000 square feet and the mobile sources

attracted to them. Based on the implementation timeline in each of the CERPs Proposed Rule 2305 was scheduled to be considered for adoption by South Coast AQMD's Governing Board in early 2020. In response to COVID-19, public hearing dates have been delayed to allow more time to work with stakeholders and to incorporate modifications to the rulemaking process. As a result, the rule is scheduled to be considered by the South Coast AQMD Governing Board in the first quarter of 2021.

The CERPs also include a regulatory strategy to develop an indirect source rule (ISR) to reduce air pollution from rail yards. Based on the CERP implementation timeline, the ISR for railyards was scheduled to be considered by the South Coast AQMD Governing Board by December 2020. Also, in response to COVID-19, public hearing dates have been delayed allowing more time to work with stakeholders and to incorporate modifications to the rulemaking process. The proposed Railyard ISR is currently scheduled for consideration by the Governing Board in the second quarter of 2021.

South Coast AQMD staff continues to work with stakeholders (i.e., rail yard operators, communities, etc.) on proposed concepts for the Railyard ISR. South Coast AQMD has limited authority over locomotives and railroad activity, and any regulations it might pass will likely require federal approval before they can go into effect. With these limits in mind, South Coast AQMD is pursuing four concepts to reduce emissions from railyards, including developing an Indirect Source Rule (ISR).[9] These include:

- Reducing exposures from locomotive maintenance and service emissions
- Requiring railroads to develop zero emission infrastructure plans for railyards
- Developing new incentive programs to focus on incentivizing cleaner locomotive activity instead of cleaner locomotive purchases
- Evaluating new monitoring approaches for in-use locomotives

[9]South Coast Air Quality Management District, Railyards and Intermodal Facilities Working Group. http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/facility-based-mobile-sourcemeasures/rail-fac-wkng-grp. Accessed July 8, 2020.

Attachment A – Status of CERP Commitments

Table 1: Actions, Goals and Strategies Required from Adoption to June 2020 for WCWLB CERP Implementation

WCWLB Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
Refineries	Begin mobile air monitoring surveys, follow-up inspections (if necessary), provide quarterly updates on findings	• July 2019 – Initiated mobile air monitoring (ongoing monitoring investigations) • January 2020 – Provided updates at quarterly CSC meeting
	Provide summary of flare emissions data and number of flaring events from 2008-2018	June 2019 – Completed by providing 2008-2018 quarterly emissions report data to CSC
	Initiate rule 1118 development activities & initiate process with stakeholders on additional improvements to flaring notifications	• July 2018 - Initiated rule development activities (e.g., evaluation of scoping plans) • December 2019 – Flaring Event Notification System (FENS) web-based portal deployed (next update expected Fall 2020)
	Deploy Rule 1180 monitoring and begin evaluating results	• January 2020 – Initiated deployment of fenceline monitoring • March 2020 – Fully implemented fenceline monitoring
	Explore SMART leak detection and repair (LDAR) technology & programs	April 2020 – Initiated research for SMART LDAR
	Provide inventory of refinery equipment and state if BARCT is being considered	September 2019 – Completed by including inventory in CERP Appendix 5B
	Continue Proposed Rule 1109.1 development (site visits, vendor meetings, etc.)	• February 2018 – Rule development initiated (over a dozen working group meetings conducted) • May 2020 – Began conducting working group meetings virtually
	Hold Proposed Rule 1109.1 working group meeting in the community	• May 2020 – Working group meetings began being conducted via virtual platforms
	Initiate process to work with local public health departments to develop outreach materials for flaring	April 2020 – Collaborative discussions in initial phases

WCWLB Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
Ports	Update CSC on CARB's enforcement of Drayage Truck Regulation	Delayed – CARB Drayage truck update expected to occur in late 2020
	Engage in outreach for PRIMER initiative	June 2019 – Initiated PRIMER outreach (outreach ongoing)
	Update CSC on demonstration projects for ships and harbor craft	• June 2020 – Initial technology demonstration project contract executed (currently in planning and design phase) • June 2020 – U.S. EPA notified South Coast AQMD that it was awarded funding for another technology demonstration project (expected to begin in 2021)
	Identify additional incentives for cleaner port equipment & Drayage Trucks	May 2020 – Initiated outreach for Carl Moyer by webcast
	Participate in CARB At-Berth Regulation development	November 2019 – Completed, South Coast AQMD comment letter submitted during CARB's public process
	Engage in outreach events when incentive programs are open for application (Ships and harbor crafts)	May 2020 – Initiated outreach for Carl Moyer by webcast
	Continue Port MOU development and begin implementing aspects of Ports Clean Air Action Plan (CAAP), if feasible	• May 2018 – South Coast AQMD Governing Board directed staff to pursue a Port MOU (development is ongoing and is based on CAAP measures) • TBD – Public hearing is TBD
Neighborhood Truck Traffic	Work to establish "no truck idling" signage with locations prioritized by CSC	October 2019 – CARB and South Coast enforcement efforts initiated based on CSC input
	Plan outreach events to inform the community members how to report idling trucks	• October 2019 – Initiated outreach efforts • January 2020 – Outreach conducted at Wilmington Neighborhood Council meeting
	Work with CARB to coordinate quarterly idling sweeps for a year	• July 2019 – Initiated collaborations with CARB

WCWLB Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
		• September 2019 – South Coast enforcement staff began conducting truck idling sweeps (4 sweeps, 219 trucks inspected, 4 NOVs)
	Begin engaging in incentive outreach events and collaborating with local businesses, agencies to provide information about incentive programs, restricted truck routes, etc.	May 2020 – Initiated outreach for Carl Moyer by webcast
	Work with city or the county to evaluate potential designated truck routes and identify resources to enforce these routes and identify	• June 2019 – Initiated potential collaboration with City of Los Angeles • May 2020 – Continued discussions with City of Los Angeles regarding community plan update
	Target incentive funds for small businesses and independent owner/operator when incentive programs are available	May 2020 – Initiated outreach for Carl Moyer by webcast
Oil Drilling and Production	Use CalGEM data to identify oil well status	July 2019 – Completed and provided this information as part of CAMP
	Work with CSC to prioritize oil wells/site locations for mobile air monitoring and begin monitoring (Post data on webpage within 30 days)	• June 2019 – Mobile air monitoring initiated (ongoing monitoring investigations) • May 2020 – Staff worked with CSC to prioritize locations based on CSC input
	Work with stakeholders to identify improvements for 1148.2	• May 2020 – Staff worked with CSC to receive input • July 2020 – Staff began evaluating path to address CSC concerns and potential rule development based on CSC input
Railyards	Provide incentive info to railyards (to replace diesel equipment)	May 2020 – Initiated outreach for Carl Moyer by webcast
	Continue ISR development for railyards	• May 2017 – Initiated railyard ISR development • November 2019 – Initial concepts released in joint community workshops with CARB • Second quarter 2021 – Public hearing is expected

WCWLB Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
Schools, Childcare Centers, and Homes - Exposure Reduction	Begin working with local health departments on outreach materials for air quality advisories	April 2020 – Collaborative discussions in initial phases
	Install new air filtration systems and extend replacement filters at schools with existing systems	• January 2020 – Prioritized schools for air filtration systems installation • April 2020 – Submitted CAPP incentive fund request for school air filtration • May 2020 – Updated CSC and provided WCWLB school prioritization list • Second quarter 2020 – CARB approved CAPP incentive request for school air filtration installation
	Outreach with community-based organizations and to school districts to provide air quality related programs	• February 2020 – WHAM outreach at Carson High School • May 2020 – Staff began working with CBOs for collaborative educational outreach for schools
	Outreach to school districts for info on safe routes/ridesharing	Delayed due to COVID-19

Table 2: Actions, Goals and Strategies Required from Adoption to June 2020 for SBM CERP Implementation

SBM Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
Neighborhood Truck Traffic	Engage and/or organize outreach event(s) for reporting idling trucks and incentive programs	October 2019 – Initiated plans for outreach events (delayed due to COVID-19)
	Conduct quarterly truck idling sweeps	• July 2019 – Initiated collaborations with CARB • September 2019 - South Coast enforcement staff began conducting truck idling sweeps (4 sweeps, 61 trucks inspected, 2 NOVs)
	Develop CARB regulations and Indirect Source Rules (ISR), and the Automated License Plate Reader policy, and truck routes, and establish designated parking areas	• August 2019 - ALPR privacy policy in progress • November 2019 - Proposed Rule 2305 (Warehouse ISR) preliminary draft rule language released • First quarter 2021 – Warehouse ISR public hearing expected
	Identify additional incentive funding	May 2020 – Initiated outreach for Carl Moyer by webcast
Warehouses	Continue Indirect Source Rules (ISR) develop and collaborate on local standard approaches for warehouse development	• May 2017 – Initiated developing Warehouse ISR • November 2019 - Proposed Rule 2305 (Warehouse ISR) preliminary draft rule language released • First quarter 2021 – Warehouse ISR public hearing expected
	Hold a public meeting in the Inland Empire to discuss proposed ISR for warehouses	Delayed due to COVID-19
	Conduct outreach to support installation of zero-emission infrastructure and equipment	June 2019 – Initiated collaboration with SCE for warehouse zero emission infrastructure outreach
Omnitrans	Conduct air measurements	• June to December 2019 – Individual air measurements taken (monitoring investigations are ongoing)

SBM Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
		• October 2019 – Provided monitoring updates to CSC
	Support Omnitrans's efforts to transition to zero-emission buses	• May 2019 – Provided letter of support for federal transit authority grant • March 2020 – Provided letter of support for grant proposal
Railyards (On-site Emissions)	Conduct air measurements	• June 2019 – Initiated mobile air monitoring (monitoring investigations are ongoing) • October 2019 – Provided monitoring updates at CSC meeting
	Consider CARB regulations and continue ISR development, and support new national locomotive standards	• May 2017 – Initiated railyard ISR development • November 2019 – Initial concepts released • Second quarter 2021 - Public hearing is expected
	Hold a public meeting in the Inland Empire on ISR for railyards	December 2019 - Joint public meeting conducted with CARB in San Bernardino
	Work to replace railyard equipment with cleaner technologies	May 2020 – Initiated outreach for Carl Moyer by webcast
Concrete Batch, Asphalt Batch, and Rock and Aggregate Plants	Conduct air monitoring; if needed, follow-up with investigations	• June 2019 – Mobile air monitoring initiated (Enforcement inspections were conducted to ensure compliance in 2019) • October 2019 – Provided monitoring updates at CSC meeting
	Conduct public outreach event on rules and complaint process	September 2019 – Began initial discussions with CSC members regarding possible dates or locations for public outreach events
Schools, Childcare Centers, Community Centers, and Homes – Exposure Reduction	Provide air quality related programs to schools or information on programs and partner with local entities and community-based organizations	• November 2019 – Began organizing WHAM events • December 2019 – Three SBM schools included in WHAM program

SBM Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
		• May 2020 – Provided information on Safe Routes Partnership at quarterly CSC meeting
	Develop outreach materials with the Department of Public Health	May 2019 – Initiated collaborative discussions during CERP development (implementation in initial phases)
	Conduct school-based air monitoring	Second quarter 2020 – Began working with CSC to establish a community sensor network (CSC chose homes instead of school-based monitoring)
	Install air filtration systems at schools	• January 2020 – Prioritized schools for air filtration systems installation • April 2020 – Submitted CAPP incentive fund request for school air filtration • May 2020 – Updated CSC and provided SBM school prioritization list • Second quarter 2020 – CARB approved CAPP incentive request for school air filtration installation
	Seek opportunities for tree planting, residential air filtration systems, and replacing school buses	April 2020 – Began efforts to identify funding for tree planting, residential air filtration systems, and school bus replacements

Table 3: Actions, Goals and Strategies Required from Adoption to June 2020 for ELABHWC CERP Implementation

ELABHWC Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
Neighborhood and Freeway Traffic from Trucks and Automobiles	Begin mobile air measurements and provide quarterly updates to the CSC on air monitoring activities	• June 2019 – Mobile air measurements initiated (ongoing monitoring investigations) • 2019 – Provided monitoring updates at quarterly CSC meeting
	Begin conducting incentive outreach events and provide quarterly or biannual updates to the CSC	May 2020 – Initiated outreach for Carl Moyer by webcast
	Work with CARB to coordinate quarterly idling sweeps for a year	• July 2019 – Initiated collaborations with CARB • October 2019 - South Coast enforcement staff began conducting idling sweeps (4 sweeps, 114 trucks inspected, 1 NOV)
	Work with local cities and county to address signage for truck idling, prioritizing locations identified by the CSC	May 2020 – Initiated outreach for Carl Moyer by webcast
	Work with CARB and community to prioritize locations for ALPR and PEAQs systems	August 2019 - ALPR policy development initiated
	Begin public outreach events to provide information to the community about cleaner technologies and provide updates to the CSC	February 2020 – Outreach meetings scheduled but delayed due to COVID-19
Railyards (On-site Emissions)	Conduct air measurements at railyards and nearby communities and provide updates to CSC	• June 2019 – Mobile air monitoring initiated (ongoing monitoring investigations) • October 2019 – Provided monitoring updates at CSC meetings

ELABHWC Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
	Provide incentive information to railyards to work towards replacing diesel-fueled equipment with cleaner technologies	May 2020 – Initiated outreach for Carl Moyer by webcast
	Continue ISR development for railyards	• May 2017 – Initiated railyard ISR development • November 2019 – Initial concepts released • Joint public meeting conducted with CARB in East Los Angeles • Second quarter 2021 - Public hearing is expected
Metal Processing Facilities	Begin mobile air measurements near metal processing facilities that have been identified as potential concerns and provide quarterly updates to the CSC	• July 2019 – Mobile air monitoring initiated (ongoing monitoring investigations) • November 2019 – Enforcement efforts driven by air monitoring findings (3 NC) • May 2020 – Provided enforcement investigation update at quarterly CSC meeting
	Provide updates to CSC on public outreach events and incentive opportunities	• April 2020 – South Coast AQMD submitted CAPP funds request for control or conversion projects • Second quarter 2020 – CARB approved CAPP incentive request for control conversion projects
Rendering Facilities	Begin outreach to provide information on Rule 415 requirements	Delayed due to COVID-19
	Begin mobile air measurements for VOCs near rendering facilities	• June 2019 – Mobile air monitoring initiated (ongoing monitoring investigations, enforcement efforts driven

ELABHWC Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
		by air monitoring findings/odor complaints) • December 2019 – Enforcement efforts initiated • January 2020 – Provided enforcement updates at quarterly CSC meeting
	Continue response to odor complaints and update complainants on a timely basis and facility inspections to evaluate compliance with Rule 415	• September 2019 – Enforcement efforts initiated to verify compliance at rendering facilities (e.g., rendering facility inspections, rendering related odor complaint response, enforcement action as necessary)
Auto Body Shops	Begin air monitoring near auto body shops as described in CAMP	July 2019 - Mobile air monitoring initiated (ongoing monitoring investigations)
	Conduct targeted enforcement activities, as needed	December 2019 – Enforcement efforts initiated/ongoing, including those driven by monitoring findings
Schools, Childcare Centers, Community Centers, Libraries, and Public Housing Projects – Exposure Reduction	Partner with community-based organizations on asthma-based programs	Delayed due to COVID-19
	Implement CARE and WHAM programs at schools	November 2019 to March 2020 – 11 WHAM events conducted at three schools
	Begin working with AltaMed on developing health messaging for advisories	Delayed due to COVID-19
	Install air filtration systems at schools	• January 2020 – Prioritized schools for air filtration systems installation • April 2020 – Submitted CAPP incentive fund request for school air filtration • May 2020 – Updated CSC and provided ELABHWC school prioritization list

ELABHWC Air Quality Priority	Actions, Goals, and Strategies Required (Adoption-June 2020)	Status
		• Second quarter 2020 – CARB approved CAPP incentive request for school air filtration installation
General Concerns about Industrial Facilities, including Waste Transfer Stations	Work with the CSC to identify community partners that would benefit from education on how to file an air quality complaint	Delayed due to COVID-19
	Engage in at least two outreach events in this community to provide information and training on how to file air quality complaints by phone, web, or mobile app	Delayed due to COVID-19
	Develop a list of relevant facility types for permit cross-check, and a list of common facility types for guideline development	Delayed due to COVID-19
	Conduct initial mobile air measurements to evaluate air quality in the community, identify high emitting facilities, and conduct follow-up air measurements as necessary	July 2019 - Mobile air monitoring initiated (ongoing monitoring investigations, enforcement efforts driven by air monitoring findings)
	Respond to odor complaints and conduct unannounced inspections	September 2019 – Enforcement staff continues to respond to all complaints received in ELABHWC (e.g., those alleging odors from waste transfer stations) with unannounced facility inspections conducted as needed

Attachment B - Community Air Monitoring Updates

Figure 3: Example of Community Air Monitoring Plan Progress Report for ELABHWC

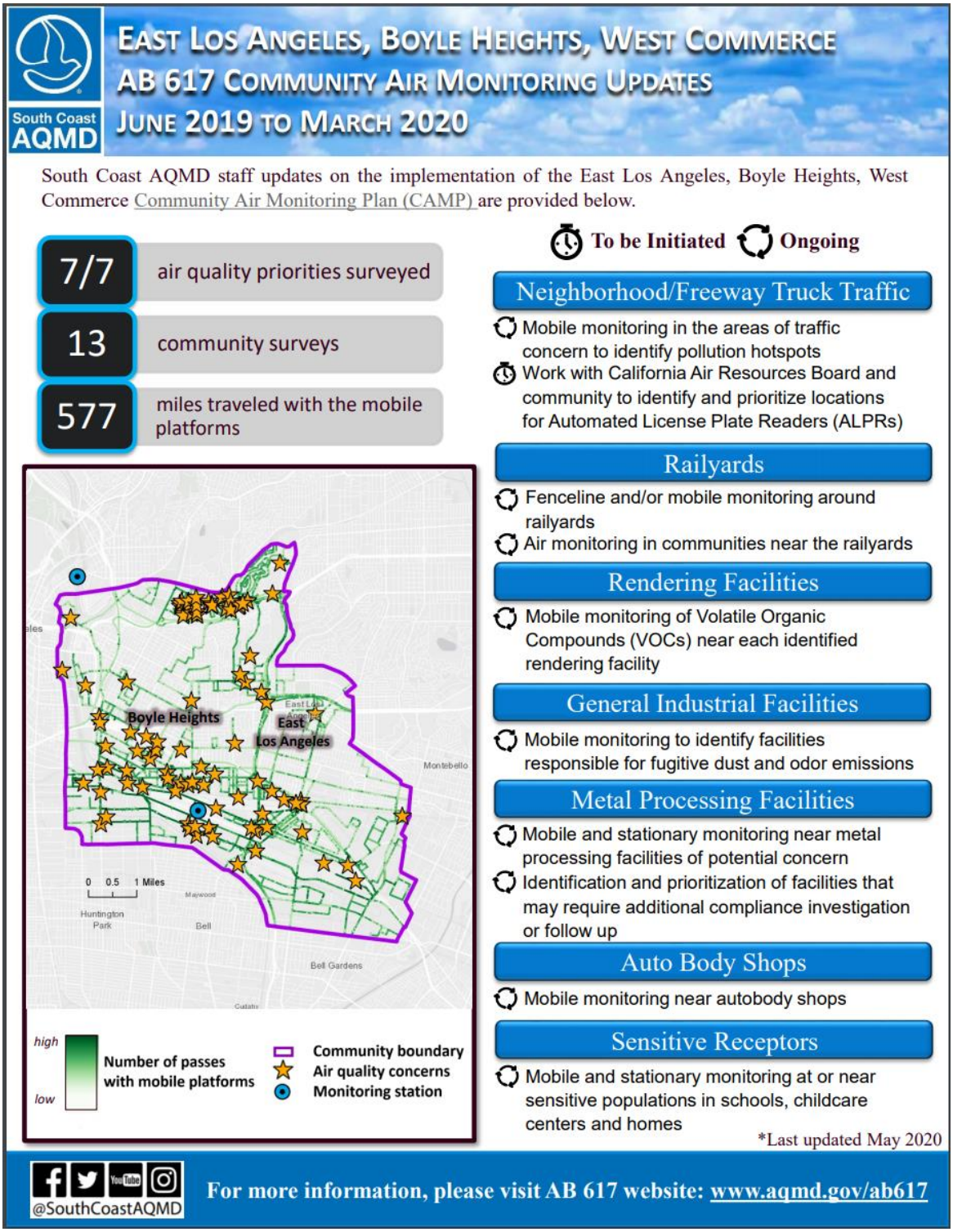


Figure 4: Example of Community Air Monitoring Plan Progress Report for SBM

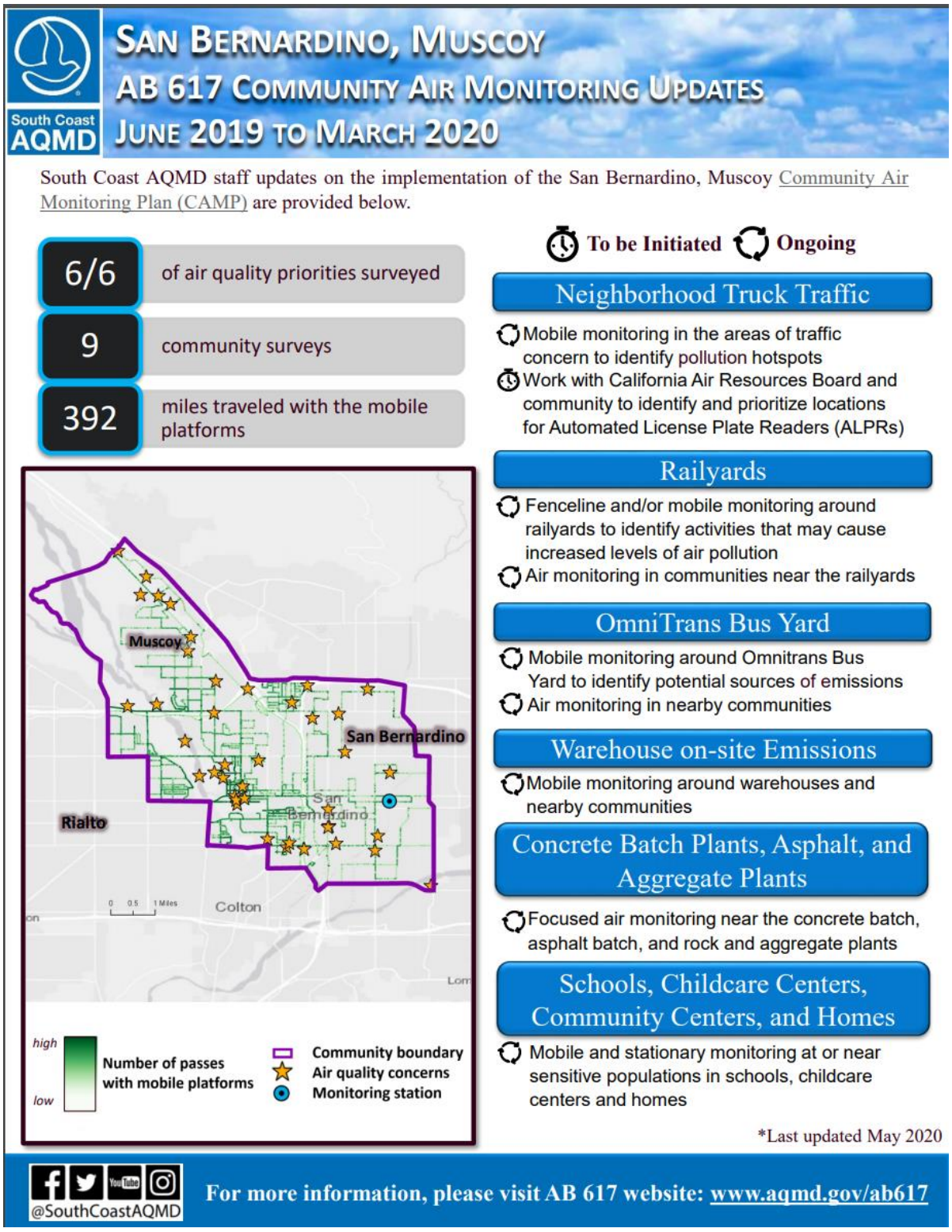
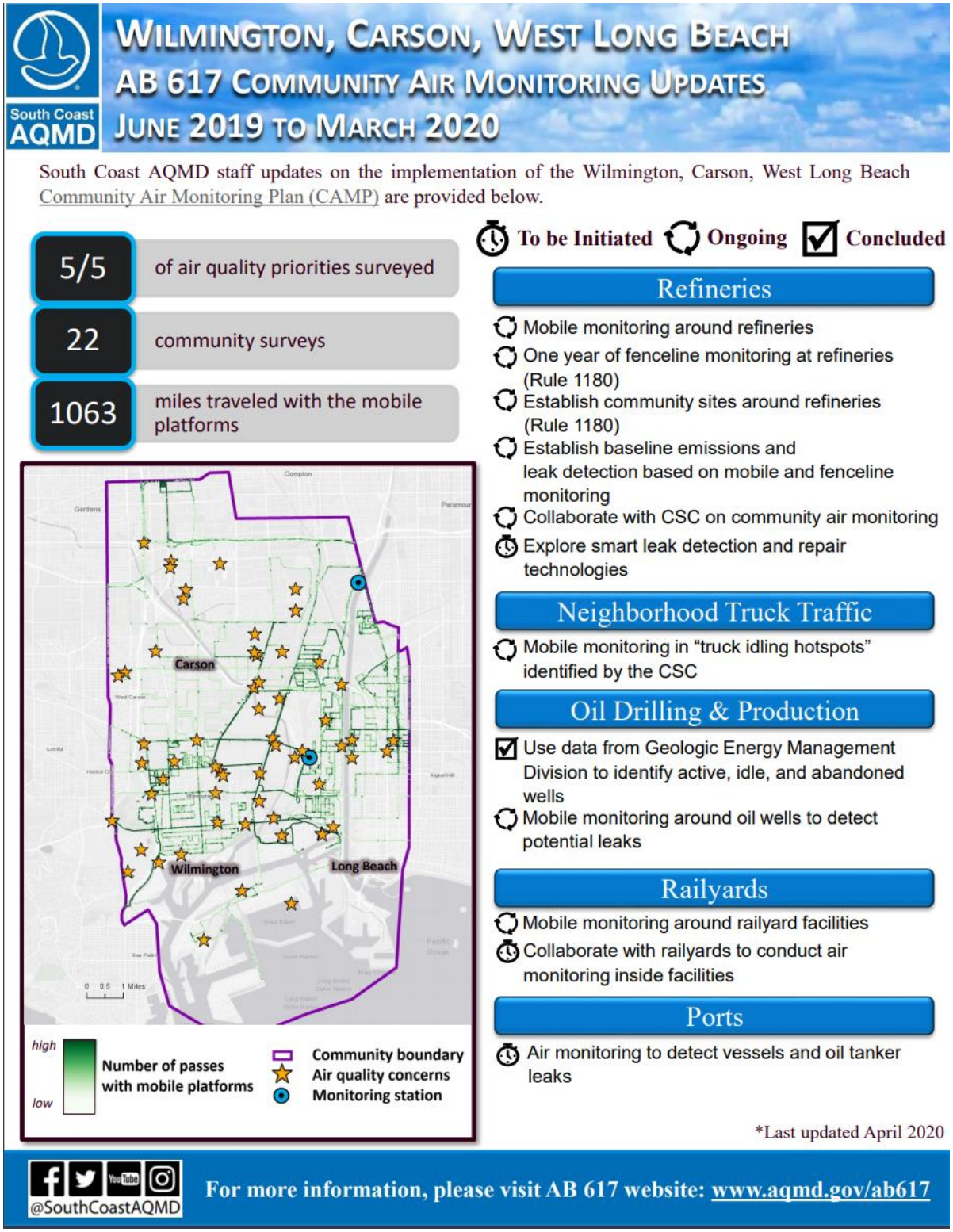


Figure 5: Example of Community Air Monitoring Plan Progress Report for WCWLB



Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 20

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a meeting remotely, Friday, September 11, 2020. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Dr. William A. Burke, Chair
Administrative Committee

nv

Committee Members

Present: Dr. William A. Burke/Chair (videoconference)
Council Member Ben Benoit/Vice Chair (videoconference)
Council Member Michael Cacciotti (videoconference)
Council Member Judith Mitchell (videoconference)

Absent: None

Call to Order

Chair Burke called the meeting to order at 10:00 a.m.

DISCUSSION ITEMS:

1. **Board Members' Concerns:** Dr. Burke mentioned a recent newspaper article regarding air quality and stated that Board Members need to be informed directly about air quality. Wayne Nastri, Executive Officer responded that all Board Members are currently receiving alerts, copies of ozone levels and smog advisories, which are received immediately as they are issued. Also, Board Members have requested information that they can utilize on their social media feeds. Mr. Nastri stated that staff will be more proactive in communicating such information to the Board. Dr. Burke asked if staff was interviewed and Mr. Nastri responded that the reporter submitted a list of questions and he was provided data in response to those questions. Mr. Nastri added that between 25-30 media requests were received regarding the air quality impact of the fires.

2. **Chairman's Report of Approved Travel:** None to report.

3. **Report of Approved Out-of-Country Travel:** None to report.

4. **Review September 4, 2020 Governing Board Agenda:** There were no comments.

5. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** There were no proposals to consider.

6. **Update on South Coast AQMD Inclusion, Diversity and Equity Efforts:** Mr. Nastri reported that since last month's report, the Inclusion, Diversity and Equity Advisory (IDEA) panel has met four times and are working on workforce recruitment, specifically targeting outreach and promotional opportunities. The Latinx/Hispanic and Black employee groups have also met. On September 8, 2020, Kori Carew, an advocate, speaker and inclusion strategist, spoke to the South Coast AQMD staff regarding human and civil rights, diversity and inclusion. There were approximately 650 employees participating. Dr. Burke asked if the Board Members were notified. Mr. Nastri responded that the information was included in the weekly report, and a recording is also available. Council Member Mitchell asked that the recording link be sent to the Board Members. Mr. Nastri responded that he will send the link. Dr. Burke commented that this is a complex issue and he would like to see progress. Mr. Nastri responded that the Bay Area AQMD is the only agency he is aware of that is moving more quickly than South Coast AQMD. The Bay Area AQMD recently hired Veronica Eady, formerly a Deputy Executive Officer for CARB, as their Diversity and Equity Officer. Mr. Nastri added that we are working on a job description for an Equity Officer. Dr. Burke asked when will we move forward with this position. Mr. Nastri responded that he will get back to him before the next Administrative Committee. Mr. Harvey Eder, Solar Power Coalition, commented that he did a study for the Public Utilities Commission on equity in the late 70s, and expressed concerns about the Coronavirus.

7. **Budget and Economic Outlook Update**: Jill Whynot, Chief Operating Officer, reported that there were no significant updates since the September Board meeting. We had another typical week where the number of permits received were lower than the same week the previous year.

8. **South Coast AQMD 2019-2020 Why Healthy Air Matters Program End-of-Year Report:** Derrick Alatorre, Deputy Executive Officer, Legislative, Public Affairs & Media, reported that the Board created the Why Healthy Air Matters (WHAM) program in February 2019. This program involves outreach to students and teachers in environmental justice communities to educate them about the South Coast AQMD and air pollution, and it seeks to inspire students to pursue academic professional careers related to air quality and the environment. For this year, outreach occurred to over 40 school districts, eight private schools and five charter schools. Twenty-seven school districts and five private schools entered into agreements with the South Coast AQMD, resulting in 100 schools confirmed

to participate in the first year of the WHAM program. The program was positively received by teachers and students. Council Member Cacciotti asked if global warming and climate change will be included in the curriculum. Mr. Alatorre responded that our current curriculum was created by Sonoma Technologies, but staff is looking into creating our own curriculum to include global warming. Council Member Cacciotti stated that he would like to observe some of the classrooms when schools go back to in-person learning and would also like to get electric vehicles, electric lawnmowers and electric trimmers on display. Mr. Alatorre responded that he will look into it. Mr. Nastri asked if Council Member Cacciotti is interested in looking at grant opportunities for schools that can actually utilize and show that technology on a daily basis and get it implemented in schools. Council Member Cacciotti replied yes. Fabian Wesson, Assistant Deputy Executive Officer, Legislative, Public Affairs & Media, added that our elementary school program includes cars, lawnmowers and leaf blowers on the playgrounds for the kids to see. Council Member Mitchell extended her congratulations to the Lee Andrews Group for getting this program off the ground and for having done amazing work. Stephanie Graves, Lee Andrews Group, relayed her gratitude to her team and South Coast AQMD staff for effective teamwork and commended Monica Kim for her exemplary work on this project. Mr. Eder commented that he used to work for Santa Cruz county as an educator and that this is an excellent program.

9. **Status Report on Major Ongoing and Upcoming Projects for Information Management:** Ron Moskowitz, Chief Information Officer, Information Management, reported that between June and August, 11 new systems went live including the VW Phase 3 Zero-Emission Class 8 system which went into production on August 18, 2020. As of September 11, 2020, a total of 24,390 people used our mobile application, which gained over 2,000 users in just the last week due to the poor air quality. All other projects are on schedule.

ACTION ITEMS:

10. **Appoint Alternate Public Member to Hearing Board:** Faye Thomas, Clerk of the Boards, reported that this item is to fill an alternate public member position on the Hearing Board. Twenty-two applications were received, and three candidates met the requirements. The Hearing Board Advisory Committee reviewed and evaluated the applications and resumes and recommended that the top three ranked candidates move forward for interviews with the Administrative Committee. Micah Ali, Maria Slaughter and Vasken Yardemian were interviewed, and the committee recommended Micah Ali.

    Moved by Cacciotti; seconded by Benoit, unanimously approved.

Ayes:	Burke, Benoit, Cacciotti, Mitchell
Noes:	None
Absent:	None

11. **Issue Purchase Order for Ingres Relational Database Management System Software Support:** Mr. Moskowitz reported that this item is a standard request to issue a purchase order for an Ingres Database Management System, including software licensing, maintenance and support for one year. The database supports over 30 critical South Coast AQMD client server and web-based applications. The funds are available in the budget.

Moved by Mitchell; seconded by Benoit, unanimously approved.

Ayes:	Burke, Benoit, Cacciotti, Mitchell
Noes:	None
Absent:	None

12. **Execute Lease Contract for Mailing Equipment:** John Olvera, Deputy Executive Officer, Administrative & Human Resources, reported that this action is to authorize the Executive Officer to execute a five-year lease agreement with Pitney Bowes for mailing and shipping, folding, inserting, and envelope addressing equipment, at a five-year lease and maintenance cost of $156,851. Pitney Bowes was the bidder with the highest average evaluation score in each of the equipment categories and the lowest overall cost proposal. Funding for this lease is in the current budget and will be requested in subsequent budgets.

Moved by Cacciotti; seconded by Mitchell, unanimously approved.

Ayes:	Burke, Benoit, Cacciotti, Mitchell
Noes:	None
Absent:	None

13. **Transfer and Appropriate Funds for the Rule 1180 Program, Execute Purchase Orders and/or Contracts and Issue Solicitation:** Jason Low, Assistant Deputy Executive Officer, Science & Technology Advancement, reported that in order to establish community air monitoring near refineries, the Board recognized over $7 million in the Rule 1180 Special Revenue Fund and $4.5 million is included in the Fiscal Year 2021 budget from annual fees to continue community monitoring. These actions are to transfer and appropriate up to $861,000 from the Rule 1180 Special Revenue Fund to the Science and Technology Advancement budget and to execute purchase orders and contracts for air monitoring equipment and vehicles. Lastly, this action is to issue a solicitation for an independent technical audit of the Rule 1180 Fenceline and Community Air Monitoring Network. Council Member Mitchell asked if we are required under AB 617 to do fenceline monitoring. Dr. Low responded that for AB 617, we take community input to develop a monitoring strategy in the community air monitoring plan and staff informs the community that Rule 1180 air monitoring is already occurring in the Carson/Wilmington/Long Beach community for which refineries were identified as a priority. There is also a

refinery that is outside of that area that is subject to fenceline monitoring under Rule 1180. Ms. Barbara Baird added there was a Muratsuchi Bill that required the refineries to pay for fenceline monitoring. Rule 1180 is consistent with the bill and was developed so refineries will pay for the whole cost of the program. Council Member Cacciotti asked if the three vehicles being purchased will be clean vehicles. Dr. Low responded that staff is looking for the cleanest vehicles that can fit the function and these vehicles will be larger van-type vehicles to carry the air monitoring equipment, calibration gases and other devices. Council Member Cacciotti asked about electric vehicles. Mr. Nastri stated that the cost of electric vehicles of this type would be three times higher and may not have the reliability necessary. Council Member Mitchell asked if we have considered propane-powered vehicles. Mr. Nastri stated it again becomes an issue of reliability. Mr. Eder commented that the South Coast AQMD should consider alcohol fuels which provides a reduction in carbon dioxide. Council Member Cacciotti suggested we consider the green-powered energy vans.

Moved by Mitchell; seconded by Cacciotti, unanimously approved.

Ayes:	Burke, Benoit, Cacciotti, Mitchell
Noes:	None
Absent:	None

WRITTEN REPORTS:

14. **Local Government & Small Business Assistance Advisory Group Minutes for the June 12, 2020 Meeting:** The report was acknowledged and received.

15. **Environmental Justice Advisory Group Minutes for the January 24, 2020 Meeting:** The report was acknowledged and received.

OTHER MATTERS:

16. **Other Business:** None.

17. **Public Comment:** Mr. Eder commented that there was a newspaper article regarding lawmakers and their instability.

18. **Next Meeting Date:** The next regular Administrative Committee meeting is scheduled for October 9, 2020 at 10:00 a.m.

Adjournment

The meeting adjourned at 11:51 a.m.

Attachments

- Local Government & Small Business Assistance Advisory Group Minutes for the June 12, 2020 Meeting
- Environmental Justice Advisory Group Minutes for the January 24, 2020 Meeting

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

LOCAL GOVERNMENT & SMALL BUSINESS ASSISTANCE ADVISORY GROUP
FRIDAY, JUNE 12, 2020
MEETING MINUTES

MEMBERS PRESENT:
Council Member Ben Benoit, LGSBA Chairman (Board Member)
Supervisor Janice Rutherford (Board Member)
Felipe Aguirre
Mayor Pro Tempore Rachelle Arizmendi, City of Sierra Madre
Paul Avila, P.B.A. & Associates
Todd Campbell, Clean Energy
LaVaughn Daniel, DancoEN
Bill LaMarr, California Small Business Alliance
Rita Loof, RadTech International
Eddie Marquez, Roofing Contractors Association
David Rothbart, Los Angeles County Sanitation District

MEMBERS ABSENT:
Supervisor V. Manuel Perez (Board Member)
Geoffrey Blake, Metal Finishers of Southern California
John DeWitt, JE DeWitt, Inc.

OTHERS PRESENT:
Mark Abramowitz
Harvey Eder, Public Solar Power Coalition
Tom Gross, Board Member Consultant (*Benoit*)
Dan McGivney, SoCal Gas
Patty Senecal
Mark Taylor, Board Member Consultant (*Rutherford*)
Ross Zelen

SOUTH COAST AQMD STAFF:
Jill Whynot, Chief Operating Officer
Derrick Alatorre, Deputy Executive Officer
Ron Moskowitz, Chief Information Officer
Sujata Jain, Chief Financial Officer
Sarah Rees, Ph.D., Assistant Deputy Executive Officer
Fabian Wesson, Assistant Deputy Executive Officer
Jo Kay Ghosh, Ph.D., Health Effects Officer
Teresa Barrera, Senior Deputy District Counsel
Victor Yip, Senior Enforcement Manager

Mark Henninger, Information Technology Manager
Anthony Tang, Information Technology Supervisor
Van Doan, Air Quality Specialist
Elaine-Joy Hills, Air Quality Specialist
Paul Wright, Senior Information Technology Specialist

Agenda Item #1 - Call to Order/Opening Remarks
Chair Ben Benoit called the meeting to order at 11:31 a.m.

Mr. Derrick Alatorre provided guidelines and general instructions for participation in the remote meeting for the Local Government & Small Business Assistance Advisory Group (LGSBA) meeting via Zoom webinar and teleconference.

Agenda Item #2 – Approval of May Meeting Minutes/Review of Follow-Up/Action Items
Chair Benoit called for approval of the May 8, 2020 meeting minutes. The minutes were approved unanimously.

Mr. Bill LaMarr referenced Mr. Ian MacMillan's response to a question on establishing a de minimis level for stationary sources on page three of the May 8, 2020 meeting minutes and commented that the Small Business Administration defines small businesses by the number of employees and annual receipts, ranging from 500-1500 employees and $7.5-37.5 million; it is not defined by the physical size of a facility. Mr. LaMarr further added that the South Coast Air Quality Management District (South Coast AQMD) also does not define small businesses by the square footage. Mr. Alatorre stated that staff will review the minutes and make corrections if needed. Mr. LaMarr stated the reason for the comment on the definition was to make a point and have it memorialized. Chair Benoit stated that it may be a future action item or discussion, not quite related to the minutes.

Agenda Item #3 – Review of Follow Up/Action Items
Mr. Alatorre stated that there were no follow-up or action items.

Agenda Item #4 – Summary of Recent Studies of Air Pollution & Health Effects
Dr. Jo Kay Ghosh provided a summary of key recent research studies of air pollution and health effects.

Ms. Rita Loof referenced slide #17 and asked for an explanation of exploratory behavior. Dr. Ghosh explained that mice have a natural curiosity and exploratory behavior refers to their desire to explore different spaces.

Mr. David Rothbart stated that the California Air Resources Board (CARB) is working on expanding the list of toxic compounds that are required to be reported to be used for health risk assessments and are not assigning toxicity values. They are using similarities in chemical properties to determine toxicity values. Mr. Rothbart asked how that approach is viewed from a regulatory standpoint. Dr. Ghosh replied that risk assessments rely on having toxicity values in order to calculate risk from a particular pollutant. The ability to develop a toxicity value for use in risk assessment depends on having appropriate studies available to derive those values. In some cases, there could be studies that show a pollutant is toxic, but there may not be enough information to derive a quantitative toxicity value.

Mr. Harvey Eder commented on the severe acute respiratory syndrome (SARS) virus, climate change, economy, oil prices, and various statistics.

Mr. LaMarr commented that the business community is constantly being bombarded by the public with the belief that businesses are the cause of cancer and commented that words like "suggestive" and "could" in the reports indicate that the studies show no definitive answer. Mr. LaMarr stated that cancer is not a single disease, it is a collection of diseases and suggested that staff take the opportunity to address the public's concern when there is an assumption that a specific facility is the cause of illnesses. Dr. Ghosh replied that it's generally not possible to pinpoint a particular pollutant or air pollution as the cause of a specific person's health problem, but studies have shown that there are a number of health conditions linked to air pollution exposure. As more studies are conducted, the air pollution levels associated with a health outcome could be better quantified. Dr. Ghosh stated that this relates to the toxicity levels and risk assessments previously referenced by Mr. Rothbart. Mr. LaMarr referenced a quote from a book by University of Southern California (USC) Professor Thomas Mack indicating that there is no evidence confirming that cancer is caused from an environmental carcinogen and stated that not much has changed. Dr. Ghosh replied that hexavalent chromium (Cr(VI)) is an air toxic, which meets the criteria for a known human carcinogen and clearly linked to cancer risk. Other air pollutants are also classified as known human carcinogens, such as benzene and formaldehyde. Today's presentation focuses on particulate matter 2.5 ($PM_{2.5}$) and its linkage to certain types of cancers. The composition of the $PM_{2.5}$ is important as well; for example, it is composed of Cr(VI), then obviously it would be a carcinogen. Mr. LaMarr referenced slide #6 and stated that there are no firm statements linking $PM_{2.5}$ to cancer. Dr. Ghosh commented that when it comes to ascertaining whether a pollutant causes a particular disease, you need more than a single study to come to those conclusions. Therefore, agencies review the entirety of the science that is available on that topic in order to come to a conclusion. For example, the U.S. EPA concluded from their scientific review that the relationship between $PM_{2.5}$ and cancer is "likely to be causal."

Agenda Item #5 – Fiscal Year (FY) 2020-21 General Fund Budget

Ms. Sujata Jain provided an overview of the General Fund Budget detailing staffing levels, expenditures, and revenues required to maintain current program commitments.

Mr. Paul Avila asked if the South Coast AQMD is eligible for Federal grants and loans available. Ms. Jain replied that South Coast AQMD applied for two grants under the Federal Emergency Management Agency (FEMA) and Coronavirus Aid, Relief and Economic Security (CARES) Act and is awaiting a response.

Mr. LaMarr asked if South Coast AQMD has a $230 million unfunded pension liability. Ms. Jain replied yes. Mr. LaMarr stated that State and Los Angeles (LA) City employees opted for pay cuts due to budget deficits and asked if South Coast AQMD has considered a similar approach instead of fee increases. Ms. Jain replied that there is no fee increase this year and future increases will be based on how the fiscal year ends and the Governing Board's (GB) decision. Mr. Alatorre indicated that, currently, there are no plans for pay cuts, layoffs, or furloughs; however, future decisions will depend on the revenues. Mr. LaMarr stated that South Coast AQMD's revenue sources are dependent on the businesses and the economy and suggested open discussions with businesses with all options being considered. Ms. Jain stated that updates are presented at the Administrative Committee and GB meetings to maintain transparency and provide the GB with ample information to make their decisions. Chair Benoit added that all options are being considered and we will get through this together.

Ms. Loof asked for the funding status of Assembly Bill (AB) 617 and what will happen in upcoming years. Ms. Jain replied that AB 617 funding for FY 2020-21 has been approved. Mr. Alatorre replied that a new bill, which was previously Senate Bill (SB) 808 authored by Senator Mitchell, is in review by the legislature. This new bill is for the appropriation of $50 million from the air pollution control fund for implementation in FY 2021-22, independent of the Cap-and-Trade Program; however, an additional $200 million, which is from the Cap-and-Trade Program, may be affected as results from the previous auction were much lower than expected.

Ms. Rachelle Arizmendi asked if there have been any discussions on prepayment of the unfunded liability pension and how to assertively address it. Ms. Jain replied that South Coast AQMD is still paying outstanding pension obligation bonds, which will be completed in three years. The budget includes almost $7 million in addition to contributions, so when the payments are complete, that fund may be available for prepayment of the liability pension upon the GB's approval. Chair Benoit stated that it is something the GB is considering.

Mr. Eder commented on solar energy and investments.

Ms. Jill Whynot indicated that the AB 617 incentive funding in the proposed budget was $200 million. It was $245 million the previous year and $250 million the year before that, and South Coast AQMD continues working to obtain any possible increase.

Agenda Item #6 –Monthly Report on Small Business Assistance Activities
No comments.

Agenda Item #7 - Other Business
None.

Agenda Item #8- Public Comment

Agenda Item #9 – Next Meeting Date
The next regular Local Government & Small Business Assistance Advisory Group meeting is scheduled for Friday, August 14, 2020 at 11:30 a.m.

Adjournment
The meeting adjourned at 12:47 p.m.

South Coast
Air Quality Management District
South Coast AQMD 21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

ENVIRONMENTAL JUSTICE ADVISORY GROUP
FRIDAY, JANUARY 24, 2020
MEETING MINUTES

MEMBERS PRESENT:
Senator Vanessa Delgado (Ret.), EJAG Chair (Board Member)
Rhetta Alexander, Valley Interfaith Council
Manuel Arredondo, Coachella Valley School District, Retiree
Suzanne Bilodeau, Knott's Berry Farm
Paul Choe, Korean Drycleaners & Laundry Association
Dr. Afif El-Hasan, American Lung Association
Mary Figueroa, Riverside Community College
Dr. Monique Hernandez, California State University, Los Angeles
Dr. Jill Johnston, University of Southern California
Humberto Lugo, Community Member
Daniel Morales, National Alliance for Human Rights
Rafael Yanez, Community Member
Donald Smith, 136th Street Block Club

MEMBERS ABSENT:
Council Member Ben Benoit, (Board Member)
Supervisor Janice Rutherford, EJAG Vice Chair (Board Member)
Dr. Lawrence Beeson, Loma Linda University, School of Public Health
Kerry Doi, Pacific Asian Consortium in Employment
Evelyn Knight, Long Beach Economic Development Commission
David McNeill, Baldwin Hills Conservancy

OTHERS PRESENT:
Harvey Eder, Public Solar Power Coalition

SOUTH COAST AQMD STAFF:
Jill Whynot, Chief Operating Officer
Fabian R. Wesson, Assistant Deputy Executive Officer/Public Advisor
Nancy Feldman, Principal Deputy District Counsel
Alicia A. Rodriguez, Senior Public Information Specialist
Jeanette N. Short, Senior Public Information Specialist
Brandee Keith, Secretary
Danietra Brown, Career Development Intern

Agenda Item #1: Call to Order/Opening Remarks
Ms. Fabian Wesson called the meeting to order at 12:05 p.m., and introduced the new Advisory Group Chair, Senator Vanessa Delgado.

Chair Delgado greeted the group, shared information about her professional experience, and the goals she aims to achieve as the Chair for the Environmental Justice Advisory Group (EJAG). Members also introduced themselves and shared their goals in participating in EJAG.

Agenda Item #2: Approval of October 25, 2019 Meeting Minutes
Chair Delgado called for the approval of the October 25, 2019 meeting minutes. Ms. Rhetta Alexander moved to approve the minutes and Ms. Mary Figueroa seconded the motion. The minutes were approved unanimously.

Agenda Item #3: Review of Follow-Up/Action Items
Ms. Wesson provided a response to the October 25, 2019 action items:

- ***Action Item***: E-mail the Advisory Group a link to the "Estamos Aqui: A Community Documentary" two-minute trailer that was shown at the EJ Conference in 2019.
  The link was emailed on October 25, 2019.

- ***Action Item:*** Share with the EJAG members conference break-out session notes from the EJ Conference in 2019.
  Conference break-out session notes were available as a handout at the meeting.

- ***Action Item:*** Agendize community science overview.
  A brief overview was presented by Rafael Yanez at the meeting.

Agenda Item #4: Goals and Objectives for 2020
Ms. Wesson referred members to the Goals and Objectives included in the agenda packet and reported two additional items be added at the request of South Coast AQMD Board Member Janice Rutherford, in absentia: Item 13 – Updates on Implementation of the 2016 AQMP; and Item 14 –Update on the Development of the 2022 AQMP. Mr. Manuel Arrendondo requested to add a goal of Implementing Existing Technology in Communities. Ms. Mary Figueroa moved to approve the Goals and Objectives as amended; Dr. Jill Johnston seconded the motion. Motion passed unanimously.

Agenda Item #5: EJAG Accomplishments 2019
Ms. Wesson reviewed EJAG's Accomplishments throughout 2019 and asked for comments. None were given.

Agenda Item #6: Environmental Justice Community Partnership Recap of 2019
Ms. Alicia Rodriguez provided a recap of the Environmental Justice Community Partnership (EJCP) in 2019.

Ms. Mary Figueroa asked what kind of information is provided to students in the Clean Air Ranger Education (CARE) program to take home. Ms. Alicia Rodriguez explained all students received a backpack containing a letter to parents, informational pamphlets on South Coast

AQMD programs, and coloring books. Ms. Figueroa asked if the informational pamphlets were available in Spanish, and Ms. Wesson confirmed all were.

Chair Delgado asked if the 2020 dates had been finalized for the various EJCP meetings. Ms. Rodriguez explained some dates have been finalized, however others are still being established and staff will share the dates with the EJAG members as they become available.

> **ACTION ITEM**: Send EJCP meeting schedules as they become available to all EJAG members.

Ms. Rhetta Alexander asked if the students visited by the CARE program were given the chance to ask questions, and what they were. Ms. Rodriguez confirmed students were given an opportunity to ask questions, and that many inquired about wildfires, what they as students could do to be aware of air quality, and how to help improve air quality.

Ms. Wesson shared that South Coast AQMD also has a high school program called Why Healthy Air Matters (WHAM). She offered to provide information to the EJAG members.

> **ACTION ITEM**: Provide EJAG members information on WHAM program.

Mr. Daniel Morales asked about the environmental conditions around the schools visited in the CARE program, and if there were a lot of diesel trucks. He explained that research states that students attending school near a high traffic area with diesel trucks have asthma. Ms. Rodriguez shared that most of the schools visited were in areas with significant trucking activity and goods movement. Mr. Morales recommended Wilson Elementary in Colton be considered for the CARE program.

Ms. Suzanne Bilodeau requested an email regarding future scheduled CARE programs. Ms. Rodriguez pointed out that any outside visitors wishing to attend need to confirm with her ahead of time, as school policies would prevent unauthorized visitors without prior notice.

> **ACTION ITEM**: Send CARE program meeting schedule to all EJAG members when available in the Summer of 2020.

Ms. Figueroa asked how the schools were selected for the CARE program. Ms. Wesson explained the schools were predominantly chosen from known environmental justice and AB 617 selected communities. Other outreach was also extended throughout our four county region.

Ms. Nancy Feldman, Principal Deputy District Counsel reiterated comments in regard to attending, as each school district has rigorous requirements on who is allowed on campus. She further explained that South Coast AQMD employees go through a background check to assure the schools that nothing nefarious is in their background.

Ms. Rhetta Alexander asked if lesson plans left with teachers were materials they could continue to use after CARE program visits. Ms. Rodriguez explained the lesson plans were still being developed and would include future activities for students and parents to pursue. Ms. Wesson added that the desired outcome would be to keep the students and school staff engaged on air quality by sharing ideas like establishing an environmental justice club. Ms. Alexander asked if the terms “climate change” or “global warming” are linked to the programs. Ms. Rodriguez

stated that it currently was not, and Ms. Alexander suggested it be included so they can learn to use those phrases.

Mr. Harvey Eder, a member of the public, commented in regard to kids getting asthma. He stated there is a real cost and that a health benefit fund should be set-up to reimburse families and schools when medical leave is taken.

Chair Delgado stated that she would like to work with staff to acquire grant funding to expand the CARE program. She further stated if we focused on schools in AB 617 communities, organizations such as Alta Med and Kaiser could contribute to such programs when there is a nexus to health. She asked staff to develop a plan for growing the program with the following information: how many schools could realistically be visited, are more staff needed, and what the timeline would look like through 2021.

ACTION ITEM: Provide information to EJAG Chair on expansion of CARE program.

Mr. Humberto Lugo asked the age group served by the CARE program. Ms. Rodriguez replied that currently it's elementary, 1st through 6th grade. Mr. Lugo suggested including it into the STEM program in AB 617 community schools and through grant funding engage children into monitoring efforts such as mapping.

Mr. Rafael Yanez suggested partnering with the schools and provide Purple Air Monitors with grant funding. Ms. Wesson mentioned that air monitors were being distributed in the high school program (Which are included in the kit until completion of curriculum) and could be extended into the elementary school programs as well (With expansion of the CARE program with funding).

Agenda Item #7: Community Science Overview

Mr. Yanez provided an overview of community science. He noted that Public Lab defined "Community science as a collaboratively lead scientific investigation, exploration and engagement in the entirety of the scientific process". Mr. Yanez stated that we need to understand the issues, learn the science, and ask questions to be more engaged in the community.

Agenda Item #8: Member Updates

Mr. Paul Choe requested information on dry cleaner facilities still in need of replacing equipment, to help outreach to them about Rule 1421 requirements, and the January 1, 2021 deadline to have non-perchloroethylene machines.

ACTION ITEM: Provide a list of dry cleaner facilities needing replacement before deadline and how much grant money is still available.

Dr. Afif El-Hasan shared the high importance of flu vaccines, especially in areas of high pollution, which exacerbates compromised immunities.

Mr. Donald Smith shared an update on his efforts to discuss road repairs, street sweepers, and degraded streets with his local government. He shared a news article regarding federal fracking projects and expressed the importance of keeping informed on such projects as it affects the air.

Dr. Jill Johnston shared that she is working on a project in collaboration with University of Illinois at Chicago and the National Institutes of Health developing a bilingual app for environmental hazard reporting with communities. The prototype is almost in place, they are pilot testing it with organizations to have it deployed within six months at no cost on Androids and iPhones. Then hopeful to work, collaborate, and integrate with South Coast AQMD's complaint system into their app. Mr. Yanez invited Dr. Johnston to present the project at an upcoming AB 617 meeting at which a community action plan is discussed.

Ms. Figueroa read sections of an article regarding environmental violations in the implementation of the World Logistics Center. She shared that the impact of increased trucking on a stretch of freeway unequipped to handle high traffic would result in increased idling of large trucks. She stated that the local elected representatives approved the World Logistics Center as they indicated the need for jobs, but she expressed the need for jobs is putting children at continued risk as they already live in a smoggy area.

Agenda Item #9 - Other Business
There was no other business.

Agenda Item #10- Public Comment
Mr. Eder suggested the South Coast AQMD and other local agencies pursue litigation against the fossil fuel industries and invest in future solar energy.

Agenda Item #11: Next Meeting Date
The next regular EJAG meeting is on Friday, April 24, 2020 at 12:00 pm.

Adjournment
Chair Delgado shared contact information and welcomed members to contact her if they wished to meet individually on environmental justice. The meeting was adjourned at 1:32 pm.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 21

REPORT: Mobile Source Committee

SYNOPSIS: The Mobile Source Committee held a meeting remotely on Friday, September 18, 2020. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Dr. William A. Burke, Chair
Mobile Source Committee

PF:ak

Committee Members

Present: Dr. William Burke/Chair
Supervisor Lisa Bartlett
Mayor Larry McCallon
Council Member Judith Mitchell
Supervisor V. Manuel Perez
Council Member Carlos Rodriguez

Absent: None

Call to Order

Chair Burke called the meeting to order at 9:01 a.m.

INFORMATIONAL ITEM:

1. **Coachella Valley Extreme Area Plan for 1997 8-hour Ozone Standard**
   Dr. Sarah Rees, Assistant Deputy Executive Officer of Planning, Rule Development, and Area Sources provided a presentation on the Coachella Valley Extreme Area Plan for 1997 8-hour Ozone Standard.

Supervisor Perez inquired about the higher ozone levels observed in 2017-2018 in Coachella Valley. Dr. Rees responded that these high ozone levels were attributed to weather conditions conducive to ozone formation, such as high temperatures and stagnant conditions which were also observed in the South Coast Air Basin. Dr. Philip Fine, Deputy Executive Officer of Planning, Rule Development and Area Sources, added that unusually warm summers and high ozone in 2017 and 2018 were observed in California and throughout the western United States.

Supervisor Perez asked about the community's comments on the reclassification of Coachella Valley from Severe to Extreme nonattainment and the proposed plan. Dr. Fine responded that the change in major source thresholds potentially affects two existing stationary source facilities, but no concerns were expressed and AB 617 community members have expressed concern about pollution in the Eastern Coachella Valley. Dr. Fine re-iterated that ozone levels in Coachella Valley are primarily driven by transport of ozone and its precursors generated upwind in the South Coast Air Basin. The focus of the AB 617 program is on local community exposure to pollutants from local sources such as open burning, dust, a waste energy plant and the Salton Sea, which will be addressed under this program.

Supervisor Perez inquired about air monitoring efforts around the Salton Sea. Dr. Fine responded that there is a monitoring station in Mecca, located near the north shore of the Salton Sea. PM levels are monitored due to dust concerns around the area. Since ozone in Coachella Valley is primarily from upwind transport, higher ozone levels are observed in Palm Springs, and to a lesser extent in Indio. The ozone levels in East Coachella Valley are expected to be even lower than those recorded from the two monitoring stations upwind.

Supervisor Perez asked about the consequences of not meeting the ozone standard in Coachella Valley. Wayne Nastri, Executive Officer responded that, upon the U.S. EPA's finding of failure to attain the standard, contingency measures would have to be implemented, and sanctions could be triggered. Other measures potentially under consideration include modifications to the Clean Air Act obligating the U. S. EPA to reduce emissions from mobile sources under its primary authority. Staff is doing everything that can be done to avoid sanctions.

WRITTEN REPORTS:

2. **Rule 2202 Activity Report: Rule 2202 Summary Status Report**
   This item was received and filed.

3. **Monthly Report on Environmental Justice Initiatives: CEQA Document Commenting Update**
   This item was received and filed.

OTHER MATTERS:

4. **Other Business**
   There was no other business.

5. **Public Comment Period**
   There were no public comments.

6. **Next Meeting Date**
   The next regular Mobile Source Committee meeting is scheduled for Friday, October 16, 2020.

Adjournment
The meeting adjourned at 9:28 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 – September 18, 2020

Dr. William Burke	South Coast AQMD Board Member
Supervisor Lisa Bartlett	South Coast AQMD Board Member
Mayor Larry McCallon	South Coast AQMD Board Member
Council Member Judith Mitchell	South Coast AQMD Board Member
Supervisor V. Manuel Perez	South Coast AQMD Board Member
Council Member Carlos Rodriguez	South Coast AQMD Board Member
James Dinwiddie	Board Consultant (Bartlett)
Matt Holder	Board Consultant (Rodriguez)
Fred Minassian	Board Consultant (Mitchell)
Kana Miyamoto	Board Consultant (Burke)
Marisa Perez	Board Consultant (Mitchell)
Andy Silva	Board Consultant (Rutherford)
Mark Abramowitz	Community Environmental Services
Curt Coleman	Southern California Air Quality Alliance
Peter Herzog	Los Angeles County of Business Federation
Frances Keeler	California Council for Environmental and Economic Balance
Bill La Marr	California Small Business Alliance
David Rothbart	Los Angeles County Sanitation Districts
Patty Senecal	Western States Petroleum Association
Debra Ashby	South Coast AQMD Staff
Jason Aspell	South Coast AQMD Staff
Barbara Baird	South Coast AQMD Staff
Elham Baranizadeh	South Coast AQMD Staff
Naveen Berry	South Coast AQMD Staff
Kalam Cheung	South Coast AQMD Staff
Amir Dejbakhsh	South Coast AQMD Staff
Scott Epstein	South Coast AQMD Staff
Philip Fine	South Coast AQMD Staff
Denise Gailey	South Coast AQMD Staff
Bay Gilchrist	South Coast AQMD Staff
Sheri Hanizavareh	South Coast AQMD Staff
Mark Henninger	South Coast AQMD Staff
Angela Kim	South Coast AQMD Staff
Sang-Mi Lee	South Coast AQMD Staff
Cristina Lopez	South Coast AQMD Staff
Lisa Mirasola	South Coast AQMD Staff
Matt Miyasato	South Coast AQMD Staff
Ron Moskowitz	South Coast AQMD Staff
Wayne Nastri	South Coast AQMD Staff
Zorik Pirveysian	South Coast AQMD Staff
Sarah Rees	South Coast AQMD Staff
Veera Tyagi	South Coast AQMD Staff
Jill Whynot	South Coast AQMD Staff
Paul Wright	South Coast AQMD Staff
Victor Yip	South Coast AQMD Staff
Rui Zhang	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, 2020 August 31, 2020

Employee Commute Reduction Program (ECRP)	
# of Submittals:	138

Emission Reduction Strategies (ERS)	
# of Submittals:	261

Air Quality Investment Program (AQIP) Exclusively		
County	**# of Facilities**	**$ Amount**
Los Angeles	40	$ 182,142
Orange	6	$ 83,320
Riverside	1	$ 24,440
San Bernardino	3	$ 17,197
TOTAL:	**50**	**$ 307,099**

ECRP w/AQIP Combination		
County	**# of Facilities**	**$ Amount**
Los Angeles	2	$ 7,103
Orange	0	$ 0
Riverside	0	$ 0
San Bernardino	2	$ 7,103
TOTAL:	**4**	**$ 14,206**

Total Active Sites as of August 31, 2020

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP[1]	AQIP[2]	ERS[3]				
521	13	143	677	99	555	1,331
39.14%	0.98%	10.74%	50.86%	7.44%	41.70%	100%[4]

Total Peak Window Employees as of August 31, 2020

ECRP (AVR Surveys)			TOTAL Submittals w/Surveys	AQIP	ERS	TOTAL
ECRP[1]	AQIP[2]	ERS[3]				
378,569	5,007	62,152	445,728	15,048	244,438	705,214
53.68%	0.71%	8.81%	63.20%	2.13%	34.66%	100%[4]

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.

DRAFT

BOARD MEETING DATE: October 2, 2020 AGENDA NO.

REPORT: Lead Agency Projects and Environmental Documents Received

SYNOPSIS: This report provides a listing of CEQA documents received by the South Coast AQMD between August 1, 2020 and August 31, 2020, and those projects for which the South Coast AQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: Mobile Source, September 18, 2020, Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

PF:SN:JW:LS:MC

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 August 1, 2020 and August 31, 2020 is included in Attachment A. A list of active projects for which South Coast AQMD staff is continuing to evaluate or prepare comments for the August reporting period is included as Attachment B. A total of 50 CEQA documents were received during this reporting period and 14 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 of August 1, 2020 and August 31, 2020, the South Coast AQMD received 50 CEQA documents. Of the 66 documents listed in Attachments A and B:

- 14 comment letters were sent;
- 20 documents were reviewed, but no comments were made;
- 25 documents are currently under review;
- 0 document did not require comments (e.g., public notices);
- 0 document were not reviewed; and
- 7 documents were screened without additional review.

(The above statistics are from August 1, 2020 and August 31, 2020 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.

Attachment 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 two 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
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Goods Movement **LAC200804-05** Pier 400 Corridor Storage Tracks Expansion Project	The project consists of relocation of 8,000 feet of existing rail tracks, expansion of project boundary 1,800 feet to the north, and construction of two track crossings, rail track connections, and roadway improvements. The project is located parallel to Navy Way between Pier 400 and New Dock Street within the Port of Los Angeles. Reference LAC180904-12 Comment Period: N/A Public Hearing: 8/6/2020	Notice of Availability of an Addendum to a Mitigated Negative Declaration	City of Los Angeles Harbor Department	Document reviewed - No comments sent for this document received
Goods Movement **LAC200818-07** Innovative Barracuda Chassis Depot Project	The project consists of expansion of existing operations to allow truckers to pick up and drop off chassis on 13.2 acres. The project is located at 915 Earle Street on the southwest corner of Cannery Street and Earle Street within the Port of Los Angeles. Comment Period: 8/20/2020 - 9/18/2020 Public Hearing: N/A	Negative Declaration	City of Los Angeles Harbor Department	** Under review, may submit written comments
Warehouse & Distribution Centers **LAC200813-05** 13131 Los Angeles Street Industrial Project	Staff provided comments on the Draft Environmental Impact Report for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/May/LAC200423-10.pdf. The project consists of demolition of two existing buildings and construction of a 528,710-square-foot warehouse on 24.9 acres. The project is located at 13131 Los Angeles Street near the northwest corner of Los Angeles Street and Little John Street. Reference LAC200423-10 and LAC190820-11 Comment Period: N/A Public Hearing: 8/19/2020	Response to Comments	City of Irwindale	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **ORC200804-08** Goodman Logistics Center Project	The project consists of construction of 1,609,384 square feet of warehouses on 73.1 acres. The project is located on the southeast corner of Kimberly Avenue and Acacia Avenue. Reference ORC200402-01 Comment Period: 8/4/2020 - 9/17/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Fullerton	** Under review, may submit written comments

**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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC200825-01** Barker Logistics, LLC Project	Staff provided comments on the Draft Environmental Impact Report for the project, which can be accessed at: www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/July/RVC200611-28.pdf. The project consists of construction of a 699,630-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. Reference RVC200611-28 and RVC190924-01 Comment Period: N/A Public Hearing: 9/2/2020	Final Environmental Impact Report	County of Riverside	Document reviewed - No comments sent for this document received
Warehouse & Distribution Centers **RVC200825-02** MA20118	The project consists of construction of a 20,000-square-foot warehouse and 9,070 square feet of support facilities on 3.3 acres. The project is located on the southwest corner of Bellegrave Avenue and Mission Boulevard. Comment Period: 8/21/2020 - 9/4/2020 Public Hearing: N/A	Site Plan	City of Jurupa Valley	** Under review, may submit written comments
Airports **LAC200821-01** Bob Hope Airport Replacement Terminal Project	The project consists of demolition of existing passenger terminal, and construction of a 14-gate passenger terminal, extensions of two taxiways, and roadway improvements. The project is located on the southwest corner of Winona Avenue and North Hollywood Way in the southeast quadrant within the Bob Hope Hollywood Burbank Airport. Reference LAC190205-01, LAC160628-07, and LAC160504-03 Comment Period: 8/21/2020 - 10/5/2020 Public Hearing: 9/23/2020	Notice of Availability of a Draft Environmental Impact Statement	United States Federal Aviation Administration	** Under review, may submit written comments
Industrial and Commercial **LAC200813-08** 414 South San Gabriel Boulevard Project	The project consists of construction of a 199,358-square-foot self-storage facility on 1.75 acres. The project is located near the southeast corner of San Gabriel Boulevard and East Broadway Street. Comment Period: 8/12/2020 - 9/11/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of San Gabriel	Document reviewed - No comments sent for this document 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **ORC200818-06** Lower Curtis Park - Dirt Import and Stockpile Project	The project consists of import of 760,000 cubic yards of soil on 40.26 acres. The project is located at 24460 Olympiad Road near the northeast corner of Olympiad Road and La Paz Road. Comment Period: 8/13/2020 - 9/11/2020 Public Hearing: N/A	Mitigated Negative Declaration	City of Mission Viejo	** Under review, may submit written comments
Industrial and Commercial **RVC200825-08** Green River Ranch Business Park	The project consists of construction of five industrial buildings totaling 746,330 square feet on 159.2 acres. The project is located on the southeast corner of Green River Ranch Road and Fresno Road. Comment Period: 8/20/2020 - 9/3/2020 Public Hearing: 9/3/2020	Site Plan	City of Corona	** Under review, may submit written comments
Industrial and Commercial **SBC200813-06** Fontana Foothills Commerce Center	The project consists of construction of two industrial buildings totaling 754,408 square feet on 33.6 acres. The project is located on the northeast corner of Juniper Avenue and Jurupa Avenue. Reference SBC200423-03 Comment Period: 8/11/2020 - 9/25/2020 Public Hearing: 9/15/2020	Notice of Availability of a Draft Environmental Impact Report	City of Fontana	** Under review, may submit written comments
Waste and Water-related **LAC200804-07** Clean Harbors Wilmington, LLC	The project consists of modifications to an existing hazardous waste facility permit to change emergency response contact information. The project is located at 1737 East Denni Street near the northeast corner of North Henry Ford Avenue and Denni Street in the community of Wilmington within Los Angeles County. Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent for this document 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **LAC200813-01** Whittier Narrows Operable Unit Treatment	The project consists of construction of 7,285 linear feet of groundwater pipelines 30 inches in diameter, a water storage tank, and a water pump station on 2.5 acres. The project is located at 331 North Durfee Avenue near the northeast corner of Rosemead Boulevard and Durfee Avenue in the City of South El Monte. Reference LAC130725-04 Comment Period: 8/11/2020 - 9/9/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Department of Toxic Substances Control	** Under review, may submit written comments
Waste and Water-related **LAC200813-02** 1910-1918 South Los Angeles Street	The project consists of development of cleanup activities to excavate, remove, and dispose contaminated soil with volatile organic compounds, lead, tetrachloroethylene, and trichloroethylene on 1.4 acres. The project is located on the southeast corner of Los Angeles Street and Washington Boulevard in the community of Southeast Los Angeles within the City of Los Angeles. Reference LAC181120-05 Comment Period: 8/10/2020 - 9/9/2020 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	** Under review, may submit written comments
Waste and Water-related **LAC200813-03** Pratt and Whitney-Rocketdyne	The project consists of evaluation of no further action request after cleanup of soil contaminated with chlorinated volatile organic compounds, tetrachloroethylene, and trichloroethylene is completed on 47 acres. The project is located at 633 Canoga Avenue near the northwest corner of Canoga Avenue and Ingomar Street in the community of Canoga Park-Winnetka-Woodland Hills-West Hills within the City of Los Angeles. Reference LAC141210-02 Comment Period: 7/27/2020 - 9/25/2020 Public Hearing: N/A	Site Cleanup Program	Los Angeles Regional Water Quality Control Board	Document reviewed - No comments sent for this document received
Waste and Water-related **LAC200818-03** Raytheon Company	The project consists of development of land use covenant to prohibit future sensitive land uses on 0.85 acres. The project is located at 2000 East El Segundo Boulevard on the southeast corner of El Segundo Boulevard and Sepulveda Boulevard in the City of El Segundo. Reference LAC200317-08 Comment Period: 8/17/2020 - 9/17/2020 Public Hearing: N/A	Draft Land Use Covenant	Department of Toxic Substances Control	Document reviewed - No comments sent for this document 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **LAC200818-04** Bridge Point South Bay	The project consists of development of land use covenant to prohibit future sensitive land uses on nine acres. The project is located at 20846 Normandie Avenue on the southeast corner of Torrance Boulevard and Normandie Avenue in the City of Torrance. Reference LAC191227-09 and LAC190920-01 Comment Period: 8/14/2020 - 9/14/2020 Public Hearing: N/A	Draft Land Use Covenant	Department of Toxic Substances Control	Document reviewed - No comments sent for this document received
Waste and Water-related **RVC200813-04** Odor Mitigation Project	The project consists of covering, capturing, and routing of odors from wastewater treatment plant, consolidation and relocation of existing scrubber stacks 40 feet in height, and installation of odor ducting. The project is located at 14634 River Road near the southwest corner of River Road and Hall Road in the City of Eastvale. Comment Period: 8/10/2020 - 9/8/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Western Riverside County Regional Wastewater Authority	** Under review, may submit written comments
Waste and Water-related **RVC200820-04** Golden Triangle Sewer Pipeline Project	The project consists of construction of 3,717 linear feet of sewer pipelines 15 inches in diameter. The project is located between Murrieta Hot Springs Road and Madison Avenue in the City of Murrieta. Comment Period: 7/24/2020 - 8/24/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	Eastern Municipal Water District	Document reviewed - No comments sent for this document received
Utilities **ORC200811-03** Bay Bridge Pump Station and Force Main Rehabilitation Project	The project consists of demolition of an existing pump station, and construction of a 14,500-square-foot pump station and 1,500 linear feet of force mains 32 inches in diameter. The project is located on the northwest corner of North Bayside Drive and East Coast Highway in the City of Newport Beach. Reference ORC190703-02, ORC170621-05, ORC170224-04, and ORC161110-08 Comment Period: 8/7/2020 - 9/21/2020 Public Hearing: 9/3/2020	Notice of Availability of a Recirculated Draft Environmental Impact Report	Orange County Sanitation District	** 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Transportation **LAC200818-01** Lakewood Boulevard at Florence Intersection Improvement Project	The project consists of construction of roadway improvements to the Lakewood Boulevard and Florence Avenue intersection. Comment Period: 8/10/2020 - 9/11/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Downey	Document reviewed - No comments sent for this document received
Transportation **LAC200825-04** Westside Purple Line Extension Wilshire/Rodeo Station North Portal Project	The project consists of construction of a transit station ranging in size 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. Reference LAC190905-01 Comment Period: 8/21/2020 - 10/5/2020 Public Hearing: N/A	Draft Environmental Impact Report	City of Beverly Hills	** Under review, may submit written comments
Transportation **LAC200825-06** California High-Speed Rail Project: Los Angeles to Anaheim Section	The project consists of construction of a 30-mile rail track for freight and passenger services, an intermodal rail facility to accommodate 10 freight trains a day, and a freight train staging track facility. The rail track component of the project is located between Los Angeles Union Station in the City of Los Angeles and Anaheim Regional Transportation Intermodal Center in the City of Anaheim. The intermodal rail facility component of the project is located in the cities of Colton and Grand Terrace. The staging track component of the project is located along the existing Burlington Northern and Santa Fe main line tracks in the City of Barstow and unincorporated areas of San Bernardino County. Reference LAC080229-07 Comment Period: 8/25/2020 - 9/24/2020 Public Hearing: 9/10/2020	Revised Notice of Preparation	California High-Speed Rail Authority	** Under review, may submit written comments
Institutional (schools, government, etc.) **LAC200820-01** Malibu Middle and High School Campus Specific Plan and Local Coastal Plan Amendment Project	The project consists of demolition of 147,556 square feet of existing buildings and construction of 431,717 square feet of school facilities on 9.9 acres. The project is located near the southeast corner of Via Cabrillo and Morning View Drive in the City of Malibu. Comment Period: 8/20/2020 - 9/21/2020 Public Hearing: 9/9/2020	Notice of Preparation	Santa Monica-Malibu Unified School District	** 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Institutional (schools, government, etc.) **LAC200825-03** Taft Charter High School Comprehensive Modernization Project	The project consists of demolition of 33,142 square feet of existing buildings, modernization of three buildings totaling 63,586 square feet, and construction of three school facilities totaling 7,750 square feet on 32.4 acres. The project is located at 5461 Winnetka Avenue on the southwest corner of Ventura Boulevard and Winnetka Avenue in the community of Canoga Park-Winnetka-Woodland Hills-West Hills within the City of Los Angeles. Comment Period: 8/17/2020 - 9/16/2020 Public Hearing: 8/27/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	Los Angeles Unified School District	** Under review, may submit written comments
Institutional (schools, government, etc.) **ORC200818-02** Chet Holifield Federal Building	The 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 in the City of Laguna Niguel. Reference ORC191001-08 Comment Period: 7/14/2020 - 9/5/2020 Public Hearing: N/A	Draft Environmental Impact Statement	United States General Services Administration	** Under review, may submit written comments
Retail **RVC200806-03** Pier Enterprises Alcohol Sales	This document includes request for the alcohol sales portion for the project. The project consists of construction of a car wash facility, restaurant uses, and a gasoline service station. The project is located at 4687 Pier Enterprise Way on the northeast corner of Interstate 15 and Cantu Galleano Ranch Road. Reference RVC160805-03 Comment Period: N/A Public Hearing: N/A	Site Plan	City of Jurupa Valley	Document reviewed - No comments sent for this document received
Retail **RVC200818-05** Costco/Vineyard II Retail Development	Staff provided comments on the Draft Environmental Impact Report for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/July/RVC200626-01.pdf. The project consists of construction of a 153,362-square-foot warehouse, 16,000 square feet of retail uses, 3,600 square feet of restaurant uses, a 37,000-square-foot fitness center, and a gasoline service station with 32 pumps on 16.4 acres. The project is located on the northeast corner of Clinton Keith Road and Antelope Road. Reference RVC200626-01 and RVC180628-03 Comment Period: N/A Public Hearing: 8/26/2020	Response to Comments	City of Murrieta	Document reviewed - No comments sent for this document 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Retail **SBC200818-08** Alder/Renaissance Project	Staff provided comments on the Mitigated Negative Declaration for the project, which can be accessed at: http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200728-06.pdf. The project consists of construction of a 7,948-square-foot convenience store, a 2,542-square-foot restaurant, 11 fuel islands with 16 gasoline pumps and four diesel pumps, and 6,476 square feet of fueling canopies on 4.2 acres. The project is located on the southeast corner of Renaissance Parkway and Alder Avenue. Reference SBC200728-06 Comment Period: N/A Public Hearing: N/A	Response to Comments	City of Rialto	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC200804-06** Hollywood & Wilcox Project	The project consists of construction of a 278,892-square-foot building with 260 residential units and 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 LAC200303-01, LAC191022-05, and LAC170526-05 Comment Period: N/A Public Hearing: 8/12/2020	Final Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **LAC200820-05** Gardena Transit-Oriented Development Specific Plan Project	The project consists of demolition of a 24,990-square-foot building and construction of 265 residential units on 1.33 acres. The project is located near the southeast corner of El Segundo Boulevard and Crenshaw Boulevard. Comment Period: 8/20/2020 - 9/18/2020 Public Hearing: 9/2/2020	Notice of Preparation	City of Gardena	** Under review, may submit written comments
General Land Use (residential, etc.) **LAC200825-05** Vesting Tentative Tract Map No. 82985	The project consists of demolition of an existing building and subdivision of 56,460 square feet for future development of 18 residential units. The project is located at 20225 Valley Boulevard near the northwest corner of Valley Boulevard and Lemon Creek Drive. Comment Period: 8/18/2020 - 9/20/2020 Public Hearing: N/A	Site Plan	City of Walnut	** 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **ORC200804-01** 1 O'Hill Ridge - Garg Residence Project	The project consists of construction of a 36,914-square-foot residential unit on six acres. The project is located at 1 O'Hill Ridge near the southeast corner of Old Ranch Road and Upper Vintage. Comment Period: 7/30/2020 - 8/28/2020 Public Hearing: 9/22/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Laguna Niguel	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **ORC200804-02** Stadium District Sub-Area A Project	The project consists of modernization of an existing 1,132,567-square-foot sports stadium with 45,500 seats, and construction of 5,175 residential units, 1,709,172 square feet of commercial uses, 2,651,155 square feet of office uses, eight acres of public parks, and a fire station on a 152-acre portion of 820 acres. The project is located at 2000 East Gene Autry Way on the southeast corner of State College Boulevard and Katella Avenue. Comment Period: 7/30/2020 - 8/31/2020 Public Hearing: 9/9/2020	Notice of Availability of Sustainable Communities Environmental Assessment	City of Anaheim	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **RVC200820-07** Murrieta Hills Specific Plan Amendment Project	The project consists of construction of 690 residential uses, 18 acres of commercial uses, 20 acres of roadway improvements, and 652 acres of open space on 972 acres. The project is located on the southwest corner of Interstate 215 and Keller Road. Reference RVC140318-06 Comment Period: 5/8/2020 - 6/22/2020 Public Hearing: N/A	Draft Environmental Impact Report (received after close of comment period)	City of Murrieta	Document reviewed - No comments sent for this document received
General Land Use (residential, etc.) **SBC200806-01** Ferree Street 95 Unit Planned Residential Development	The project consists of construction of 96 residential units on 9.65 acres. The project is located near the southwest corner of Richardson Street and East Coulston Street. Comment Period: 8/4/2020 - 8/24/2020 Public Hearing: 9/8/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	City of San Bernardino	Document reviewed - No comments sent for this document 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **LAC200806-04** Globemaster Corridor Specific Plan	The project consists of development of land use policies, development standards, design guidelines, infrastructure systems, and implementation strategies with a planning horizon of 2045 on 437 acres. The project is generally located on the northeast corner of Cherry Avenue and East Spring Street. Reference LAC180913-01 Comment Period: 8/3/2020 - 9/17/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Long Beach	** Under review, may submit written comments
Plans and Regulations **LAC200806-05** Downtown Community Plan Update	The project consists of development of land use policies, development standards, design guidelines, and zoning codes with a planning horizon of 2040 on 2,161 acres. The project is generally located on the northeast corner of Interstate 10 and Alameda Street. Reference LAC170208-01 Comment Period: 8/6/2020 - 10/20/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Los Angeles	** Under review, may submit written comments
Plans and Regulations **LAC200812-01** Forestwide Fuelbreak Maintenance Strategy	The project consists of development of wildfire control strategies and vegetation management activities on 8,700 acres. The project is located at 56 locations in the Angeles National Forest within Los Angeles County. Comment Period: 8/12/2020 - 9/15/2020 Public Hearing: N/A	Initial Project Consultation	United States Department of Agriculture Forest Service	** Under review, may submit written comments
Plans and Regulations **LAC200813-07** Golden State Specific Plan	The project consists of development of design guidelines and standards to guide future residential, commercial, retail, industrial, and airport projects with a planning horizon of 2035 on 643 acres. The project is located on the southwest corner of Interstate 5 and Cohasset Street. Comment Period: 8/12/2020 - 9/25/2020 Public Hearing: 8/26/2020	Notice of Preparation	City of Burbank	** 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.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
August 1, 2020 to August 31, 2020

SOUTH COAST AQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **ORC200806-02** Santa Ana General Plan	The project consists of updates to the City's General Plan to develop design guidelines, policies, and programs to guide future development with a planning horizon of 2045. The project encompasses 27 square miles and is bounded by City of Orange to the north, cities of Irvine and Tustin to the east, City of Costa Mesa to the south, and cities of Garden Grove, Westminster, and Fountain Valley to the west. Reference ORC200303-03 Comment Period: 8/3/2020 - 9/16/2020 Public Hearing: N/A	Notice of Availability of a Draft Program Environmental Impact Report	City of Santa Ana	** Under review, may submit written comments
Plans and Regulations **RVC200805-01** 2020 Integrated Natural Resource Management Plan	The project consists of development of policies and strategies to guide natural resources management on 2,162 acres. The project is located near the southeast corner of Cactus Avenue and Interstate 215 in Riverside County. Comment Period: N/A Public Hearing: N/A	Final Environmental Assessment	United States Department of the Air Force	Document reviewed - No comments sent for this document received
Plans and Regulations **RVC200825-09** San Jacinto Wildlife Area Land Management Plan Project	The project consists of development of programs and strategies to guide wildlife protection and habitats management on 20,126 acres. The project is located near the northeast corner of West Contour Road and David Road in the cities of Moreno Valley and Beaumont. Reference RVC171215-02 and RVC160616-01 Comment Period: N/A Public Hearing: N/A	Final Environmental Impact Report	California Department of Fish and Wildlife	Document reviewed - No comments sent for this document 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.

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
Waste and Water-related **LAC200708-27** Biogas Renewable Generation Project	The project consists of construction of a 12-megawatt power generation facility, a one-mile natural gas pipeline, a one-mile water pipeline, and two 70,000-gallon water tanks on a 2.2-acre portion of 95 acres. The project is located at 3001 Scholl Canyon Road on the northwest corner of North Figueroa Street and Scholl Canyon Road. Reference LAC190320-02, LAC180309-01, LAC170927-01, and LAC170912-01 Comment Period: 7/2/2020 - 9/30/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	City of Glendale	**Under review, may submit written comments
Institutional (schools, government, etc.) **RVC200724-01** Beaumont High School Expansion	The project consists of demolition of existing school facilities and construction of two buildings totaling 50,000 square feet to accommodate up to 1,344 students on a 34-acre portion of 62 acres. The project is located at 39139 Cherry Valley Boulevard on the northwest corner of Beaumont Avenue and Cherry Valley Boulevard. Reference RVC200617-02 Comment Period: 7/27/2020 - 9/10/2020 Public Hearing: 9/15/2020	Notice of Availability of a Draft Environmental Impact Report	Beaumont Unified School District	**Under review, may submit written comments
Goods Movement **LAC200714-06** Pier B On-Dock Rail Support Facility Project	The project consists of reconfiguration and expansion of the Pier B on-dock rail support facility to move cargo via on-dock rail with a capacity of handling up to 35 percent of cargo containers by on-dock rail. The project is located on the northwest corner of Interstate 710 and Ocean Boulevard in the community of Wilmington-Harbor City. Reference LAC190705-04, LAC180112-01, LAC170127-01, and LAC161216-06 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200714-06.pdf Comment Period: 7/9/2020 - 8/31/2020 Public Hearing: 7/28/2020	Notice of Availability of a Draft Environmental Impact Statement	United States Department of Transportation, Maritime Administration	South Coast AQMD staff commented on 8/28/2020
Warehouse & Distribution Centers **RVC200728-04** Sycamore Hills Distribution Center Project	The project consists of construction of two warehouses totaling 603,100 square feet on 11.6 acres. The project is located on the northeast corner of East Alessandro Boulevard and Barton Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200728-04.pdf Comment Period: 7/28/2020 - 8/27/2020 Public Hearing: 8/12/2020	Notice of Preparation	City of Riverside	South Coast AQMD staff commented on 8/25/2020
Industrial and Commercial **SBC200716-01** Area Q Quarry Project	The project consists of expansion of existing mining operations to extract 42.1 million tons of materials with a planning horizon of 2050 on 187.6 acres. The project is located on the northwest corner of Devil Creek Diversion Channel and Cajon Boulevard in the community of Muscoy. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200716-01.pdf Comment Period: 6/30/2020 - 8/17/2020 Public Hearing: N/A	Notice of Availability of a Draft Environmental Impact Report	County of San Bernardino	South Coast AQMD staff commented on 8/14/2020

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

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
Waste and Water-related **ORC200723-01** Zone 4 Landfill Construction Projects and Source Separated Organics Facility	The project consists of excavation and removal of up to 3.3 million cubic yards of hard rock material, import of 8,108 cubic yards of soil for liner installation, and construction of a recycling facility with a receiving capacity of 300 tons per day of organic wastes on a 680-acre portion of 1,530 acres. The project is located at 32250 Avenida La Plata on the southeast corner of Avenida La Plata and Prima Deshecha in cities of San Juan Capistrano and San Clemente and unincorporated areas of Orange County. www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/ORC200723-01.pdf Comment Period: 7/23/2020 - 8/21/2020 Public Hearing: 7/30/2020	Notice of Preparation	Orange County Department of Waste and Recycling	South Coast AQMD staff commented on 8/19/2020
Waste and Water-related **RVC200723-02** Southern California Edison San Jacinto	The project consists of development of cleanup actions to remove soil contaminated with polychlorinated biphenyls, arsenic, and lead on 0.14 acres. The project is located on the southwest corner of South San Jacinto Avenue and East Third Street in the City of San Jacinto. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200723-02.pdf Comment Period: 7/24/2020 - 8/22/2020 Public Hearing: N/A	Draft Removal Action Workplan	Department of Toxic Substances Control	South Coast AQMD staff commented on 8/19/2020
Transportation **LAC200526-01** California High-Speed Rail Project: Burbank to Los Angeles Section	The project consists of construction of a 14-mile rail track for freight and passenger services between Hollywood Burbank Airport in the City of Burbank and Los Angeles Union Station in the City of Los Angeles. Reference LAC140729-04 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200526-01.pdf Comment Period: 5/29/2020 - 8/31/2020 Public Hearing: 7/8/2020	Notice of Availability of a Draft Environmental Impact Report/ Draft Environmental Impact Statement	California High-Speed Rail Authority	South Coast AQMD staff commented on 8/28/2020
Transportation **SBC200716-03** Interstate 10 Eastbound Truck Climbing Lane Improvement Project	The project consists of reconfiguration of a three-mile segment of Interstate 10 (I-10) between the I-10 and Live Oak Canyon Road interchange in the City of Yucaipa and the I-10 and County Line Road interchange near the border of San Bernardino County and Riverside County. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200716-03.pdf Comment Period: 7/3/2020 - 8/10/2020 Public Hearing: 7/15/2020	Notice of Intent to Adopt a Mitigated Negative Declaration	California Department of Transportation	South Coast AQMD staff commented on 8/7/2020

- Project has potential environmental justice concerns due to the nature and/or location of the project.
** Disposition may change prior to Governing Board Meeting

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
Institutional (schools, government, etc.) **RVC200708-14** 2021 Long Range Development Plan	The project consists of development of strategies, actions, and programs to accommodate increases in enrollment capacity from 23,922 students to 35,000 students and 3.7 million square feet of academic buildings with a planning horizon of 2036 on 1,108 acres. The project is located on the southeast corner of Blaine Street and Watkins Drive in the City of Riverside. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200708-14.pdf Comment Period: 7/7/2020 - 8/6/2020 Public Hearing: 7/29/2020	Notice of Preparation	Regents of the University of California	South Coast AQMD staff commented on 8/4/2020
Retail **SBC200728-06** Alder/Renaissance Project	The project consists of construction of a 7,948-square-foot convenience store, a 2,542-square-foot restaurant, 11 fuel islands with 16 gasoline pumps and four diesel pumps, and 6,476 square feet of fueling canopies on 4.2 acres. The project is located on the southeast corner of Renaissance Parkway and Alder Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/SBC200728-06.pdf Comment Period: 7/18/2020 - 8/6/2020 Public Hearing: N/A	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Rialto	South Coast AQMD staff commented on 8/6/2020
General Land Use (residential, etc.) **LAC200708-06** The District NoHo Project	The project consists of construction of 1,527 residential units totaling 1,523,528 square feet, 645,499 square feet of retail uses, and 297,925 square feet of open space on 15.9 acres. The project is located near the southeast corner of Burbank Boulevard and Lankershim Avenue in the community of North Hollywood. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200708-06.pdf Comment Period: 7/7/2020 - 8/10/2020 Public Hearing: 7/15/2020	Notice of Preparation	City of Los Angeles	South Coast AQMD staff commented on 8/4/2020
General Land Use (residential, etc.) **LAC200716-06** 1688 West Garvey Avenue Residential Project	The project consists of construction of 16 residential units on 6.22 acres. The project is located on the southwest corner of Garvey Avenue and Abajo Drive. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200716-06.pdf Comment Period: 7/10/2020 - 8/10/2020 Public Hearing: N/A	Notice of Preparation	City of Monterey Park	South Coast AQMD staff commented on 8/4/2020
General Land Use (residential, etc.) **ORC200724-02** Brea Plaza Hotel and Apartments Expansion Project	The project consists of demolition of 25,950 square feet of existing buildings, and construction of a 92,538-square-foot hotel with 150 rooms, 194 residential units totaling 229,855 square feet, and 22,882 square feet of commercial uses on a 3.8-acre portion of 16 acres. The project is located on the northwest corner of East Imperial Highway and South Associated Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/ORC200724-02.pdf Comment Period: 7/27/2020 - 8/26/2020 Public Hearing: 8/12/2020	Notice of Preparation	City of Brea	South Coast AQMD staff commented on 8/25/2020

- Project has potential environmental justice concerns due to the nature and/or location of the project.
** Disposition may change prior to Governing Board Meeting

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
General Land Use (residential, etc.) **RVC200728-05** Porcupine Creek Retreat Specific Plan Project	The project consists of construction of 50 residential units totaling 183,500 square feet and a golf course with 18 holes on 191 acres. The project is located near the southwest corner of Highway 111 and Mirage Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/RVC200728-05.pdf Comment Period: 7/27/2020 - 8/27/2020 Public Hearing: N/A	Notice of Preparation	City of Rancho Mirage	South Coast AQMD staff commented on 8/25/2020
Plans and Regulations **LAC200616-01** Green Zones Ordinance	The project consists of development of a countywide zoning requirement, design standards, and strategies to enhance public health and land use compatibility. The project also establishes green zone districts in communities of Avocado Heights, East Los Angeles, East Rancho Dominguez, Florence-Firestone, South San Jose Hills, Walnut Park, West Athens-Westmont, West Carson, West Rancho Dominguez-Victoria, Whittier-Los Nietos, and Willowbrook within Los Angeles County. www.aqmd.gov/docs/default-source/ceqa/comment-letters/2020/August/LAC200616-01.pdf Comment Period: 6/16/2020 - 8/24/2020 Public Hearing: 7/13/2020	Notice of Preparation	County of Los Angeles	South Coast AQMD staff commented on 8/24/2020

- Project has potential environmental justice concerns due to the nature and/or location of the project.
** Disposition may change prior to Governing Board Meeting

ATTACHMENT C
ACTIVE SOUTH COAST AQMD LEAD AGENCY PROJECTS
THROUGH AUGUST 31, 2020

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
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.	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 preliminary Draft EIR and has provided comments to the consultant.	Trinity Consultants
Sunshine Canyon Landfill is proposing to modify its South Coast AQMD permits for its active landfill gas collection and control system to accommodate the increased collection of landfill gas. The proposed project will: 1) install two new low emissions flares with two additional 300-hp electric blowers; and 2) increase the landfill gas flow limit of the existing flares.	Sunshine Canyon Landfill	Subsequent Environmental Impact Report (SEIR)	The consultant provided a preliminary air quality analysis and health risk assessment (HRA) which is undergoing review by South Coast AQMD staff.	SCS Engineers

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 22

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee held a meeting remotely on Friday, September 18, 2020. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben Benoit, Chair
Stationary Source Committee

AD:cr

Committee Members

Present: Council Member Ben Benoit (Chair)
Board Member Gideon Kracov
Council Member Judith Mitchell
Supervisor V. Manuel Perez

Absent: Senator Vanessa Delgado (Ret)
Supervisor Janice Rutherford

Call to Order

Chair Benoit called the meeting to order at 10:00 a.m.

INFORMATIONAL ITEMS:

1. **Annual Progress Report for AB 617 Community Emissions Reduction Plans**
   Dr. Jo Kay Ghosh, Director of Community Air Programs and Health Effects Officer/Planning, Rule Development and Area Sources, presented a summary of the Annual Progress Report for AB 617 Community Emissions Reduction Plans (CERPs). The presentation highlighted the report framework, community outreach, and a summary of the commitments and actions taken from September 2019 to June 2020 to further reduce emissions in AB 617 communities designated in 2018.

   Council Member Benoit asked when the MATES V study is expected to be released. Dr. Ghosh stated that the draft report is expected to be released by the end

of this year, with the expectation to have the final report considered by the Board in early 2021.

Bill LaMarr, California Small Business Alliance, asked what type of incentives have been allocated for the East Los Angeles, Boyle Heights, West Commerce (ELABHWC) community. Dr. Ghosh stated that these incentive projects included mobile source incentives as well as projects to decrease emissions from metal processing facilities and school air filtration projects in the ELABHWC community.

Angie Balderas, San Bernardino/Muscoy Community Steering Committee, requested a copy of the presentation. Dr. Ghosh committed to provide that to her.

Board Member Kracov asked the Board's role and responsibility to approve the various rule development projects included in the CERPs to achieve the emission reduction commitments for the AB 617 program. Executive Officer Wayne Nastri clarified that staff cannot presume what the Board will decide, nor can staff commit on behalf of the Board to adopt these rules, but staff commits to making the Board aware of the projects identified in the plans as part of our rulemaking efforts. Board Member Kracov emphasized the importance of implementing these plans and thanked staff for their work. Dr. Ghosh also clarified that the commitments in the San Bernardino/Muscoy community around aggregate plants were related to outreach and enforcement of existing rules, rather than for rule development for that industry. Board Member Kracov asked if Rule 1147 was included in the rule forecast calendar. Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development and Area Sources, confirmed that Rule 1147 is on the rule forecast calendar and noted that there may be some overlap for that industry and the applicability of that rule.

Council Member Mitchell stated that she frequently attends AB 617 meetings and that Board Member Kracov has also attended these meetings. She noted an issue mentioned at the CARB Board meeting when they are considering approval of the CERP regarding the connection between land use and how it impacts air quality in these communities. Council Member Mitchell urged the Committee members to attend the AB 617 community meetings so that they may hear the community concerns so that they may work to encourage land use authorities to be involved in the program voluntarily, without requiring legislation to be amended to require their participation.

2. Recommendation for Year 3 Implementation of Assembly Bill 617

Dr. Ghosh presented a summary of the community identification and prioritization process, additional considerations, and staff's recommendation for Year 3 implementation of the AB 617 program. The presentation highlighted community characteristics and existing community efforts that demonstrate South Los Angeles's readiness for the AB 617 program. In addition to recommending South

Los Angeles for Year 3 implementation, staff recommended seeking additional funding to support the development and implementation of the community plans.

Board Member Kracov asked what the Board's role was in determining the community boundary for this recommendation. Dr. Ghosh stated that the Board approves the preliminary boundary and then after the community is designated, staff works with the community steering committee to finalize the community boundary. Board Member Kracov also asked what South Coast AQMD's authority is over oil production facilities in relation to other agencies like California Geologic Energy Management Division (CalGEM, previously DOGGR). Dr. Fine responded that the Year 1 community of Wilmington, Carson, West Long Beach had prioritized oil production sites in their CERP. He noted that other regulatory agencies such as CalGEM and the City of Los Angeles have important roles and he confirmed that South Coast AQMD has regulations and permitting requirements applicable to this industry.

Council Member Mitchell acknowledged the impact of oil production and oil well activity, such as from AllenCo, given their proximity to homes in the community. Council Member Mitchell agreed that South Los Angeles is a strong candidate for the program, noting that the community is well organized around these issues.

The public commenters included South Los Angeles residents, South Central Los Angeles PUSH program ambassadors, as well as staff from Strategic Concepts in Organizing and Policy Education (SCOPE) and Physicians for Social Responsibility-Los Angeles (PSR-LA):

Storm Hopkins
Ruth Andrade
Manuel Hernandez
Ignacio Gutierrez
Iretha
Laura Muraida
Gina Charusombat
Oscar Morales
Guadalupe
Elba Lilian Pleitez

The public all provided testimony regarding the various industries in the community, environmental and health conditions experienced by community members, community efforts that demonstrate community readiness and their experience working with key agency partners. Each speaker expressed support for the recommendation of South Los Angeles for Year 3 implementation of the AB 617 program.

Gloria Medina, SCOPE, supported the recommendation of South Los Angeles, and noted that the SCLA-PUSH program allowed residents to take data collection into their own hands.

Erica Blyther, City of Los Angeles Office of Petroleum and Natural Gas Administration, supported the recommendation of South Los Angeles noting the

community is being impacted by three drill sites in the area: Jefferson, Murphy, and AllenCo. Ms. Blyther stated that they welcome the advanced air monitoring that South Coast AQMD can provide for this community.

Marco A Sanchez, resident near AllenCo, spoke to a discharge from the facility in 2019 and expressed concern regarding the compliance history of the facility. Mr. Sanchez requested that monitoring be conducted 24/7 given the nearby college and high school for disabled children. Dr. Jason Low, Assistant Deputy Executive Officer/Office of Science and Technology Advancement, explained the history of monitoring efforts for this area, noting that air toxics have been within typical levels. Dr. Low also explained that in addition to the sampling that inspectors obtain as part of complaint response, the monitoring strategy has been updated to be able to activate sampling remotely. Dr. Low also discussed staff's efforts to provide air canisters to community members so that they may also obtain samples.

Martha Dina Arguello, Physicians for Social Responsibility-Los Angeles (PSR-LA) and Standing Together Against Neighborhood Drilling (STAND), expressed commitment and readiness of the community to participate in this program by highlighting current community efforts. Ms. Arguello shared appreciation for Council Member Mitchell's comment acknowledging the importance of land use agency participation in the program and shared PSR-LA's experience working with land use agencies and their policies and remain committed to ensure that work is implemented.

Board Member Kracov complimented Ms. Arguello's efforts in the community and her participation in the AB 617 consultation group. He emphasized the limited funds for the program, and asked Ms. Arguello how her organization may help seek additional funding if South Los Angeles is included in the AB 617 program. Ms. Arguello spoke to the strength of networking and experience her coalition has had in the community to ensure there is reinvestment in this community. She highlighted that her organizations' partners are also experienced in seeking additional funding sources, fighting for resources for the community, and reaffirmed her commitment to ensure the budget is utilized to create real change in the community.

A member of the public requested that companies and their employees are educated and that they use equipment that produce the least amount of emissions possible. He stated that community members must also be educated as to what they can do in their own home and to clean their community as well. He also asked what resources South Coast AQMD has to educate the community on air quality concerns. Council Member Benoit stated that the education will be a part of the AB 617 program. He stated the process is to first come into the area, identify the issues, address those, and get more funding from the state so that this work can be done in the community.

Council Member Mitchell acknowledged that the public comments demonstrate that the community is well organized. She also acknowledged that oil drilling has been an issue in the community for years and stated that this industry should be a focus for the agency. Council Member Mitchell corrected her previous reference to Baldwin Park which should have been Baldwin Hills and the Inglewood Oil Field area. She confirmed that this recommendation would be presented to the Board in October and stated that this community is deserving of AB 617 protections.

Council Member Benoit thanked staff and committed to join the fight to seek additional funding for this community and other AB 617 communities in the program. He acknowledged that this community should be prioritized for the program, emphasized the importance to find funds to support the program, and stated that he was encouraged by public speakers who participated.

3. **Summary of Proposed Amended Rule 1178 – Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities**
Michael Morris, Planning and Rules Manager, provided a summary on Proposed Amended Rule 1178.

Council Member Mitchell expressed support for the amendment.

4. **Status Update on the Development of Proposed Rule 1109.1**
Michael Krause, Planning and Rules Manager, presented an update on the development of Proposed Rule 1109.1, including the rule background, affected facilities, development process, BARCT assessment steps, proposed BARCT limits and considerations for implementation schedule.

Council Member Mitchell requested clarification as to the two proposed BARCT limits numbers for the smaller heater categories. Mr. Krause explained that the larger number represents the NOx limit which was determined to be cost-effective and achievable, and the second limit (smaller number) is achievable through the application of emerging technology proposed by vendors to be more fully developed at a future time.

Council Member Mitchell expressed concern about the application of one BARCT limit for all refineries that might have different operations for the same equipment. Mr. Krause clarified that the BARCT analysis was conducted based on the class and category of equipment. Ms. Susan Nakamura, Assistant Deputy Executive Officer/Planning, Rule Development and Area Sources, added that the analysis was conducted as part of a “bottom-up” approach which comprises of cost-effectiveness calculation for each piece of equipment, averaging the cost-effectiveness over class and category, and including cost estimates for unique limitations at specific facilities.

Council Member Mitchell also inquired about the interpretation of the Assembly Bill 617 requirement to implement BARCT by 2023. Dr. Fine responded that the maximum NOx emission reductions would be sought as soon as practicable, but recognizing implementation considerations such as multiple concurrent emission reduction projects with concurrent construction activities, turnaround schedules, and availability of engineering and resources need to be considered and are part of determining the feasibility to implement BARCT.

Board Member Kracov asked when the rule is scheduled to be considered by the Board and whether the project will be evaluated under CEQA. Mr. Krause stated that the rule is scheduled to be presented to the Board in March 2021 and confirmed that a CEQA evaluation is required. Staff is currently working on an environmental assessment evaluating potential impacts from the new requirements.

5. **2019 Annual Report on AB 2588 Program**
   The Committee did not have time to review this item and therefore recommended that it be forwarded to the Board for consideration.

6. **RECLAIM Quarterly Report – 8th Update**
   Due to time constraints, the presentation was waived. There were no questions or comments.

WRITTEN REPORT:

7. **Notice of Violation Penalty Summary**
   The report was acknowledged by the Committee.

OTHER MATTERS:

8. **Other Business**
   There was no other business.

9. **Public Comment Period**
   There were no public comments.

10. **Next Meeting Date**
    The next regular Stationary Source Committee meeting is scheduled for Friday, October 16, 2020.

Adjournment
The meeting was adjourned at 11:50 a.m.

Attachments
1. Attendance Record
2. Draft Notice of Violation Penalty Summary

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
STATIONARY SOURCE COMMITTEE
SEPTEMBER 18, 2020
ATTENDANCE ROSTER

Council Member Ben Benoit	South Coast AQMD Governing Board
Board Member Gideon Kracov	South Coast AQMD Governing Board
Council Member Judith Mitchell	South Coast AQMD Governing Board
Supervisor V. Manuel Perez	South Coast AQMD Governing Board
Tom Gross	Board Consultant (Benoit)
Fred Minassian	Board Consultant (Mitchell)
Andy Silva	Board Consultant (Rutherford)
Mark Taylor	Board Consultant (Rutherford)
Ross Zelen	Board Consultant (Kracov)
Martha Dina Arguello	PSR-LA and STAND
Angie Balderas	San Bernardino, Muscoy Community Steering Committee
Erica Blyther	City of Los Angeles Office of Petroleum and Natural Gas Administration
Linda Cedillo	California Air Resources Board
Curtis Coleman	Southern California Air Quality Alliance
Frances Keeler	CCEEB
Bill LaMarr	California Small Business Alliance
Guo Quan Lim	CARB
Dan McGivney	Southern California Gas Co
Gloria Medina	SCOPE
Noel Muyco	Southern California Gas Co
Liliana Nunez	CARB
Helena Rhim	CARB
David Rothbart	SCAP
Patty Senecal	Western States Petroleum Association
Scott Weaver	Ramboll
Peter Whittingham	Whittingham Public Affairs Advisors
Derrick Alatorre	South Coast AQMD staff
Jason Aspell	South Coast AQMD staff
Barbara Baird	South Coast AQMD staff
Naveen Berry	South Coast AQMD staff
Amir Dejbakhsh	South Coast AQMD staff
Philip Fine	South Coast AQMD staff
Jo Kay Ghosh	South Coast AQMD staff

Bayron Gilchrist	South Coast AQMD staff
Tracy Goss	South Coast AQMD staff
Sheri Hanizavareh	South Coast AQMD staff
Mark Henninger	South Coast AQMD staff
Michael Krause	South Coast AQMD staff
Jason Low	South Coast AQMD staff
Terrence Mann	South Coast AQMD staff
Matt Miyasato	South Coast AQMD staff
Michael Morris	South Coast AQMD staff
Ron Moskowitz	South Coast AQMD staff
Susan Nakamura	South Coast AQMD staff
Wayne Nastri	South Coast AQMD staff
Sarah Rees	South Coast AQMD staff
Lisa Tanaka O' Malley	South Coast AQMD staff
Anthony Tang	South Coast AQMD staff
Jill Whynot	South Coast AQMD staff
William Wong	South Coast AQMD staff
Paul Wright	South Coast AQMD staff
Victor Yip	South Coast AQMD staff

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

Settlement Penalties Report (08/01/2020 - 08/31/2020)

	Total Penalties
Civil Settlement :	$1,145,492.00
Hearing Board Settlement :	$30,000.00
MSPAP Settlement :	$31,408.00
Total Cash Settlements:	$1,206,900.00
Fiscal Year through 08/31/2020 Cash Total :	$3,242,607.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
Civil						
183832	AST TEXTILE GROUP, INC.	2004, 2005, 2012	08/14/2020	DH	P65379, P66906, P66912, P66916	$49,992.00
188623	CAL RETROFIT	1403, 40 CFR 60, QQQ	08/14/2020	BT	P67458, P67459	$2,900.00
119219	CHIQUITA CANYON LLC	203, 3002	08/11/2020	DH	P67616	$1,000.00
800037	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	2004	08/14/2020	DH	P64424	$1,200.00
189467	NAM AUTO BODY	109, 201, 203(a), 1151(e)(1)	08/27/2020	KER	P68610	$500.00
8547	QUEMETCO INC	1420.1, 2004, 3002, 40 CFR 60, QQQ	08/27/2020* *Date payment received; case settled 4/30/20	NSF	P52420, P64422, P67052, P67053, P67054	$600,000.00
15504	SCHLOSSER FORGE COMPANY	1155, 1430, 2004, 3002(c)(1)	08/14/2020	VT	P63874, P64143, P67363	$6,500.00
184301	SENTINEL PEAK RESOURCES CALIFORNIA, LLC	463(c), 2004(f)(1)	08/20/2020	DH	P67907	$3,400.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
181667	TORRANCE REFINING COMPANY LLC	401, 1114, 1118, 1173, 1176, 3002, 40 CFR 60, QQQ	08/20/2020	DH	P65605	$350,000.00
800026	ULTRAMAR INC	3002(c)(1)	08/14/2020	TB	P63377	$30,000.00
111176	WESTERN RIVERSIDE CO REG WASTEWATER AUTH	402, H&S 41700	08/14/2020	MR	P52412, P52419, P61120, P63163, P63465, P63466, P63467, P63468, P63469, P63918, P64517, P64518, P64570, P64571, P64572, P64573, P64853, P65853, P65884, P66255, P66275, P66292, P66424, P66427, P66430, P67051	$100,000.00
Total Civil Settlements : $1,145,492.00						
Hearing Board						
104234	SCAQMD v. Mission Foods	202, 203(b), 1153.1, 1303	8/20/2020	KCM	5400-4	$25,000.00
10966	WEBER METALS INC	1430	08/27/2019	DH	6136-1	$5,000.00
Total Hearing Board Settlements : $30,000.00						
MSPAP						
109142	AGRISCAPE SOILS	203(a)	08/05/2020	GC	P67426	$800.00
134482	ALEX CLEANERS	203(a), 1421	08/27/2020	GC	P69507	$850.00
168966	ALI'S ENTERPRISES, INC. 2	461, H&S 41960	08/05/2020	GC	P68415	$360.00
167321	ANABI OIL, DBA WILLIAM HAWATMEH, PASADENA	461	08/06/2020	TCF	P70059	$300.00
127384	CIRCLE K STORES INC. #2705786	461	08/27/2020	GC	P68126	$1,063.00
181985	DINO STATION	461, H&S 41960	08/27/2020	GC	P68405	$960.00
7018	L & N COSTUME SERVICES	1146	08/06/2020	TCF	P68755	$750.00
164968	L.A.N. TESTING	1166	08/07/2020	TCF	P70355	$1,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
126273	LUCKY CENTER CLEANERS, BYOUNG M LEE DBA	1421	08/07/2020	TCF	P68703	$100.00
91211	MOBIL DLR, AMIR BARHOMA	461, H&S 41960.2	08/20/2020	TCF	P69050	$900.00
191046	NAVARCHUS, LLC	1403, 40 CFR 60, QQQ	08/20/2020	TCF	P69204, P69212	$1,600.00
143533	NEW CINGULAR WIRELESS PCS LLC	1470	08/07/2020	TCF	P69395	$800.00
117724	OIL OPERATORS INC.	203(b)	08/07/2020	TCF	P66843	$1,600.00
145971	PACIFIC MINI MARKET, PHILIP J. LAO DBA	461, H&S 41960.2	08/27/2020	TCF	P68454	$2,000.00
102355	PCM INC/GOLDEN RAIN FOUNDATION	461(c)(3)(Q)	08/07/2020	TCF	P68764	$300.00
177201	PREMIER INV GRP, INC. VENICE CHEVRON	201, 203(a)	08/27/2020	TCF	P68429	$400.00
168554	PRISTINE FIDELITY ENTERPRISES	461, H&S 41960.2	08/27/2020	TCF	P69603	$800.00
179739	PROPEL FUELS CMSI #109	461	08/27/2020	TCF	P69043	$375.00
142501	PROSPECT CLEANERS, YANG KON KIM DBA	1421	08/27/2020	TCF	P68760	$375.00
128235	PUENTE HILLS TOYOTA, INC.	203(b)	08/27/2020	TCF	P70259	$375.00
190240	R A CONSTRUCTION	403(d)(2)	08/27/2020	TCF	P68858	$800.00
149378	RIVERSIDE CO TRAVEL ZONE CENTER INC	461(c)(3)(Q)	08/27/2020	TCF	P66396	$500.00
100806	ROBINSON HELICOPTER CO INC	3002	08/28/2020	TCF	P69954	$500.00
175999	RUBBER RECOVERY, INC	203(b)	08/28/2020	TCF	P69390	$1,000.00
100	RUSS BASSETT COMPANY	201, 203(a)	08/28/2020	TCF	P70253	$1,000.00
184292	SENTINEL PEAK RESOURCES CALIFORNIA LLC	203	08/28/2020	TCF	P66511	$1,000.00
159612	SIGNATURE FLIGHT SUPPORT-VNY	461	08/28/2020	TCF	P67717	$500.00
171593	SOUTH SHORE MOBIL NABIL KHEIR	461(c)(3)(Q)	08/28/2020	TCF	P69032	$300.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbrs	Total Settlement
181224	SUNSET FUELS, INC	461(e)(2)(C)	08/28/2020	TCF	P69034	$800.00
71051	SYSTEM TRANSPORT	1146.1	08/28/2020	TCF	P63898	$3,200.00
171612	TESORO (US) 63270, TESORO REFINING & MAR	461, H&S 41960.2	08/20/2020	TCF	P69026	$800.00
171549	TESORO (USA) 63133	461, H&S 41960.2	08/20/2020	TCF	P70352	$800.00
117466	THREE SISTERS TRUCK STOP	461(e)(2)	08/20/2020	TCF	P66386	$500.00
143057	UNITED NO. 1, LLC	461, H&S 41960	08/20/2020	TCF	P68430	$800.00
151073	V-T WEST, INC. CALIFORNIA DIV.	203(b)	08/20/2020	TCF	P65900	$500.00
175260	W & M, INC	1166	08/20/2020	TCF	P69048	$500.00
189371	WHITTIER UNION HIGH SCHOOL DISTRICT	461(c)(3)(Q)	08/28/2020	TCF	P65874	$300.00
27306	WINALL OIL CO #9	461	08/20/2020	TCF	P68432	$1,600.00
31923	WORTMANN OIL COMPANY, INC.	461	08/20/2020	TCF	P70057	$300.00

Total MSPAP Settlements : $31,408.00

SOUTH COAST AQMD'S RULES AND REGULATIONS INDEX
FOR AUGUST 2020 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

REGULATION IV - PROHIBITIONS

Rule 401	Visible Emissions
Rule 402	Nuisance
Rule 403	Fugitive Dust
Rule 461	Gasoline Transfer and Dispensing
Rule 463	Storage of Organic Liquids

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1114	Petroleum Refinery Coking Operations (MCS-01)
Rule 1118	Emissions from Refinery Flares
Rule 1146	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
Rule 1146.1	Emissions of Oxides of Nitrogen from Small 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 1155	Particulate Matter Control Devices (10-08)
Rule 1166	Volatile Organic Compound Emissions from Decontamination of Soil
Rule 1173	Fugitive Emissions of Volatile Organic Compounds
Rule 1176	Sumps and Wastewater Separators

REGULATION XIII - NEW SOURCE REVIEW

Rule 1303	Requirements

REGULATION XIV - TOXICS

Rule 1403	Asbestos Emissions from Demolition/Renovation Activities
Rule 1420.1	Emissions Standards for Lead from Large Lead-Acid Battery Recycling 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 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004 RECLAIM Program Requirements
Rule 2005 New Source Review for RECLAIM
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

CODE OF FEDERAL REGULATIONS

40 CFR 60, QQQ – Standards of Performance for VOC Emissions from Petroleum Refinery Wastewater

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 23

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting remotely on Friday, September 18, 2020. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Judith Mitchell, Acting Chair
Technology Committee

MMM:av

Committee Members

Present: Supervisor Lisa Bartlett
Board Member Gideon Kracov
Mayor Larry McCallon
Council Member Judith Mitchell
Council Member Carlos Rodriguez

Absent: Council Member Joe Buscaino/Chair

Call to Order

Acting Chair Mitchell called the meeting to order at 12:00 p.m.

ACTION ITEMS:

1. **Execute Contract to Develop Model for Connected Network of Microgrids**
   Microgrids are gaining attention as a means of increasing the resiliency and reliability of the electricity system to support alternative fuel transportation. The University of California Irvine Advanced Power and Energy Program (UCI APEP) proposes a study to assess air quality impacts of connected microgrids by evaluating the fueling and charging options of alternative transportation under microgrid control. This action is to execute a contract with UCI APEP to develop

a model for a connected network of microgrids for zero emission transportation in an amount not to exceed $290,000 from the Clean Fuels Program Fund (31).

Mayor McCallon emphasized the importance of microgrids to support local transit agencies required to convert to zero emission buses, as well as school districts transitioning to zero emission school buses.

Moved by Bartlett; seconded by McCallon; unanimously approved.

Ayes: Bartlett, Kracov, McCallon, Mitchell, Rodriguez
Noes: None
Absent: Buscaino

2. **Issue Program Announcement for Lower Emission School Bus Program**
Since 2001, South Coast AQMD has funded the replacement of over 1,800 pre-1994 publicly owned diesel school buses and retrofitted nearly 3,400 diesel school buses as part of the Lower Emission School Bus Program. In February 2020, CARB issued a guideline update for the Lower Emission School Bus Program allowing the replacement of diesel buses that are more than 20 years old. This action is to issue a Program Announcement to replace pre-2001 model year diesel school buses owned by public school districts with new alternative fuel or zero emission buses.

Council Member 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 Rodriguez requested a list of school districts that qualify for the Lower Emission School Bus Program and asked if outreach is done across the service area. Staff responded that the requested list would be forwarded, including county designation, and that extensive outreach is conducted to the school districts.

Mayor McCallon inquired about the inventory of pre-2001 school buses in the Basin and if infrastructure funds are also available. Staff explained that the program has recently expanded to include pre-2001 school buses and work is in progress on the inventory, and that funds are available for propane, natural gas and electric charging infrastructure.

Ranji George, a member of the public, commented about the incentive amount for zero emission school buses and urged staff to negotiate with the vendors to lower the cost of electric school buses.

Moved by Kracov; seconded by Bartlett; unanimously approved.

Ayes: Bartlett, Kracov, McCallon, Mitchell, Rodriguez
Noes: None
Absent: Buscaino

3. **Execute Contract to Develop and Demonstrate Natural Gas and Propane Conversion Systems for Medium-Duty Vehicles**
In 2019, the Board approved three projects to develop natural gas and propane conversion systems for the new Ford 7.3-liter gasoline engine with Ford Qualified Vehicle Modifiers, including a $607,825 award to Agility Fuel Solutions (Agility). However, a contract with Agility was not executed due to lack of necessary Ford approvals. CARB recently adopted a new lower Optional Low NOx Standard of 0.01 g/bhp-hr under the Heavy-Duty On-Road Low NOx "Omnibus" regulation. Subsequently, Agility submitted a revised proposal to further optimize the engine to achieve the newly adopted level. This action is to execute a contract with Agility Fuel Solutions to develop, demonstrate and commercialize the Ford 7.3-liter medium-duty natural gas and propane conversions systems in an amount not to exceed $607,825 from the Clean Fuels Program Fund (31).

Council Member Mitchell asked about the type of medium-duty trucks this project would cover. Staff responded that this technology could be used in Class 3-7 trucks including utility trucks, vans that are converted to airport shuttles, Class 7 tractor trailers as well as Freightliner chassis used for package delivery vans. Council Member Mitchell supported the potential emission reductions from this project.

Moved by Rodriguez; seconded by Bartlett; unanimously approved.

Ayes: Bartlett, Kracov, McCallon, Mitchell, Rodriguez
Noes: None
Absent: Buscaino

OTHER MATTERS:

4. **Other Business**
There was no other business.

5. **Public Comment Period**
There was no public comment.

6. **Next Meeting Date**
   The next regular Technology Committee meeting is scheduled for Friday, October 16, 2020 at noon.

Adjournment
The meeting adjourned at 12:24 p.m.

Attachment
Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
TECHNOLOGY COMMITTEE MEETING
Attendance Record – September 18, 2020

Supervisor Lisa Bartlett	South Coast AQMD Board Member
Board Member Gideon Kracov	South Coast AQMD Board Member
Mayor Larry McCallon	South Coast AQMD Board Member
Council Member Judith Mitchell	South Coast AQMD Board Member
Council Member Carlos Rodriguez	South Coast AQMD Board Member
James Dinwiddie	Board Consultant (Bartlett)
Fred Minassian	Board Consultant (Mitchell)
Andrew Silva	Board Consultant (Rutherford)
Mark Taylor	Board Consultant (Rutherford)
Mark Abramowitz	Public Member
Betsy Brian	Public Member
Ranji George	Public Member
Sean Kearns	Public Member
Dan McGivney	SoCalGas
Noel Muyco	Public Member
Craig Sakamoto	Public Member
Patty Senecal	WSPA
Alek Van Houghton	Public Member
Zander Zane	Public Member
Naveen Berry	South Coast AQMD Staff
Sam Cao	South Coast AQMD Staff
Seungbum Ha	South Coast AQMD Staff
Sheri Hanizavareh	South Coast AQMD Staff
Mark Henninger	South Coast AQMD Staff
Joseph Impullitti	South Coast AQMD Staff
Cristina Lopez	South Coast AQMD Staff
Matt Miyasato	South Coast AQMD Staff
Lisa Mirisola	South Coast AQMD Staff
Ron Moskowitz	South Coast AQMD Staff
Wayne Nastri	South Coast AQMD Staff
Penny Shaw Cedillo	South Coast AQMD Staff
Yuh Jiun Tan	South Coast AQMD Staff
Anthony Tang	South Coast AQMD Staff
Alejandra Vega	South Coast AQMD Staff
Veera Tyagi	South Coast AQMD Staff
Vicki White	South Coast AQMD Staff
Jill Whynot	South Coast AQMD Staff
Paul Wright	South Coast AQMD Staff

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 24

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: The Mobile Source Air Pollution Reduction Review Committee held a meeting remotely on Thursday, September 17, 2020. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben Benoit
South Coast AQMD Representative
to MSRC

MMM:NB:CR:psc

Meeting Minutes Approved

The MSRC approved the minutes of the April 16, May 21, and June 18, 2020 meetings. The approved minutes are attached *(Attachment 1)*.

California Clean Air Day

The Coalition for Clean for Clean Air holds California Clean Air Day to demonstrate the benefits of tackling air pollution. The initiative focuses upon the cumulative impact of individual actions which will help stakeholders become part of the solution. For 2020, California Clean Air Day will be October 7, 2020. The MSRC adopted a proclamation recognizing the campaign and supporting greater public awareness of the campaign.

FYs 2018-2021 Work Program

Programmatic Outreach Services

The Programmatic Outreach Coordinator, Better World Group Advisors (BWG), was tasked with developing an Outreach Strategy outlining supplemental activities to be undertaken under the current contract as well as activities which might be undertaken in subsequent years. Ongoing activities include outreach and promotion of the MSRC's Work program achievements, development and dissemination of market/promotional materials, strategic market directions and participation in meetings and events. BWG outlined a proposed Outreach Strategy which would, among other elements, commemorate the MSRC's 30th anniversary, develop new collateral materials for the Goods Movement Program, launch regional online workshops and leverage high-profile partnership opportunities for major event center transportation investments. The MSRC approved the proposed Outreach Strategy.

Update on MSRC's Regional Goods Movement Program and Recommendations Concerning Inland Ports Zero/Near-Zero Emission Warehouse & Distribution Facilities

The MSRC received an update on the implementation status of the four subcategories of their Regional Goods Movement Program. To date, in the Zero/Near-Zero Drayage Truck Cooperative Category, MSRC has entered into two partnership programs with the South Coast AQMD. Both programs recently launched, and a full report will be provided in January 2021. In the "Last Mile" Goods Movement subcategory, the MSRC approved a partnership last month with SCAG. The Phase 1 allocation of $10 million has been approved by MSRC and is in the contract formation stage. Allocation of $5 million for Phase 2 is pending approval following Phase 1. In the Maritime Ports category, a request to participate in a regional partnership is expected to be considered by the MSRC next month.

In the Inland Ports subcategory, eleven responses were received to the Program Opportunity Notice released in December 2019. The majority of the pre-proposals submitted sought to implement near-zero or zero-emission container drayage between the Maritime ports and Inland Ports. In evaluating the submissions, the MSRC-TAC determined that additional detailed information, especially pertaining to project costs, would be beneficial to support evaluation. Additionally, budget uncertainties resulting from COVID-19 disruptions negatively impacted co-funding originally offered by respondents. The MSRC-TAC recommended the development of two RFPs to solicit complete, updated project proposals: one for zero/near-zero goods movement to the Inland Ports, and one for zero/near-zero cargo handling equipment. The MSRC authorized the development of the RFPs for their review.

Received and Approved Final Reports

This month, the MSRC received and unanimously approved two final report summaries.

1. Penske Truck Leasing Co., L.P., # MS14037, which provided $75,000 for vehicle maintenance facility modifications.
2. City of Redondo Beach, #MS18120, which provided $275,000 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 2007-08 to the present. The Contracts Administrator's Report for July 30, 2020 through August 26, 2020 is attached (Attachment 2).

Attachment

Attachment 1 – Approved April 16, May 21, and June 18, 2020 Meeting Minutes
Attachment 2 – July 30, 2020 through August 26, 2020 Contracts Administrator's Report

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, APRIL 16, 2020 MEETING MINUTES

21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

All participants attended the meeting remotely pursuant to Executive Orders N-25-20 and N-29-20

MEMBERS PRESENT:

(Chair) Larry McCallon, representing SBCTA
Ben Benoit, representing SCAQMD
Brian Berkson, representing RCTC
Jack Kitowski, representing California Air Resources Board
Rex Richardson, representing SCAG
Dolores Roybal Saltarelli (Alt.), representing Regional Rideshare Agency
Meghan Sahli-Wells (Alt.), representing SCAG
Mark Yamarone (Alt.), representing Los Angeles County MTA

MEMBERS ABSENT:

(Vice-Chair) Greg Winterbottom, representing OCTA

MSRC-TAC MEMBERS PRESENT:

Jenny Chan, Riverside County Transportation Commission
Rongsheng Luo, representing SCAG

OTHERS PRESENT:

Ruben Aronin, Better World Group
Lauren Dunlap, SoCalGas
Nancy Strickert, SBCTA
Alex Van Houghton

SOUTH COAST AQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Maria Allen, Secretary
Naveen Berry, Asst. Deputy Executive Officer
Penny Shaw Cedillo, MSRC Administrative Liaison
Ray Gorski, MSRC Technical Advisor-Contractor
Daphne Hsu, Senior Deputy District Counsel
John Kampa, Financial Analyst
Matt Mackenzie, MSRC Contracts Assistant
Ash Nikravan, Senior Staff Specialist
Cynthia Ravenstein, MSRC Contracts Administrator
Paul Wright, Information Technology Specialist

CALL TO ORDER

- Call to Order

  MSRC Chair Larry McCallon called the meeting to order at 2:00 p.m.

  Roll call was taken at the start of the meeting. The following members and alternates were present: BEN BENOIT, BRIAN BERKSON, LARRY MCCALLON, REX RICHARDSON, DOLORES ROYBAL SALTARELLI, MARK YAMARONE.

- STATUS REPORT

  [MSRC Member Jack Kitowski joined the discussion at 2:07 p.m.]

  Cynthia Ravenstein, MSRC Contracts Administrator presented that the Governor has announced that he is going to focus on a very stripped-down budget for the next fiscal year due to the Coronavirus crisis. No new ideas or programs, that is going to obviously impact potential co-funding for some of the programs that the MSRC might wish to do. One example of this is often times a lot of the projects that are interested in MSRC funding are looking for co-funding from the Clean Truck and Bus Voucher Program (HVIP) and they are anticipating limited funding for the 2020-2021 fiscal year. They had a webinar and options being discussed to try to deal with that limited funding include graduating, as they call it, certain technologies and vehicles out of the program, making changes to vehicle and fleet eligibility, adjusting voucher amounts, putting caps on the number of voucher requests that will be accepted, and taking into account upcoming regulations to reduce funds as compliance deadlines draw near.

  MSRC Chair Larry McCallon stated for the record that for Agenda Items #7 and #8, he does not have any financial interest, but is required to identify that he is a Governing Board Member for South Coast AQMD and Regional Council Member for Southern California Association of Governments, which are involved in these items.

  MSRC Member Brian Berkson stated for the record that for Agenda Item #4, he does not have any financial interest, but is required to identify that he is a Commissioner for the Riverside County Transportation Commission, which is involved in this item.

  MSRC Rex Richardson stated for the record that for Agenda Item #8, he does not have any financial interest, but is required to identify that he is a Regional Council

Member for the Southern California Association of Governments, which is involved in this item.

MSRC Member Ben Benoit stated for the record that for Agenda Items #4, #7 and #8, he does not have any financial interest, but is required to identify that he is a Commissioner of Riverside County Transportation Commission, Governing Board Member for South Coast AQMD and Regional Council Member for Southern California Association of Governments, which are involved in these items.

CONSENT CALENDAR (Items 1 through 4)

Receive and Approve Items

Agenda Item #1 – MSRC Contracts Administrator's Report

The MSRC AB 2766 Contracts Administrator's Report for February 27 through April 8, 2020 was included in the agenda package.

ON MOTION BY MSRC MEMBER BEN BENOIT AND SECONDED BY MSRC MEMBER BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #4, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR FEBRUARY 27 THROUGH APRIL 8, 2020.
AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the May 1, 2020 South Coast AQMD Board meeting.

Agenda Item #2 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for March 2020 was included in the agenda package.

ON MOTION BY MSRC MEMBER BEN BENOIT AND SECONDED BY MSRC MEMBER BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #4, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING MARCH 2020.

AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

Agenda Item #3 – Consider Nine-Month Term Extension for the City of Azusa, Contract #ML16032 ($474,925 – Implement "Complete Streets" Pedestrian Access Project)

The City requests a nine-month contract term extension due to delays associated with the larger project of which this is a part, and to align construction with Azusa Pacific University's summer break to minimize impacts on pedestrian and vehicular traffic. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC MEMBER BEN BENOIT AND SECONDED BY MSRC MEMBER BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #4, MSRC UNANIMOUSLY VOTED TO APPROVE A NINE-MONTH TERM EXTENSION FOR THE CITY OF AZUSA, CONTRACT #ML16032.
AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #4 – Consider Twenty-One Month Contract Term Extension by Riverside County Transportation Commission (RCTC), Contract #MS14059 ($1,250,000 – Implement Various Signal Synchronization Projects)

RCTC requests a twenty-one month contract term extension due to the Coachella Valley Associated Governments' Regional Synchronization Project taking longer than anticipated due to the necessary coordination with the numerous jurisdictions, the wide variety of existing equipment, and planning for synchronization that will be utilizing rapidly changing technology. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC MEMBER BEN BENOIT AND SECONDED BY MSRC MEMBER BRIAN BERKSON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #4, MSRC UNANIMOUSLY VOTED

TO APPROVE A TWENTY-ONE MONTH CONTRACT TERM EXTENSION BY RIVERSIDE COUNTY TRANSPORTATION COMMISSION, CONTRACT #MS14059.
AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

ACTION CALENDAR (Item 5 through 8)

Agenda Item #5 – Consider Modifications to the MSRC Operational Policies and Procedures Related to the Regional Rideshare Agency Representative

Cynthia Ravenstein, MSRC Contracts Administrator, reported that part of the enabling legislation calls for there to be a Regional Rideshare Agency member on the MSRC. The MSRC itself has the discretion to select the agency that is going to designate the member. Back in 1991, originally the MSRC selected Commuter Transportation Services as the Regional Rideshare Agency. Commuter Transportation Services remained the agency until 2003, when they dissolved. At that point, the MSRC discovered that the four County Transportation Commissions (CTCs) were mutually providing rideshare services for the region. The intention was that the MSRC's Regional Rideshare Agency position would rotate, but nothing was ever said officially. Initially the Riverside County Transportation Commission (RCTC) was selected to be the Regional Rideshare Agency. Then in 2010, the CTCs thought maybe it was time that this should rotate. A group called the Regional Rideshare Implementation Committee submitted a letter recommending that the MSRC consider selecting Metro to be the Regional Rideshare Agency. The MSRC considered that recommendation, and a recommendation from the MSRC-TAC, and designated Metro to be the Regional Rideshare Agency in 2010. And that has been the agency up to this point. There really has not been any mechanism for anything to change. We have gathered that it is still the case that the four CTCs that are represented on the MSRC all provide some of the regional rideshare services. What is proposed is a modification to the MSRC Operational Policies and Procedures to ensure a smooth rotation of the Regional Rideshare Agency now and in the future, so it established that it would rotate every four years. If this was approved San Bernardino County Transportation Authority would become the new Regional Rideshare Agency and then four years after that it would be Orange County Transportation Authority. Then it would be RCTC, then it would be Metro, and then that cycle would repeat thereafter. So, it would be sort of an automatic thing instead of waiting for some impetus to come and cause the MSRC to consider it. This was not reviewed by the MSRC-TAC, it is a policy issue for the MSRC consideration.

MSRC Member Brian Berkson commented, related to the four-year terms, and wondering if that might be too long of a term for any one agency if we are going to do a rotating scenario. Two years sounds more in line with our Work Programs. Is it something that we want to do for four years at a time? Because then when you take a break, it is another 12 years till you are back in your county.

MSRC Alternate Meghan Sahli-Wells commented, in general, do the organizations put staff members forward? Who would be the appointees? MSRC Chair Larry McCallon replied, it is with my understanding the appointee would be a member of the board of that organization. In the case of Metro, they have not filled that position and it has fallen to staff as an alternate. Ms. Sahli-Wells asked, is it the policy that it would be a board member? Mr. McCallon replied, it is not spelled out in the policy currently, it could be. Ms. Ravenstein added, the policy as written right now does not speak to who the agency could designate as their member. Ms. Sahli-Wells commented, in my experience like on the Westside Cities COG, these types of bodies are usually filled by staff members and the idea is that there is a technical expertise that they usually bring to these conversations. If it does turn out to be staff members as opposed to board members, then there is a capacity issue. How do people get appointed? How does the board vote on who is going to represent? MSRC Alternate Dolores Roybal Saltarelli added, my understanding is that it has always been preferred to have a board member. However, if for various reasons that is not possible, then the staff member is the alternate. I do think it is important to formalize the rotation. This item is extremely appropriate. Going back to Brian's question in terms of the length, is there any input as to the four years versus something that shorter because it seems either one could work, but I think it is contingent on everybody feeling comfortable with that. Mr. McCallon commented, when I first saw the change to four years, I thought that was a little long, I would suggest like Brian, that we go to a two-year term.

MSRC Member Ben Benoit commented, I agree with the two years. To try and line up with our Work Programs, that would be the way to do it. We are in the middle of our two-year Work Program right now, maybe we need to give that first member an extra year so they can line that up with the Work Program. Cynthia, I will leave it to you to line it up in the most effective way, if we want that person coming into this to be able to participate in the upcoming Work Program. So, whenever timing would be right to time that out. Mr. McCallon commented, our current Work Program is three years. Ms. Sahli-Wells commented is the Work Program something that changes over time, is it always three years or is it sometimes two years? Mr. McCallon commented, it has always been two years recently until this year. This time we made it three years because we wanted to a larger pool of money to deal with. Ms. Sahli-Wells commented, if you had the appointment align with whatever the Work Program is, that would allow you that flexibility. Ms. Ravenstein commented, when do you define exactly when the Work Program is starting and ending? Ms. Sahli-Wells commented, is that something you vote on? Ms. Ravenstein commented, we have in the past asked the MSRC to authorize longer because the Work Program always used to be one year, and then for the past several years, it was two years and then three

years. Mr. McCallon commented, when does the Work Program begin? When do we vote on it? Ms. Ravenstein commented, typically you have been voting on it in the spring before the fiscal year when it starts. Mr. McCallon commented, we can align it to the Work Program. Since we are in the middle of this three-year Work Program, we can have this one go through the end of this Work Program.

Mr. Benoit asked, wouldn't that person who ever it was, want to be there for the planning of the Work Program and then be part of carrying it out? Maybe it is more important that they are there, the six months prior to the Work Program actually starting or when we vote out on it. Because before we vote on it, it has gone to the MSRC-TAC and before that it goes to our joint meeting and there have been other planning meetings to get it to that point. I would assume they would want to be a part of that. Mr. McCallon commented, targeting first of the year then. Mr. Benoit commented, when do we normally start planning for our Work Program? Obviously, it will not work for this one coming forward. Whoever gets assigned now would stay on until we are beginning the process of starting the following Work Program. So this first person to get assigned might be closer to the four-year term that was originally envisioned, but then after that would fall back to either a two- or three-year term based on how long the Work Program is after they have gone through the planning and then gotten up and running. Once it is up and running, switching at that point will probably be no big deal. If we are going to line it up with the Work Program, it needs to include the planning portion of it. Ms. Ravenstein commented, generally there is not a lot of planning that goes on before we are asking you how long the Work Program is going to be, because we cannot really plan too much until we know how much money there is going to be to work with. Mr. Benoit commented, they would not need to be part of the planning conversation of how long the Work Program would be.

Mr. Berkson asked, is there any issue with having an overlap where we actually have the transition from the old to the new and they are both overlapping and both on duty? One is wrapping up the Work Program they were completing, and the next group is coming on a little earlier so they can be involved in the setting up and staging of the new Work Program? Is that possible or is further complicating?

Mr. McCallon commented, you have to realize this is a position that is appointed like your position and my position and it is up to the organization that is appointing, when they make the appointments and that could change at any time. My position is up every couple of years. It does not coincide with any work program schedule or anything else. Maybe we are making this too complicated when this is just another one of our positions on this committee. Ms. Sahli-Wells commented, so then default to the two years that was suggested? Mr. McCallon commented, that is what I would suggest.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER BRIAN BERKSON, MSRC UNANIMOUSLY VOTED TO APPROVE MODIFICATIONS TO THE MSRC OPERATIONAL

POLICIES AND PROCEDURES RELATED TO THE REGIONAL RIDESHARE AGENCY REPRESENTATIVE FOR A TWO-YEAR TERM.
AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the Operational Policies and Procedures accordingly.

FYs 2016-18 WORK PROGRAM

Agenda Item #6 – Consider Recommendation Regarding Extending Submittal Deadline Under the Hydrogen Infrastructure Partnership Program

Cynthia Ravenstein, MSRC Contracts Administrator, reported the MSRC issued a Program Opportunity Notice as part of the 2016-18 Work Program for Hydrogen Infrastructure seeking to encourage the establishment of new and expanded hydrogen fueling stations. The MSRC has made one award in the amount of $1 million under this program. We have also received numerous inquiries and had many discussions with interested parties. Some of them indicated that they needed more time. Towards the end of the application period the California Energy Commission (CEC) came out with a funding opportunity for hydrogen refueling infrastructure in January, that coincided with a marked increase in interest in the MSRC's funding opportunity because people were looking for co-funding. At the time that the MSRC-TAC considered this item, the CEC's deadline was April 30, 2020. The MSRC-TAC recommended that the MSRC extend the deadline on their funding opportunity to April 9, 2021. Since that time, the March 19th MSRC meeting was canceled because the South Coast AQMD offices were closed, and we did not have preparation time to set up a remote meeting like this. But we have been informed by legal counsel that it is possible for the MSRC to still extend the deadline and have that be effective retroactively. You could still act on the MSRC-TAC's recommendation to extend the submittal deadline for this solicitation. Also, since the MSRC-TAC met, the CEC has extended the deadline for their funding opportunity to May 22nd. The recommendation before for you is to extend the deadline to April 9, 2021. There is still a lot of interest. We did get a few applications from one proposer based on the current deadline, but we know there are a lot more out there that are still in the works.

MSRC member Jack Kitowski asked, is this a competitive solicitation or is this a set amount? Ms. Ravenstein replied, there is not a set amount, but it was somewhat first-come, first served. We were primarily seeking to be that last little bit of funding for projects that had already been vetted by other funders, primarily CARB, CEC, and South Coast AQMD. That was the primary goal, although we were not necessarily going to turn away projects that came in directly from the proposers.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER JACK KITOWSKI, MSRC UNANIMOUSLY VOTED TO APPROVE EXTENDING SUBMITTAL DEADLINE UNDER THE HYDROGEN INFRASTRUCTURE PARTNERSHIP PROGRAM TO APRIL 9, 2021.
AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: This item will be considered by the South Coast AQMD Governing Board at its May 1, 2020 meeting.

FYs 2018-21 WORK PROGRAM

Agenda Item #7 – Consider Partnership with South Coast AQMD on Implementation of a Voucher Inventive Program (VIP) Plus Up Incentive

Cynthia Ravenstein, MSRC Contracts Administrator, reported this is to consider a partnership with South Coast of AQMD on a Plus Up Incentive for the Voucher Incentive Program (VIP). The current Voucher Incentive Program under the Carl Moyer Program provides incentive funding for the cost of replacing older, higher polluting vehicles with newer, lower emission vehicles that meet the 0.20 g/bhp-hr NOx standard. That is basically the current standard for a new vehicle. Participation is limited to fleets which have 10 or fewer vehicles. They submit applications through approved dealers. Current engines have to be model year 2009 or older and in compliance with the Truck and Bus Regulation. The applicant gets issued a voucher and that amount is deducted from the purchase price of the new truck. The voucher amounts vary depending on the vehicle class and mileage. The maximum amount that they could get is $60,000. The majority of the new vehicles that are purchased under this program are diesel. Given the technology developments that have been occurring, and the need to achieve emission reductions as soon as practicable, we saw that there is an opportunity to partner with South Coast AQMD to support vehicle owners in going a step further to achieve emission reductions that are at least 90% cleaner than what the current standards are, going with engines that meet 0.02 g/bhp-hr and cleaner. This could be achieved by adding MSRC funds to what the applicant would get under the regular VIP. For Class 7 and 8, the maximum would be a $100,000, for Class 6 vehicles $80,000, and for Class 5 vehicles, $60,000. Other than the funding caps, all the requirements of the VIP guidelines would remain in place. There would not be any difference that the fleets would see in terms of the process. We have run this by CARB in terms of policy; there are some little details that need to be worked out in terms of the implementation. The MSRC-TAC has recommended a $5 million initial allocation as the minimum that would make the program viable, that would match $5 million in the VIP funds. If all the trucks were Class 8 and they receive the maximum VIP voucher amount, then 100 low NOx trucks could be

funded. If there were smaller trucks in there, then the total number of trucks would be increased. But if some of them were getting less than the maximum amount on the VIP vouchers, which is probably likely, then that could decrease the total number of trucks. There are a lot of variables there. The 2020 VIP funding tables have not been out all that long. The interest in doing this soon after the VIP launched is to try to encourage as many fleets as possible to consider taking the low NOx option rather than just buying the diesel truck. You may have heard; CARB is currently working on adding a low NOx incentive to their Statewide VIP. That is expected to come out sometime in the next few months. The early indications are that their incentive amounts would be lower than what we are proposing here. If that is the case, then probably there would still be some funding coming from the MSRC to make up that difference. On March 5th, the TAC also recommended a sunset date on these the MSRC funds of December 31, 2020. A lot of things have changed since March 5th. So that just might be something to think about in terms of that sunset date, that perhaps people are not going to be buying trucks quite as quickly as they were before.

MSRC Chair Larry McCallon asked, the reason for the sunset date? Ms. Ravenstein replied, the TAC just thought that there should be some kind of an end point.

MSRC Member Ben Benoit asked, does the sunset date line up with the end of the Work Program? Ms. Ravenstein replied, I am not entirely sure why they picked that date. I think that they just felt like that there should be an end point and that there might be a reasonable chance that the money would have been spent by then. I do not really have a clear picture of why they picked that date.

Mr. McCallon commented, if we have an end date, we need to extend it until the end of next year because of the way the economy is and where things are headed.

Naveen Berry, Assistant Deputy Executive Officer, commented, typically speaking of the funds that the South Coast AQMD allocates to the subset of the Carl Moyer Program for VIP are exhausted in the October/November time frame, so perhaps that is why that end of the year date was selected, but I would suggest that we extend by a year, as the Committee is discussing, just because we are not certain as to how quickly the incentive funds are going to be drawn down after this Covid-19 issue starts to settle down.

MSRC Member Brian Berkson commented, in essence is this a combination of half of our money and half of South Coast AQMD's money? It went from $60,000 to $100,000 as the max for those large trucks. If we go through this process and partner up, is the benefit that rather than just allow a normal diesel truck to be qualified, this goes that step further to make sure that these are even more beyond the standard diesel? Ms. Ravenstein replied, yes, sometimes South Coast AQMD's Carl Moyer funds are going to be taking a little more than half, sometimes MSRC funds are going to be taking a little more than half, depending on the mileage of the truck and so forth. The ones that are higher mileage are going to get more of the South Coast AQMD funds, the ones that have a little bit lower mileage, the MSRC is

going to be making up a little more for those. This is going to be encouraging people to go with the lower emitting trucks.

MSRC Member Jack Kitowski commented, there is one other aspect that I think is going to make it better as folks are trying to advertise and outreach this program and that is there is a known set amount. The Carl Moyer program is highly variable depending on how many miles you drive so you could get the full $100,000 out of the Carl Moyer account, you could get much less. You will not know until somebody analyzes your mileage and plugs the numbers in and all of that. That is hard to explain to a fleet as you're trying to say it. The combination of these two together simply means okay, you're going to be eligible for $100,000. Do you want to do this or not? And that is I think that is easier for more fleet owners to understand.

Mr. McCallon commented, with the trucks being one of our major sources of criteria pollutants in the South Coast Area, it certainly makes sense for us to encourage turnover of these older trucks and I would like to see us partner with South Coast AQMD to do this because I think it's a very important program if we can help incentivize some of these older trucks to get off the road. It benefits all of us and I would hope that personally that we get down to the 0.02 engines.

Mr. Berkson commented, I move the recommendation with an amendment to change the ending date that staff suggested to December 31, 2021.

> ON MOTION BY MSRC MEMBER BRIAN BERKSON, AND SECONDED BY MSRC MEMBER BEN BENOIT, MSRC UNANIMOUSLY VOTED TO APPROVE THE PARTNERSHIP WITH SOUTH COAST AQMD ON IMPLEMENTATION OF A VOUCHER INVENTIVE PROGRAM (VIP) PLUS UP INCNETIVE WITH AN AMENDMENT TO THE SUNSET DATE TO DECEMBER 31, 2021.
> AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
> NOES: NONE.

ACTION: This item will be considered by the South Coast AQMD Governing Board at its May 1, 2020 meeting.

Agenda Item #8 – Update on MSRC's Regional Goods Movement Program and Consider Direction on Solicitations and Authorization of Submissions

Ray Gorski, MSRC Technical Advisor, provided an update on the overall Goods Movement Program that the MSRC has embarked upon. The Inland Ports Program Opportunity Notice which opened on December 6th is now closed. As you may recall during some of the

intervening meetings, we were expressing that we were uncertain as to what type of a response this PON would generate. We had had prior meetings and we were trying to see if we could get some traction with some of the warehouse distribution centers located out in the Inland Empire to gauge their interest in partnering with the MSRC on implementing clean air projects, but in all honesty, we were not getting a lot of responses. We thought that there might be some concern about the Indirect Source Rule that the South Coast AQMD is promulgating and that be having a chilling effect on entities coming forward to participate in an MSRC-sponsored program, in association with the South Coast AQMD. The targeted funding amount we had asked the MSRC for was $20 million, because we thought that value would get these entities' attention. Putting $20 million on the street as the target of opportunity would raise some interest.

I am happy to say that the response that we received as of the 21st of February, when the program closed, was overwhelming. It does present the MSRC with some really exceptional opportunities. The entities which have submitted proposals, for the most part, are very well-recognized entities; these are large companies. We had a $20 million MSRC funding target, but we have received over $80 million in MSRC requests. With the co-funding which is being offered to implement these projects there is a total program response that is a quarter million dollars. We were very happy with the response but to a certain extent we were also victims of our own success because now we have the responsibility to go through all these applications. Now, this PON is an instrument which affords the MSRC maximum flexibility. The PON process allows the MSRC to disregard a conceptual project if you deem it non-meritorious. It allows the MSRC to move forward with a more formal solicitation, should you choose that course of action. Also, it allows the MSRC to negotiate directly with one or more of these respondents, if you deem their project to be meritorious and to have benefit that warrants entering into a contract based upon the PON.

Where we are right now is that we have several applications that the Subcommittee is working through. However what is really interesting is many of the responses that we've received under the Inland Ports PON are directly applicable to other Work Program categories that the MSRC has identified, including those relevant to drayage trucks which operate at the ports and some of the work that LA Metro is doing to implement a Clean Truck Corridor on the I-710. Many of these projects are looking to incentivize zero and near-zero emission fleets. They have direct applicability not only to the warehouse distribution centers that these trucks will service but also the Maritime Ports, the drayage trucks coming out of the ports, as well as those trucks which operate along the major corridors. What is also important is that there is a lot of discussion that is currently going on with the South Coast AQMD and with many stakeholders relative to the deployment of large numbers of zero emission Class 8 tractors. There are working groups which have been set up, of which the MSRC is a member, and the focus is to identify a program to demonstrate 50 to 100 zero emission Class 8 trucks. Some of the proposals that you have received under these PON responses are offering to deploy greater than 50 zero emission trucks per a single application. If you look at the number of trucks for which funding has

been requested, it is in the 100s of trucks, both near-zero and zero emission. This is an opportunity which not only is of interest to the MSRC but should also be of interest to other stakeholders including the South Coast AQMD, as well as the Maritime Ports and Los Angeles Metro. So, what we are doing is looking for opportunities to leverage the MSRC funding by working with other stakeholders, and the Subcommittee has directed MSRC staff to identify these additional co-funding sources, and we have already started the dialogue. There are large corporations who are offering to bring substantial co-funding to the table to partner with the MSRC to deploy a large numbers of the types of vehicles that the South Coast AQMD has identified in the AQMP as being essential to meeting the air quality goals of the South Coast AQMD region.

The Subcommittee has asked staff to go out and identify other potential partnerships that the MSRC can enter into to leverage the MSRC funds which were made available under the PON. The goal is to fund as many of these projects as the MSRC deems appropriate. And given that the ask was for $80 million, and only $20 million has been identified, we will need to find substantial co-funding to leverage the MSRC investment. We are off working to do that. Many of these projects do identify other funds which are available through the state, specifically the HVIP Program. We understand that there is at least a staff recommendation to have $150 million in HVIP funds available again at the first of the year. Given the situation which we are in, we will need to revisit that on a regular basis to determine if in fact that money can be made available. If it cannot, then we will have to identify other ways to get these projects funded, but we will go off and do that. In addition to the identification of partnerships to help fund some of these projects, we are going to short list them and come back with recommendations to the MSRC. At that time, we will be disclosing more of the specific attributes of these projects. We have just begun the Subcommittee process and we have not engaged the full TAC yet, but we will be doing so in the next month. Most likely it will be June when we bring back some initial recommendations. However, of course, we will provide an update at the May 2020 MSRC meeting as to the status of reviewing the applications submitted under this PON. We feel that there are some really excellent projects that warrant consideration and we will give them due consideration and then bring back some initial recommendations for MSRC input.

MSRC Chair Larry McCallon commented, I am gratified with the response, it looks like we got a good response and it is a nice problem to have. We got more asking than we have money because that shows that people are really interested in doing something and putting substantial amounts of their own money forward. That is fantastic.

MSRC Member Jack Kitowski commented, CARB is fully supportive of these measures. We are going through a funding process and this would be a very high priority for us, but we also have some money from last year that we are implementing. We would be happy to coordinate that funding and look for opportunities to leverage it with MSRC.

MSRC Member Rex Richardson commented, I had a chance to check in with SCAG staff this week. We had a chance to really talk through some of the details of this program. Those numbers are impressive, a quarter of a billion dollars investment is what has been produced out of the initial $20 million investment in this program. Given that I represent a 710 city, the anchor of the 710 and I live adjacent to the 710, I am incredibly supportive here. The sentiments from SCAG is that they sincerely thank you particularly Ray and Cynthia for all your technical and administrative support over the last two years in the program and with the proposed new partnership.

Mr. Gorski commented, the fourth category under the MSRC Goods Movement Program is Last Mile. These are the delivery trucks which go into the local areas to deliver goods which are really coming out of the warehouses for their distribution to consumers. We have had considerable interaction with SCAG over the last several months, working on conceptual ideas to move the Last Mile component forward. Today SCAG is offering to provide, on behalf of the MSRC, a multi-phase implementation of the Last Mile Goods Movement element of the MSRC Work Program. This is not something which has been introduced to the MSRC-TAC but SCAG has provided us some information relative to doing that. Mr. Richardson would probably like to give some additional comment as to the role that SCAG can enter into on behalf of the MSRC to bring the Last Mile component to fruition.

Mr. Richardson commented, SCAG is proposing to serve as the lead in the establishment of the Last Mile component. The plan is to have a two-phase approach both to work with private industry and to meet the goals of cost-effective emission reductions from the Last Mile freight operations. In Phase 1, SCAG would do a Call for Projects process to solicit interest from these participants and project concepts from private industry that will be focused on the purchase and commercial use of zero emission or near-zero emission heavy- and medium-duty on-road trucks. We anticipate that proposals will be provided from delivery companies like UPS, FedEx, and Sysco. Many of these companies have already expressed their interest in participating in the program. For Phase 1, our MSRC funding request totals $10 million to support the purchase and the commercial deployment of trucks. The schedule would entail an immediate solicitation for projects starting in the spring and summer of 2020, With anticipated deployment into winter 2020. In Phase 2, SCAG would expand upon the first phase, establishing engagement between local jurisdictions and private sector stakeholders to deploy broader innovative zero emission technologies, such as e-cargo bikes together with zero emission trucks, low to zero emissions zones, and delivery consolidation/staging. And for this phase, the request is totaled at $5 million. The schedule may partly overlap with Phase 1, starting in summer and fall to include the completion of Phase 2 by winter of 2021. SCAG has demonstrated that it has the capacity for substantial research and planning knowledge in Last Mile Freight. They have conducted extensive research in the past few months with key stakeholders. And we're in a unique position to ensure broad long-term implementation of emissions reductions in Last Mile freight operations beyond the proposed partnership, as these strategies are core components of our RTP/SCS Connect SoCal Plan, as well as an element within the South Coast's AQMP. For

the next steps, we are requesting that the MSRC-TAC Last Mile Subcommittee review the draft proposal before the May meeting. Upon the Subcommittee recommendation, we request that the MRSC-TAC review the final draft of the proposal addressing any comments that may be given at their next teleconference on May 7th. And upon MSRC-TAC recommendation, request the MSRC committee consider the final SCAG proposal that has been vetted by the MSRC-TAC at our next meeting on May 21st.

ON MOTION BY MSRC MEMBER REX RICHARDSON, AND SECONDED BY MSRC MEMBER BEN BENOIT, MSRC UNANIMOUSLY VOTED TO APPROVE SUBMITTAL OF A SOLE-SOURCE PROPOSAL FROM SOUTHERN CALIFORNIA ASSOCIATION OF GOVERMENTS.
AYES: BENOIT, BERKSON, KITOWSKI, MCCALLON, RICHARDSON, ROYBAL SALTARELLI, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #9 – Other Business

No other business was introduced.

PUBLIC COMMENT PERIOD

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

ADJOURNMENT

There being no further business, the MSRC meeting adjourned at 3:03 p.m.

NEXT MEETING

Thursday, May 21, 2020, at 2:00 p.m.

(Minutes prepared by Penny Shaw Cedillo)

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, MAY 21, 2020 MEETING MINUTES

21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

All participants attended the meeting remotely pursuant to Executive Orders N-25-20 and N-29-20

MEMBERS PRESENT:

(Chair) Larry McCallon, representing San Bernardino County Transportation Authority (SBCTA)
(Vice-Chair) Greg Winterbottom, representing Orange County Transportation Authority (OCTA)
Brian Berkson, representing Riverside County Transportation Commission (RCTC)
Jack Kitowski, representing California Air Resources Board
Mark Yamarone (Alt.), representing Los Angeles County Metropolitan Transportation Authority (Metro)

MEMBERS ABSENT:

Ben Benoit, representing South Coast AQMD
Rex Richardson, representing Southern California Association of Governments (SCAG)

MSRC-TAC MEMBERS PRESENT:

MSRC-TAC Vice-Chair Anthony (AJ) Marquez, representing Orange County Board of Supervisors
Jenny Chan, representing RCTC
Rongsheng Luo, representing SCAG
Kelly Lynn, representing SBCTA
Scott Strelecki, representing SCAG

OTHERS PRESENT:

Debra Ashby, South Coast AQMD
Ruben Aronin, Better World Group
Lauren Dunlap, SoCalGas
Lane Garcia, South Coast AQMD
Rick Sikes
Rainbow Yeung, South Coast AQMD

SOUTH COAST AQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Maria Allen, Secretary
Naveen Berry, Asst. Deputy Executive Officer
Penny Shaw Cedillo, MSRC Administrative Liaison
Ray Gorski, MSRC Technical Advisor-Contractor
Daphne Hsu, Senior Deputy District Counsel
John Kampa, Financial Analyst
Matt Mackenzie, MSRC Contracts Assistant
Cynthia Ravenstein, MSRC Contracts Administrator
Anthony Tang, Information Technology Supervisor
Paul Wright, Information Technology Specialist

CALL TO ORDER

- Call to Order

  MSRC Chair Larry McCallon called the meeting to order at 2:02 p.m.

  Roll call was taken at the start of the meeting. The following members and alternates were present: BRIAN BERKSON, JACK KITOWSKI, LARRY MCCALLON, GREG WINTERBOTTOM, MARK YAMARONE.

  MSRC Alternate Mark Yamarone stated for the record that for Agenda Items #1 and #11, he does not have any financial interest, but is required to identify that he is employed by Los Angeles County Metropolitan Transportation Authority, which is involved in these items.

  MSRC Chair Larry McCallon stated for the record that for Agenda Items #1, #6 and #13, he does not have any financial interest, but is required to identify that he is a alternate for the Board of Directors for Omnitrans, a Member of the Board of Directors for San Bernardino County Transportation Authority, and a Regional Council Member for Southern California Association of Governments, which are involved in these items.

- Election of MSRC Chair and Vice-Chair

  Nominations for the Chair and Vice-Chair positions were opened.

  A motion from MSRC Member Brian Berkson, and seconded by MSRC Chair Larry McCallon, nominated MSRC Chair Larry McCallon to serve as Chair for another term and MSRC Member Brian Berkson to serve as Vice-Chair.

  No further nominations were offered, so nominations for Chair and Vice-Chair were closed.

  THE MSRC UNANIMOUSLY VOTED TO APPROVE THE ABOVE NOMINATIONS.
  AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
  NOES: NONE.

CONSENT CALENDAR (Items 1 through 10)

Receive and Approve Items

Agenda Item #1 – Summary of Final Reports by MSRC Contractors

The MSRC received and approved seven final report summaries this month, as follows:

- Omnitrans, Contract #MS16117, which provided $175,000 for the expansion of existing CNG infrastructure;
- Omnitrans, Contract #MS16118, which provided $175,000 for the expansion of existing CNG infrastructure;
- Anaheim Transportation Network, Contract #MS18006, which provided $219,564 to implement Anaheim Circulator Service;
- Orange County Transportation Authority, Contract #MS18102, which provided $1,146,000 for the OC Flex Micro-Transit Pilot Project;
- Orange County Transportation Authority, Contract #MS18103, which provided $642,000 to install a hydrogen detection system;
- Regents of the University of California, Contract #MS18014, which provided $254,795 for planning for EV Charging infrastructure investments; and
- Los Angeles County MTA, Contract #MS21001, which provided $1,148,742 to implement special transit service to Dodger Stadium.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, THE MSRC UNANIMOUSLY APPROVED THE FINAL REPORTS LISTED ABOVE.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC staff will file the final reports and release any retention on the contracts.

Agenda Item #2 – MSRC Contracts Administrator ‘s Report

The MSRC AB 2766 Contracts Administrator ‘s Report for April 9 through April 29, 2020 was included in the agenda package.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10,

THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR APRIL 9 THROUGH APRIL 29, 2020.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the June 5, 2020 South Coast AQMD Board meeting.

Agenda Item #3 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for April 2020 was included in the agenda package.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING APRIL 2020.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

Agenda Item #4 – Consider Seven-Month Term Extension for the County of Los Angeles, Contract #ML14030 ($425,000 – Bicycle Racks, Outreach and Education)

The County requests a seven-month term extension because the COVID-19 situation has resulted in a freeze on non-essential services, supplies and equipment, which will cause a delay in the final procurement and installation of supplemental lighting at bicycle racks. EXCEPT FOR AN ABSTENSION BY MEMBER LE, THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE A SEVEN-MONTH

TERM EXTENSION FOR THE COUNTY OF LOS ANGELES, CONTRACT #ML14030.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #5 – Consider Four-Month Term Extension for the City of Claremont, Contract #ML16053 ($498,750 – Implement "Complete Streets" Pedestrian Access Project)

The City requests a four-month term extension because the COVID-19 situation prevents them from conducting meaningful post-construction bicycle and pedestrian counts as required by the contract. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE A FOUR-MONTH TERM EXTENSION FOR THE CITY OF CLAREMONT, CONTRACT #ML16053.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #6 – Consider One-Year Term Extension for the San Bernardino County Transportation Authority (SBCTA), Contract #MS16096 ($450,000 – EV Charging Infrastructure)

SBCTA requests a one-year term extension due to delays in equipment delivery associated with the COVID-19 situation. EXCEPT FOR AN ABSTENSION BY MEMBER LYNN, THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE A ONE-YEAR TERM

EXTENSION FOR THE SAN BERNARDINO COUNTY TRANSPORTATION AUTHORITY, CONTRACT #MS16096.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #7 – Consider Increasing Stations from Thirteen to Twenty-four for the City of Brea, Contract #ML18100 (proposed) ($56,500 – Install EV Charging Infrastructure)

As a result of a funding opportunity with Tesla, the City of Brea requests to expand the number of stations to be installed from 13 to 24. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE INCREASING STATIONS FROM THIRTEEN TO TWENTY-FOUR FOR THE CITY OF BREA, CONTRACT #ML18100 (PROPOSED).
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #8 – Consider Sixteen-Month Term Extension for the City of Calimesa, Contract #ML18139 ($50,000 - Install Bicycle Lane)

The City requests a sixteen-month term extension due to earlier delays associated with a wildfire, and, more recently, delays in right-of-way acquisitions due to the COVID-19 situation. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE A SIXTEEN-MONTH TERM EXTENSION FOR THE CITY OF CALIMESA, CONTRACT #ML18139.

AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #9 – Consider Modified Statement of Work for the City of Fontana, Contract #ML18144 ($269,090 – Install EV Charging Infrastructure)

The City requests to substitute 4 single-port stations and 4 dual-port stations for the 12 stations specified in the contract. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE A MODIFIED STATEMENT OF WORK FOR THE CITY OF FONTANA, CONTRACT #ML18144.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #10 –Consider Modified Statement of Work for the City of Alhambra, Contract #ML18169 ($111,980 – Install EV Charging Infrastructure)

The City requests to substitute 2 single-port stations and 8 dual-port stations for the 12 stations specified in the contract, and to correct an address. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL

ON MOTION BY MSRC VICE CHAIR BRIAN BERKSON, AND SECONDED BY MSRC CHAIR LARRY MCCALLON, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #10, MSRC UNANIMOUSLY VOTED TO APPROVE A MODIFIED STATEMENT OF WORK FOR THE CITY OF ALHAMBRA, CONTRACT #ML18169.
AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

ACTION CALENDAR (Item 11 through 13)

Agenda Item #11 – Consider Re-Opening Contract for Los Angeles Metropolitan Transportation Authority, Contract #MS18025 ($1,324,560 – Special Bus and Train Service to Dodger Stadium)

Cynthia Ravenstein, MSRC Contracts Administrator reported that the MSRC awarded Metro $1,324,000 to provide special bus and train service to Dodger Stadium in 2018. Several invoices had been submitted for payment. Supplementary documentation was requested. While waiting for the documentation, the contract was closed in error. We have received the documentation, but we need the MSRC to authorize for the contract to be reopened in order to pay the invoice in the amount of $255,011.

MSRC Vice-Chair Brian Berkson commented, confirming that the money was already allocated and approved, and this was just a misstep of an accidental closure to the file. Ms. Ravenstein replied, that is correct. This was funding that was already awarded. They still will not have expended all of the money that was originally awarded. There will still be funding returned and not spent. Mr. Berkson commented, do we need to keep the contract open once the invoice is paid? Ms. Ravenstein replied, once the invoice is paid, we can close the contract.

> ON MOTION BY VICE CHAIR GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER JACK KITOWSKI, MSRC UNANIMOUSLY VOTED TO APPROVE RE-OPENING CONTRACT FOR LOS ANGELES METROPOLITAN TRANSPORTATION AUTHORITY, CONTRACT #MS18025, SOLELY FOR PURPOSES OF REIMBURSEMENT.
> AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
> NOES: NONE.

ACTION: This item will be considered by the South Coast AQMD Governing Board at its June 5, 2020 meeting.

Agenda Item #12 – Consider Request to Release Retention by R.F. Dickson Co., Contract #MS18106 ($265,000 – Expand CNG Station and Train Mechanics)

Cynthia Ravenstein, MSRC Contracts Administrator, reported that the MSRC contracts under the FYs 16-18 Alternative Fuel Infrastructure Program have a retention for submission of a final report. The amount of the retention varies depending upon whether it is a private company or whether it is a public agency. For private companies it is 10%. R.F. Dickson Company received an award from the MSRC for expanding their CNG station and the training of mechanics. The larger part of this project was the expansion of the CNG station, and they have completed that. They put in their invoice for the expansion of the station and were reimbursed 90% of the eligible cost. They could not receive all the funding because they have not submitted a final report, and they could not submit a final report because they have not completed the mechanic training. They have not been able to complete it because of the Covid-19 situation. They asked if the MSRC would consider allowing them to get that retention on the station expansion portion of the project. This would amount to $25,000. R.F. Dickson asks to allow that to be released because it is kind of beyond their control to not be able to go forward to finish the project and submit a final report. They have completed a report that covers the station expansion portion. They have completed some of the mechanic training but are unable to complete all of it. They are working on getting that done as quickly as possible.

MSRC Chair Larry McCallon commented the retention for the rest of it is a small amount. Ms. Ravenstein agreed. We know that they have basically got the bulk of the final report written because we have seen it. There is relatively little that they will need to do to complete the final report. We feel pretty confident that they we get it done.

> ON MOTION BY MSRC CHAIR LARRY MCCALLON, AND SECONDED BY MSRC VICE CHAIR BRIAN BERKSON, MSRC UNANIMOUSLY VOTED TO APPROVE THE RELEASE OF RETENTION OF $25,000 FOR R.F. DICKSON CO., CONTRACT #MS18106.
> AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
> NOES: NONE.

ACTION: MSRC staff will release the $25,000 retention on the station expansion portion of the project.

FYs 2018-21 WORK PROGRAM

Agenda Item #13 – Consider Sole-Source Proposal from Southern California Associated Governments (SCAG) to Implement Last Mile Component of MSRC Goods Movement Program

Ray Gorski, MSRC Technical Advisor, reported that at the MSRC's April 16th MSRC meeting, SCAG presented a preliminary concept in which they would take the responsibility

to implement on behalf of the MSRC a component of the 2018-21 Work Program that considers the Last Mile Goods Movement. At that time, SCAG did not request the Committee to take action. They requested the MSRC to task the MSRC-TAC and their subcommittees to conduct a deliberative process to work with SCAG to refine the preliminary concept and then bring it back for your consideration at today's meeting. The MSRC-TAC Last Mile Subcommittee met on two occasions with SCAG to go over the elements of their concept and to refine them. That was presented to the MSRC-TAC for their consideration. The MSRC-TAC recommends to have SCAG, on behalf of the MSRC and in cooperation with your MSRC-TAC, implement the Last Mile component of the Work Program. The amount of funding requested to implement this program is $15 million. From the April 16th meeting, SCAG requested this project be broken into two distinct phases. The first phase would focus on getting near term, cost-effective air quality benefits by working with package delivery companies to get Last Mile technology projects implemented as quickly as possible, with a targeted funding amount of $10 million. The second phase of the program would continue to work with these stakeholders but explore more innovative last mile delivery concepts. That was valued at $5 million dollars. The recommendation from the MSRC-TAC is to approve the program with the following additional elements. To ensure broad-based participation there would be a geographic funding minimum of no less than $1.25 million set aside for each of the four counties that comprise the MSRC. Also, to the extent feasible, SCAG will leverage the MSRC's investment. At this time given the circumstances which we are under, it is recommended to move forward with Phase 1 of the program. Phase 2 will be bought forth for consideration when Phase 1 has been successfully implemented and SCAG is ready to implement Phase 2. The reason we are bifurcating the recommendation is because of some uncertainty given the COVID-19 situation with whether or not the MSRC revenues will be brought forth on a timely basis and in an amount which is typical.

MSRC-TAC Alternate Scott Strelecki from SCAG presented that SCAG as the regional metropolitan planning organization for the Southern California area, excluding San Diego County, has strong expertise in working with local jurisdictions and transportation planning agencies to implement the Regional Transportation Plan/Sustainable Communities Strategy through sustainable planning grant programs. SCAG has expanded resources and local assistance through partnerships with MSRC in the past. Fairly recently that has been through Go Human events and demonstration projects, as well as the partnership effort focused on the implementation of the Future Communities Pilot Program. Leveraging is always an objective of SCAG with all of these programs. There are definitely opportunities to leverage with other funding sources. SCAG is proposing to serve as the lead for the Last Mile component of the MSRC Goods Movement Program. We recognize the important primary goal of this is to achieve cost effective emissions reductions of criteria air pollutants from Last Mile freight operations. Regarding the two phased approach, basically the way that we characterize it is for Phase 1, we are looking for a $10 million budget. That is primarily focusing on the purchase and commercial deployment of zero emission or near-zero emission heavy- and or medium-duty on-road trucks. Phase 2 is looking at leveraging and

further reaping benefits from, and building upon, this effort with the stakeholders to conduct more robust outreach and look to expand this working with both public and private sector stakeholders. Phase 2 would be trying to get better and broader innovative technologies deployment through that process.

We recognize the success that MSRC has already had in terms of soliciting interest in some of the other programs. When we think about this opportunity for zero emission and near-zero emission heavy-duty or medium-duty vehicles that are primarily focused in the Last Mile freight operation world, we also want to keep it open to the infrastructure required to provide those operations as well as any other equipment that may be used at different facilities. For Phase 2, to try to give you an understanding of what the benefits and opportunities are for that, a specific example is cargo eBike delivery. We recognize that could potentially combine commercial deployment of zero emission vans from a package delivery company, with a consolidation location that could potentially leverage public facilities or properties, and then with another mode of delivery which also would be zero emission eBikes. We see that there is a strong progression that we can achieve from looking at these broader contexts, such as changing zero-emission vehicles to delivering off peak, which has an impact on some of the congestion effects for all the vehicles using different corridors or zones. For drone delivery and robot delivery we would be similarly looking at consolidating with other zero-emission vehicles. Those are examples of what we are trying to accomplish in Phase 2.

Phase 1 is looking at a $10 million request to begin immediately going through the process and implementing those projects. Concurrently, we expect to work with the MSRC-TAC Last Mile Subcommittee to make sure the program guidelines are designed in a way that we can be successful, including criteria screening. A request for the second $5 million would be upon completion of Phase 1 and ensure that the funds are available and ready at that time. From a schedule perspective, we had originally looked at accelerating Phase 1 to be implemented this calendar year, while concurrently having Phase 2 begin while we were still conducting Phase 1. The request today is changing that, so that Phase 1 will complete and then Phase 2 will start up once funds are available. Our objective is to begin implementing the projects later this year and then come back with an evaluation and a final report on the findings and the success of those projects. Similarly, for Phase2, we would expect to be partnering closely with the MSRC in developing the continued outreach, request for information, and development of screening criteria. Then we would go through a call for projects, selection and then getting to demonstration frameworks. Some of the new technologies may not be as commercially ready or deployable as our zero-emission and near-zero technologies, so that is why we are calling it a demonstration framework, and then project implementation, evaluation and final report.

Over the last several years SCAG has been spending a lot of time focusing on Last Mile operations and delivery. We conducted a study directly focusing on this, the Last Mile Freight Study, which focused on extensive outreach to stakeholders. We have been talking

with all the major companies that are doing package delivery food service. A lot of newer models are out there that are doing food delivery. We have done a lot of data collection and a lot of analysis of that data. We have been looking at tools and strategies of how to get better at understanding what are the impacts and what are some of the ways that we can focus on achieving benefits not just for air quality, but broader, operationally and how the supply chains work overall and how they affect all the different environments that they operate in. SCAG recently adopted the Connect SoCal Regional Transportation Plan on sustainable community strategy. We have implemented a lot of our Last Mile findings into that as well as provided highlights and a more robust understanding of e-commerce. We have been working across the country with academic institutions who have been doing similar research work. So when we keep bringing up that word leveraging, we see a very unique opportunity in furthering the pilot project process as well as coordinating with other areas throughout the country to help gain insights, perspective, and information sharing those sort of things.

MSRC Chair Larry McCallon asked, how do we have a contract and we do not have a statement of work? How do you track, how do you invoice against it? It is unusual, in my view, to have a contract with no statement of work. Cynthia Ravenstein, MSRC Contracts replied, the first deliverable is going to be for them to provide their exact plan of how they are going to implement the program. We are going to be working in tandem as I am developing the contract with them. We are also going to be working on what their process is going to be. The first thing they are going to have to provide is the plan of how they are going to do this and that is going to have to be approved.

MSRC Member Jack Kitowski commented, SCAG tying in with this is really exciting. The Phase 2 portion of this is innovative and different. As you're talking about Phase 1, including development of the program guidelines, is the thought that those program guidelines would include things like which vehicles are eligible, how much we would pay for those vehicles, etc., is that coming back to this committee for us to see those before they go out and get finalized? Mr. Gorski replied, there was quite a bit of feedback provided by the Last Mile Subcommittee initially relative to the preliminary concept that SCAG presented on April 16th. There has been agreement to continue the subcommittee process, to continue to develop this conceptual path forward and as mentioned, each step of the way we expect to bring it back for approval. As always with these types of programs, we build in throughout the contract implementation milestones and approval steps. At a minimum, approval steps would be to look at the detailed statement of work and conceptual plan for implementing the program for Phase 1. Then as Phase 1 is being implemented, once there are projects which SCAG is recommending for MSRC funding, that of course would be brought back for action by the committee. We can build in as many checks and balances as the MSRC deems necessary and appropriate. I do not think there is any misunderstanding between the MSRC, your MSRC-TAC, the Subcommittee, staff and SCAG that this is going to be a process which does have a high level of participation and involvement by all those parties. Mr. Kitowski replied, that sounds great. Regarding the evaluation and final reports,

if you just take the Phase 1, the final report is the winter of this year. That obviously means it would capture what vehicles are selected but most cases it will take longer than that for vehicles to get ordered. If there's infrastructure to be put in place, or just to see how the vehicles are doing, if there are any challenges with that, those parts would obviously not be captured by that final report. Is there any ability or desire to try to follow up with the people who are part of this and see if these projects are being implemented as we envisioned, are they incorporated as part of their daily use, or something like that? Mr. Gorski maybe final report is not the correct term we want to use. The final report should include the lessons learned that result from Phase 1 and it is going to take a much longer time than having simply the trucks initially deployed to get that knowledge. The final report would come at a later date. What we could do however, is have them submit an interim report which would demonstrate that Phase 1 has at least been successfully implemented if not completed. Depending on the preference of the MSRC, that could trigger the start of a Phase 2 program. While the motivation of Phase 1 is to achieve these cost-effective air quality benefits as quickly as possible, the value of implementing Phase 1 will require a longer time to fully understand and therefore needs to be documented in some report that would occur after there has been sufficient demonstration time. As part of the process of working with SCAG, the Subcommittee and the MSRC-TAC, we will put together a refined timeline which will take into account your comments and show how there can be dovetailing between Phase 1 and Phase 2 without shortchanging Phase 1 in an effort to quickly get to Phase 2. That absolutely will be taken into consideration and will be implemented. Mr. Strelecki commented, a key word maybe is flexibility. We recognize that we want to be ambitious and we want to achieve these objectives we have set before us, but we are completely flexible when it comes to making sure that the MSRC is fully on board. The value is there, everything is in order and we fully recognize that we always set schedules, and things do not always work out perfectly. The lessons learned are the biggest value and the biggest potential in the segueing for Phase 2.

MSRC Vice Chair Brian Berkson commented, this is an MSRC program; we are reaching out to SCAG to have them drive the bus. We are asked to approve a $10 million budget item to put in their hands to get this program running. I want to make sure it is not administrative-heavy; that those funds are going to be utilized for their intended purpose. Obviously, there would be some funds to do some administrative things, but I just don't want to see at the end of this that we spent $2 million on administrative fees and got less out of it than we anticipated. I certainly believe SCAG will make this an even a larger and better program, but I am just concerned. We are basically issuing something without specifics on the checks and balances, the dollar amounts and when they will be paid and how we know if things are right and who is coordinating with the MSRC-TAC and with SCAG to make sure everything runs smoothly. I think it can all be done fine. I am a little concerned with the dollar amount with kind of the undocumented pathway here. Mr. McCallon commented, I am assuming that's SCAG's staff time has been donated and none of this money goes to pay for any of that. Ms. Ravenstein added, that is my understanding. Mr. Strelecki replied, this is

to be purchasing vehicles, purchasing whatever equipment or infrastructure that is in alignment with all that operation.

Mr. Kitowski commented that next month ARB's board will be hearing an advanced clean truck regulation for adoption. There is certainly an intersection here. There is a balance with sort of the irony of the earlier emission reduction and zero emissions, once they are required as part of a regulation, there's the possibility people may be inclined to move to the technology without quite as much funding as was required before. That does change the dynamics of a lot of the situation; it will be an evolving area. We will be following up right afterwards with a fleet rule. We should coordinate because the dynamics are changing a lot.

> ON MOTION BY MSRC MEMBER JACK KITWOSKI, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, MSRC UNANIMOUSLY VOTED TO DEFER TO AUGUST MEETING.
> AYES: BERKSON, KITOWSKI, MCCALLON, WINTERBOTTOM, YAMARONE.
> NOES: NONE.

ACTION: SCAG, MSRC staff and the Last Mile Subcommittee will work to refine a Statement of Work for MSRC approval.

Agenda Item #14 – Other Business

No other business was introduced.

PUBLIC COMMENT PERIOD

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

ADJOURNMENT

There being no further business, the MSRC meeting adjourned at 2:54 p.m.

NEXT MEETING

Thursday, June 18, 2020, at 2:00 p.m.

[Prepared by Penny Shaw Cedillo]

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, JUNE 18, 2020 MEETING MINUTES
21865 Copley Drive, Diamond, Bar, CA 91765 - Conference Room CC-8

All participants attended the meeting remotely pursuant to Executive Orders N-25-20 and N-29-20

MEMBERS PRESENT:

(Chair) Larry McCallon, representing San Bernardino County Transportation Authority (SBCTA)
Ben Benoit, representing South Coast AQMD
Jack Kitowski, representing California Air Resources Board (CARB)
Meghan Sahli-Wells (Alt.), representing Southern California Association of Governments (SCAG)
John Valdivia (Alt.), representing SBCTA
Steve Veres, representing Los Angeles County Metropolitan Transportation Authority (Metro)
Greg Winterbottom, representing Orange County Transportation Authority (OCTA)
Mark Yamarone (Alt.), representing Metro

MEMBERS ABSENT:

(Vice-Chair) Brian Berkson, representing Riverside County Transportation Commission (RCTC)
Rex Richardson, representing SCAG

MSRC-TAC MEMBERS PRESENT:

Laura Iannoccone, representing Los Angeles County Board of Supervisors
Minh Le, representing Los Angeles County Board of Supervisors
Steven Lee, representing Metro
Rongsheng Luo, representing SCAG
Kelly Lynn, representing SBCTA
AJ Marquez, representing Orange County Board of Supervisors
Scott Strelecki, representing SCAG
Derek Winters, representing CARB

OTHERS PRESENT:

Debra Ashby, South Coast AQMD
Sam Emmerson, Better World Group
Dawn Fenton, Volvo
Lane Garcia, South Coast AQMD
Rick Sikes
Jack Symington, Los Angeles CleanTech Incubator

SOUTH COAST AQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Naveen Berry, Asst. Deputy Executive Officer
Ray Gorski, MSRC Technical Advisor-Contractor
Daphne Hsu, Senior Deputy District Counsel
John Kampa, Financial Analyst
Matt Miyasato, Deputy Executive Officer
Cynthia Ravenstein, MSRC Contracts Administrator
Paul Wright, Information Technology Specialist

CALL TO ORDER

- Call to Order

  MSRC Chair Larry McCallon called the meeting to order at 2:01 p.m.

  Roll call was taken at the start of the meeting. The following members and alternates were present: BENOIT, MCCALLON, VERES, SAHLI-WELLS, WINTERBOTTOM.

- Opening Comments

  MSRC Chair Larry McCallon stated we have chosen the representative from the San Bernardino County Transportation Authority for the Regional Rideshare Agency. It will be Mayor John Dutrey from City of Montclair, and the alternate will be Ray Marquez from Chino Hills.

- STATUS REPORT

  [MSRC Member Jack Kitowski arrived during the discussion of this item]

  Cynthia Ravenstein, MSRC Contracts Administrator reported there is a brief report about the state budget that was adopted on June 15th, but essentially that was a placeholder to meet the statutory deadline. There are still going to be negotiations continuing to try to reach an agreement before July 1st. Even then, special fund programs including some related to clean transportation are expected to be addressed in what is being called the August revision. There is still a lot of uncertainty in terms what is going to be available in terms of clean transportation in the next fiscal year. That is available to look at in greater detail through the links in that report.

  MSRC Member Ben Benoit stated for the record that for Agenda Items #6 and #9, he does not have any financial interest, but is required to identify that he is a Regional Council Member for Southern California Association of Governments, which is involved in these items.

  MSRC Alternate Meghan Sahli-Wells stated for the record that for Agenda Items #6 and #9, she does not have any financial interest, but is required to identify that she is a Regional Council Member for Southern California Association of Governments, which is involved in these items.

  MSRC Chair Larry McCallon stated for the record that for Agenda Items #6 and #9, he does not have any financial interest, but is required to identify that he is a Regional Council Member for Southern California Association of Governments, which is involved in these items.

CONSENT CALENDAR (Items 1 through 6)

Informational Only – Receive and Approve Items

Agenda Item #1 – MSRC Contracts Administrator's Report

The MSRC AB 2766 Contracts Administrator's Report for April 30 through May 27, 2020 was included in the agenda package.

> ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR APRIL 30 THROUGH MAY 27, 2020.
> AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the August 7, 2020 South Coast AQMD Board meeting.

Agenda Item #2 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for May 2020 was included in the agenda package.

> ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING MAY 2020.
> AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

Agenda Item #3 – Consider Station Location Change and Six-Month Term Extension for the City of Bellflower, Contract #ML12091 ($100,000 – Install EV Charging Infrastructure)

The City requests a six-month term extension due to the need to change the installation location of one of the stations. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

> ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, , MSRC UNANIMOUSLY VOTED TO APPROVE THE STATION LOCATION CHANGE AND SIX-MONTH TERM EXTENSION BY CITY OF BELLFLOWER, CONTRACT #ML12091.
> AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #4 – Consider Six-Month Term Extension for the City of Moreno Valley, Contract #ML16041 ($20,000 – Install EV Charging Infrastructure)

The City requests a six-month term extension due to a longer than expected time necessary to execute the construction agreement. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

> ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, MSRC UNANIMOUSLY VOTED TO APPROVE SIX-MONTH TERM EXTENSION FOR THE CITY OF MORENO VALLEY, CONTRACT #ML16041.
> AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #5 – Increase Number and Types of Bicycle Racks, and Eliminate Certain Bicycle Outreach Tasks and Funding for the City of Palm Springs, Contract #ML16126 ($40,000 – Install Bicycle Racks and Implement Bicycle Outreach)

The City indicates that they were unable to complete the full scope of outreach as specified in the contract due to the unexpected departure of staff in 2016, and a recent budget freeze makes further updates unlikely. The bike safety brochures were produced and a greater number of bike racks than

anticipated were installed, however. The City requests to eliminate the Open Streets event, bike safety demonstrations, and mobile application from the contract and reduce the value from $40,000 to $22,000. THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, MSRC UNANIMOUSLY VOTED TO APPROVE INCREASING NUMBER AND TYPES OF BICYCLE RACKS AND ELIMINATE CERTAIN BICYCLE OUTREACH TASKS AND FUNDING FOR THE CITY OF PALM SPRINGS, CONTRACT #ML16126.
AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #6 – Consider Reallocation of Funds Between Events and Six-Month Term Extension for Southern California Association of Governments (SCAG), Contract #MS18002 ($2,500,000 – Regional Active Transportation Partnership Program)

Due to COVID-19 concerns, the City of Wildomar's active transportation event had to be rescheduled. This resulted in additional costs. SCAG requests to reallocate $8,000 which was originally budgeted for the La Quinta event, but not used, for the Wildomar event to accommodate the changes. SCAG also requests a six-month contract term extension to allow time to conduct the remaining activities. EXCEPT FOR AN ABSTENTION BY ALTERNATE MEMBER STRELECKI, THE MSRC-TAC UNANIMOUSLY RECOMMENDS APPROVAL.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, MSRC UNANIMOUSLY VOTED TO APPROVE REALLOCATION OF FUNDS BETWEEN EVENTS AND SIX-MONTH TERM EXTENSION FOR SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS, CONTRACT #MS18002.
AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

ACTION CALENDAR (Item 7 through 9)

Agenda Item #7 – Consider FY 2020-21 Administrative Budget

Naveen Berry, Assistant Deputy Executive Officer reported that the enabling legislation for the MSRC allows for 6.25% of the revenues for the administrative budget. We continue to maintain our expenditures well below the anticipated revenue from the AB 2766 funds. We're at about $200,000 lower than what the fund would allow us to have. That also includes expenditures that are associated with our Technical Advisor's contract.

ON MOTION BY MSRC MEMBER BEN BENOIT, AND SECONDED BY MSRC ALTERNATE MEGHAN SAHLI-WELLS, MSRC UNANIMOUSLY VOTED TO APPROVE THE FY 2020-21 ADMINISTRATIVE BUDGET.
AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: This item will be considered by the South Coast AQMD Board at its meeting on August 7, 2020.

FYs 2018-21 WORK PROGRAM

Agenda Item #8 – Evaluate Performance of MSRC Website and Consider Potential Next Steps

Cynthia Ravenstein, MSRC Contracts Administrator reported that the MSRC website currently has a contract with Geographics for hosting and maintenance. That contract will terminate in February 2021. The MSRC-TAC Administrative Subcommittee looked at the website and they do not feel that there is a need for a major redesign at this time. It was actually just completely developed from the ground up the last time around. They are recommending the development of a draft RFP for hosting and maintenance of the website. We are seeking your direction to develop an RFP and that would be brought back to you and at that time it would include a targeted funding amount.

MSRC Alternate Meghan Sahli-Wells commented a lot of times the minutes are not posted, is there a technical issue or just a timing issue, and whether that could be remedied. Penny Shaw Cedillo, MSRC Administrative Liaison replied, it is a timing issue and it will be remedied shortly.

ON MOTION BY MSRC MEMBER GREG WINTERBOTTOM, AND SECONDED BY MSRC MEMBER BEN BENOIT, MSRC UNANIMOUSLY VOTED TO APPROVE THE DEVELOPMENT OF A DRAFT RFP FOR HOSTING AND MAINTENANCE OF THE WEBSITE.
AYES: BENOIT, KITOWSKI, MCCALLON, SAHLI-WELLS, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC staff will develop a draft RFP in coordination with the MSRC-TAC Administrative Subcommittee and bring it forward for MSRC approval.

Agenda Item #9 – Update on Timelines for MSRC's Regional Goods Movement Program

Ray Gorski, MSRC Technical Advisor, reported that the Southern California Association of Governments has offered to assist the MSRC in implementing the Last Mile component of your overall 2018-2021 Work Program. At your last MSRC meeting, you were provided a conceptual overview from the staff of SCAG relative to how they would implement the program. At that time there was discussion regarding the need to have additional detail, especially as it pertains to a more definitive scope of work. The MSRC directed that the item be remanded back to the MSRC-TAC for further consideration. That was done. However, given the amount of time we had between the MSRC and when the MSRC-TAC met, although progress was made the MSRC-TAC did not feel that it was ready to bring to the MSRC for final consideration. The MSRC-TAC recommended that the Last Mile Subcommittee reconvene to work with SCAG to add additional detail to the program and any action by the MSRC be deferred until your August meeting.

MSRC Alternate Meghan Sahli Wells commented, as the SCAG representative, I have some additional information. We know that last mile freight has been growing and COVID-19 has seen exponential growth. Obviously, we want that to be clean and sustainable going forward both in terms of SCAG's goals and of course the MSRC. Through Connect SoCal, our agency's Regional Transportation Plan/Sustainable Communities Strategy, SCAG has demonstrated substantial planning, knowledge, and expertise in last mile freight. This proposal and statement of work represents a tremendous opportunity for MSRC and SCAG to partner in deploying the most cutting-edge technologies to reduce emissions. We have established working partnerships with key public and private stakeholders, and we are continuing to expand resources targeting last mile freight deployment and testing opportunities. Through this partnership with MSRC, there is a great opportunity to scale our efforts more broadly and achieve long-term implementation of emissions reductions. The focus on last mile freight operations is particularly significant as internal truck trips--that is non-port-related truck trips--constitute nearly 90% of the total truck trips in the region. As the lead on this project, SCAG would establish a two-phased approach to meet the goal of cost-effective emissions reduction of criteria pollutants from last mile deliveries. The approach will focus on commercial deployment of zero and near-zero emission vehicles and supporting infrastructure, as well as leveraging these deployments to operationalize broader zero emission concepts. SCAG has developed a preliminary draft statement of work contract that has been reviewed by the MSRC-TAC at their June meeting. Based on their recommendations, SCAG will be refining the contract through the Last Mile Subcommittee. The next steps are to work with the Last Mile Subcommittee through July to refine the contract, then bring back the refined statement of work contract for consideration and recommendation in August to both the MSRC-TAC and to this Committee.

MSRC Member Jack Kitowski commented, I do appreciate the need to take additional time and that the MSRC-TAC wants to come back with details. This board should get details associated with that. There is a lot going on in this space, different incentive programs, kind of hitting at the same time. Next week the Advanced Clean Truck Rule will go to the California Air Resources Board for

adoption. We also have technology that is evolving and price changes. All of this is happening while we have this program being developed. It is challenging and I appreciate SCAG putting time and effort and look forward to seeing the details that we can really dive into.

ACTION: No further action is required.

Agenda Item #10 – Other Business

MSRC Member Steve Veres reported that our Committee received an inquiry over the past week from the Los Angeles CleanTech Incubator (LACI) on a proposed pilot project for charging infrastructure for heavy-duty trucks and fleets at multiple strategic locations along the 710 Corridor connecting out to the Inland Empire. We were challenged with the timing of our meeting scheduling and our posting requirements. It is a significant project that I would like to see if the Chair can work with staff to initiate discussions. In mid-July CARB and the California Energy Commission (CEC) are set to issue solicitations for substantial truck pilot infrastructure build-outs and for projects that are regional, that are public/private in nature and that put the best foot forward for our region. This Committee should engage with a proposal like this to try to make sure that our region is as competitive as possible for these upcoming solicitations. We typically are lighter in our summer program, but I did not want to pass this by and not give ourselves and our region the opportunity to be able to compete strongly at CARB and CEC, and to work with a proposal that has potential for immediate air pollution benefits for the region. I would like to see if we can work something out and facilitate a process that would be able to make sure we compete well and to consider when feasible and possible the proposal from LACI. MSRC Chair Larry McCallon commented, I will direct staff to convene with the MSRC-TAC to work with LACI to more fully develop this concept and then convene the stakeholder technical working group to also assist in more fully developing the proposal. Based on progress and how things are going, if it is deemed appropriate by the MSRC-TAC, we could schedule a special meeting in July. If it is not developed far enough along in July, we will certainly consider it at the August meeting. MSRC Members Meghan Sahli-Wells and Ben Benoit commented, they would like to lend their support.

MSRC-TAC Member Minh Le commented, I would like to lend my support for developing the LACI concept and would love to see how the SCAG project can dovetail and work cohesively with the LACI proposal. It would be great if this infrastructure could work with that Last Mile infrastructure at the same time. That would be a win. Ms. Sahli-Wells commented from my understanding, SCAG and LACI are in those conversations and are working together.

PUBLIC COMMENT PERIOD

Public comments were allowed during the discussion of each agenda item. No comments were made on non-agenda items.

ADJOURNMENT

There being no further business, the MSRC meeting adjourned at 2:36 p.m.

NEXT MEETING

Thursday, August 20, 2020, at 2:00 p.m.

[Prepared by Penny Shaw Cedillo]

Clean Transportation Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

MSRC Agenda Item No. 3

DATE: September 17, 2020

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 July 30 to August 26, 2020.

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 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 with the prospective contractor for signature, with the South Coast AQMD Board Chair 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 with the prospective contractor 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 6, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is with the South Coast AQMD Board Chair for signature.

On December 6, 2019, the SCAQMD Governing Board approved an award under the Major Event Center Transportation Program. This contract is undergoing internal review.

Work Program Status

Contract Status Reports for work program years with open and/or pending contracts are attached.

FY 2010-11 Work Program Contracts

One contract from this work program year is open; and 10 are in "Open/Complete" status.

FY 2010-11 Invoices Paid

No invoices were paid during this period.

FY 2011-12 Work Program Contracts

6 contracts from this work program year are open, and 13 are in "Open/Complete" status.

FY 2011-12 Invoices Paid

No invoices were paid during this period.

FYs 2012-14 Work Program Contracts

16 contracts from this work program year are open, and 32 are in "Open/Complete" status.

FYs 2012-14 Invoices Paid

2 invoices totaling $141,686.00 were paid during this period.

FYs 2014-16 Work Program Contracts

42 contracts from this work program year are open, and 30 are in "Open/Complete" status.

FYs 2014-16 Invoices Paid

2 invoices totaling $213,105.51 were paid during this period.

FYs 2016-18 Work Program Contracts

118 contracts from this work program year are open, and 29 are in "Open/Complete" status. 3 contracts passed into "Open/Complete" status during this period: City of Lynwood, Contract #ML18048 – Purchase up to Three Medium-Duty Zero Emission Vehicles; City of Garden Grove, Contract #ML18052 – Purchase Four Light-Duty Zero Emission Vehicles and Install EV Charging Infrastructure; and City of Pasadena, Contract #ML18079 – Install EV Charging Infrastructure. One contract was declined during this period: the City of Cathedral City determined that

changing economic conditions precluded them from proceeding with the installation of EV charging infrastructure, and their award of $52,215 reverted to the AB 2766 Discretionary Fund.

4 invoices totaling $85,806.72 were paid during this period.

FYs 2018-21 Work Program Contracts
2 contracts from this work program year are open.

One invoice in the amount of $7,181.90 was paid during this period.

Administrative Scope Changes
Two administrative scope changes were initiated during the period of July 30 to August 26, 2020:

- City of San Clemente, Contract #ML18163 (Procure Four Light-Duty ZEVs and Install EV Charging Stations) – One-year term extension
- City of Diamond Bar, Contract #ML18031 (Procure Two Light-Duty ZEVs and One Heavy-Duty Near-Zero Emission Vehicle and Install EV Charging Station) – One-year term extension

Attachments
- FY 2007-08 through FYs 2018-21 (except FY 2009-10) Contract Status Reports

AB2766 Discretionary Fund Program Invoices

July 30 to August 26, 2020

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
2014-2016 Work Program							
8/14/2020	8/14/2020	8/19/2020	8/25/2020	ML16017	City of Long Beach	20-008	$55,000.00
8/19/2020				ML16077	City of Rialto	1R	$158,105.51
Total: $213,105.51							
2016-2018 Work Program							
8/19/2020	9/2/2020	9/4/2020	9/4/2020	ML18096	City of Highland	1	$9,918.84
8/14/2020	8/14/2020	8/19/2020	8/25/2020	ML18163	City of San Clemente	2020-01	$70,533.75
8/14/2020	8/14/2020	8/19/2020	8/25/2020	ML18055	City of Long Beach Fleet Services Bureau	20-007	$4,174.39
8/6/2020	8/14/2020	8/19/2020	8/25/2020	MS18003	Geographics	1,22095,221(	$1,179.74
Total: $85,806.72							
2018-2021 Work Program							
8/20/2020	9/2/2020	9/4/2020	9/4/2020	MS21002	Better World Group Advisors	WG-MSRC0	$7,181.90
Total: $7,181.90							

Total This Period: $306,094.13

Clean Transportation Funding Database

FYs 2007-08 Through 2018-21 AB2766 Contract Status Report

9/9/2020

FY 2007-2008 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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 Wor	4/3/2009	2/2/2010		$14,875.00	$14,875.00	70 Vehicles (Diagnostic)	$0.00	Yes
ML08034	County of San Bernardino Public Wor	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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS08066	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		$400,000.00	$400,000.00	New CNG Station - Palm Spring Airport	$0.00	Yes
MS08067	Trillium CNG	3/19/2009	6/18/2015	6/18/2016	$311,600.00	$254,330.00	New CNG Station	$57,270.00	Yes
MS08069	Perris Union High School District	6/5/2009	8/4/2015	8/4/2016	$225,000.00	$225,000.00	New CNG Station	$0.00	Yes
MS08070	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		$400,000.00	$400,000.00	New CNG Station - Paramount	$0.00	Yes
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. Modificatio	$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
Total: 59									
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
Total: 1									

FY 2008-2009 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Declined/Cancelled Contracts									
ML09017	County of San Bernardino Public Wor	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 Managemen				$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 Sw	$425,000.00	No
ML09045	City of Orange				$125,000.00	$0.00	Purchase 5 CNG Sweepers	$125,000.00	No
Total: 10									
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 Wor	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 Servic	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 Dept of General	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	Yes
ML09034	City of La Palma	11/25/2009	6/24/2015		$25,000.00	$25,000.00	1 LPG Heavy-Duty Vehicle	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
Total: 30									
Open/Complete Contracts									
ML09036	City of Long Beach Fleet Services Bu	5/7/2010	5/6/2017	11/6/2022	$875,000.00	$875,000.00	Purchase 35 Natural Gas Refuse Trucks	$0.00	Yes
Total: 1									

FY 2010-2011 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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 - Paramoun	$150,000.00	No
MS11063	Standard Concrete Products				$310,825.00	$0.00	Retrofit Two Off-Road Vehicles under Showc	$310,825.00	No
MS11070	American Honda Motor Company				$100,000.00	$0.00	Expansion of Existing CNG Station	$100,000.00	No
MS11072	Trillium USA Company DBA Californi				$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No
MS11077	DCL America Inc.				$263,107.00	$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	$263,107.00	No
MS11083	Cattrac Construction, Inc.				$500,000.00	$0.00	Install DECS on Eight Off-Road Vehicles	$500,000.00	No
MS11084	Ivanhoe Energy Services and Develo				$66,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$66,750.00	No
MS11088	Diesel Emission Technologies				$32,750.00	$0.00	Retrofit Three H.D. Off-Road Vehicles Under	$32,750.00	No
MS11089	Diesel Emission Technologies				$9,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$9,750.00	No
MS11090	Diesel Emission Technologies				$14,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$14,750.00	No
Total: 22									
Closed Contracts									
ML11007	Coachella Valley Association of Gove	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 General	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 Dept of General	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
ML11037	City of Anaheim	12/22/2012	12/21/2019		$300,000.00	$300,000.00	Purchase 12 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11039	City of Ontario, Housing & Municipal	1/27/2012	9/26/2018		$180,000.00	$180,000.00	Purchase 6 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11042	City of Chino	2/17/2012	4/16/2018		$30,000.00	$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle, Repower	$0.00	Yes
ML11043	City of Hemet Public Works	2/3/2012	2/2/2019		$60,000.00	$60,000.00	Purchase 2 H.D. Nat. Gas Vehicles	$0.00	Yes
ML11044	City of Ontario, Housing & Municipal	1/27/2012	6/26/2019		$400,000.00	$400,000.00	Expand Existing CNG Station	$0.00	Yes
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
MS11008	USA Waste of California, Inc.	10/24/2013	4/23/2020		$125,000.00	$125,000.00	Expansion of Existing LCNG Station	$0.00	Yes
MS11009	USA Waste of California, Inc.	10/24/2013	4/23/2020		$125,000.00	$125,000.00	Expansion of Existing LCNG Station	$0.00	Yes
MS11010	Border Valley Trading	8/26/2011	10/25/2017	4/25/2020	$150,000.00	$150,000.00	New LNG Station	$0.00	Yes
MS11011	EDCO Disposal Corporation	12/30/2011	4/29/2019		$100,000.00	$100,000.00	New CNG Station - Signal Hill	$0.00	Yes
MS11012	EDCO Disposal Corporation	12/30/2011	4/29/2019		$100,000.00	$100,000.00	New CNG Station - Buena Park	$0.00	Yes
MS11016	CR&R Incorporated	4/12/2013	10/11/2019		$100,000.00	$100,000.00	New CNG Station - Perris	$0.00	Yes
MS11017	CR&R, Inc.	3/2/2012	2/1/2018		$100,000.00	$100,000.00	Expansion of existing station - Garden Grove	$0.00	Yes
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
MS11019	City of Corona	11/29/2012	4/28/2020		$225,000.00	$225,000.00	Expansion of Existing CNG Station	$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
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
MS11061	Eastern Municipal Water District	3/29/2012	5/28/2015		$11,659.00	$1,450.00	Retrofit One Off-Road Vehicle under Showca	$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 Showca	$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	Yes
MS11066	Torrance Unified School District	11/19/2012	9/18/2018		$42,296.00	$42,296.00	Expansion of Existing CNG Station	$0.00	Yes
MS11067	City of Redlands	5/24/2012	11/23/2018	11/23/2019	$85,000.00	$85,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS11068	Ryder System Inc.	7/28/2012	10/27/2018		$175,000.00	$175,000.00	New Public Access L/CNG Station (Fontana)	$0.00	Yes
MS11069	Ryder System Inc.	7/28/2012	8/27/2018		$175,000.00	$175,000.00	New Public Access L/CNG Station (Orange)	$0.00	Yes
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019	1/21/2020	$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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 Aut	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: 51									
Closed/Incomplete Contracts									
MS11064	City of Hawthorne	7/28/2012	8/27/2018	8/27/2019	$175,000.00	$0.00	New Limited Access CNG Station	$175,000.00	No
MS11076	SA Recycling, LLC	5/24/2012	9/23/2015		$424,801.00	$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	$424,801.00	No
MS11081	Metropolitan Stevedore Company	9/7/2012	1/6/2016		$45,416.00	$0.00	Install DECS on Two Off-Road Vehicles	$45,416.00	No
MS11082	Baumot North America, LLC	8/2/2012	12/1/2015		$65,958.00	$4,350.00	Install DECS on Four Off-Road Vehicles	$61,608.00	Yes
MS11085	City of Long Beach Fleet Services Bu	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 S	$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
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
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: 10									

FY 2011-2012 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML12014	City of Santa Ana	11/8/2013	8/7/2020	8/7/2021	$338,000.00	$4,709.00	9 H.D. Nat. Gas & LPG Trucks, EV Charging	$333,291.00	No
ML12043	City of Hemet	6/24/2013	9/23/2019	11/23/2021	$30,000.00	$30,000.00	One Heavy-Duty Nat. Gas Vehicles	$0.00	No
ML12045	City of Baldwin Park DPW	2/14/2014	12/13/2020	6/13/2025	$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	12/30/2020	$100,000.00	$0.00	EV Charging Infrastructure	$100,000.00	No
Total: 6									
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 Wor				$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 Musi	$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
ML12020	City of Los Angeles Dept of General	9/27/2012	3/26/2019	3/26/2020	$450,000.00	$450,000.00	15 H.D. Nat. Gas Vehicles	$0.00	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
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
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 Gove	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 Depar	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
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
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
MS12009	Sysco Food Services of Los Angeles	1/7/2014	4/6/2020		$150,000.00	$150,000.00	Construct New Public-Access LNG Station	$0.00	Yes
MS12010	Murrieta Valley Unified School Distric	4/5/2013	9/4/2019		$242,786.00	$242,786.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS12012	Rim of the World Unified School Distr	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 Ora	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/VSP	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
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
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
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
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 Aut	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 D	$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
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		$150,000.00	$150,000.00	Construct New CNG Station	$0.00	Yes
MS12074	Arcadia Unified School District	7/5/2013	9/4/2019		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS12076	City of Ontario, Housing & Municipal	3/8/2013	4/7/2015		$75,000.00	$75,000.00	Maintenance Facilities Modification	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
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: 57									
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
ML12018	City of West Covina	10/18/2013	10/17/2020	8/17/2023	$300,000.00	$300,000.00	Expansion of Existing CNG Station	$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
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
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 S	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
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: 13									

FY 2012-2014 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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 Dept of General	3/6/2015	9/5/2021	5/5/2025	$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	3/1/2021	$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	9/1/2021	$230,000.00	$0.00	Maintenance Fac. Modifications-Baldwin Par	$230,000.00	No
ML14027	County of Los Angeles Dept of Public	10/2/2015	5/1/2023	12/1/2025	$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	1/8/2021	$425,000.00	$25,000.00	Bicycle Racks, Outreach & Education	$400,000.00	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
ML14097	County of Los Angeles Internal Servi	9/6/2019	9/5/2020	9/5/2021	$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	$67,500.00	Vehicle Maint. Fac. Modifications - Carson	$7,500.00	No
MS14057	Los Angeles County MTA	11/7/2014	10/6/2019	10/6/2023	$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	3/4/2022	$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	3/26/2022	$1,250,000.00	$887,566.17	Implement Various Signal Synchronization P	$362,433.83	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: 16									
Declined/Cancelled Contracts									
ML14063	City of Hawthorne				$32,000.00	$0.00	Expansion of Existng CNG Infrastructure	$32,000.00	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
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 Mirada	$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: 10									
Closed Contracts									
ML14010	City of Cathedral City	8/13/2014	10/12/2015		$25,000.00	$25,000.00	Street Sweeping Operations	$0.00	Yes
ML14011	City of Palm Springs	6/13/2014	1/12/2016		$79,000.00	$78,627.00	Bicycle Racks, Bicycle Outreach & Educatio	$373.00	Yes
ML14014	City of Torrance	9/5/2014	12/4/2019		$56,000.00	$56,000.00	EV Charging Infrastructure	$0.00	Yes
ML14015	Coachella Valley Association of Gove	6/6/2014	9/5/2015		$250,000.00	$250,000.00	Street Sweeping Operations	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML14020	County of Los Angeles Dept of Pub	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
ML14096	County of Los Angeles Dept of Pub	5/3/2019	12/2/2019	3/2/2020	$74,186.00	$74,186.00	San Gabriel BikeTrail Underpass Improveme	$0.00	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 County	$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 Ange	$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 R	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 R	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 Aut	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 Ange	$44,267.12	Yes
MS14088	Southern California Regional Rail Aut	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: 33									
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 Pub	8/14/2015	1/13/2019		$150,000.00	$0.00	San Gabriel BikeTrail Underpass Improveme	$150,000.00	No
MS14092	West Covina Unified School District	9/3/2016	12/2/2022		$124,000.00	$0.00	Expansion of Existing CNG Infrastructure	$124,000.00	No
Total: 5									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open/Complete Contracts									
ML14013	City of Los Angeles, Bureau of Sanit	10/7/2016	2/6/2025		$400,000.00	$400,000.00	Purchase 14 H.D. Nat. Gas Vehicles	$0.00	Yes
ML14016	City of Anaheim	4/3/2015	9/2/2021		$380,000.00	$380,000.00	Purchase 2 H.D. Vehicles, Expansion of Exis	$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
ML14025	County of Los Angeles Dept of Public	10/2/2015	7/1/2018	7/1/2024	$300,000.00	$300,000.00	Construct New CNG Station in Malibu	$0.00	Yes
ML14026	County of Los Angeles Dept of Public	10/2/2015	5/1/2023	5/1/2024	$300,000.00	$300,000.00	Construct New CNG Station in Castaic	$0.00	Yes
ML14028	City of Fullerton	9/5/2014	1/4/2022		$126,950.00	$126,950.00	Expansion of Exisiting CNG Infrastructure	$0.00	Yes
ML14031	Riverside County Waste Managemen	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	Yes
ML14064	City of Claremont	7/11/2014	7/10/2020	1/10/2021	$60,000.00	$60,000.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	$0.00	Yes
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 An	$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 Dis	7/22/2016	11/21/2023		$300,000.00	$293,442.00	Expansion of Existing CNG Infrastructure/Ma	$6,558.00	Yes
MS14076	Rialto Unified School District	6/17/2015	2/16/2022	6/25/2023	$225,000.00	$225,000.00	New Public Access CNG Station	$0.00	Yes
MS14077	County Sanitation Districts of L.A. Co	3/6/2015	5/5/2021		$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
MS14080	CR&R Incorporated	6/1/2015	8/31/2021	8/31/2022	$200,000.00	$200,000.00	Expansion of Existing CNG Infrastructure/Ma	$0.00	No
MS14081	CR&R Incorporated	6/1/2015	5/30/2021		$175,000.00	$100,000.00	Expansion of Existing CNG Infrastructure/Ma	$75,000.00	No
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

Total: 32

FY 2014-2016 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
ML16006	City of Cathedral City	4/27/2016	4/26/2022		$25,000.00	$0.00	Bicycle Outreach	$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	4/6/2024	$78,222.00	$27,896.71	Expand Existing CNG Station, EV Charging I	$50,325.29	No
ML16017	City of Long Beach	2/5/2016	8/4/2023	1/4/2026	$1,445,400.00	$1,375,400.00	Purchase 50 Medium-Duty, 17 H.D. Nat. Ga	$70,000.00	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
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 Exi	$160,000.00	No
ML16032	City of Azusa	9/9/2016	4/8/2019	7/8/2020	$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	9/30/2022	$170,000.00	$0.00	Install Bicycle Lanes & Purchase 2 Heavy-D	$170,000.00	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	7/5/2026	$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	3/31/2021	$315,576.00	$0.00	Install Two Class 1 Bikeways	$315,576.00	No
ML16053	City of Claremont	3/11/2016	7/10/2018	12/10/2020	$498,750.00	$0.00	Implement a "Complete Streets" Pedestrian	$498,750.00	No
ML16057	City of Yucaipa	4/27/2016	1/26/2019	1/26/2021	$380,000.00	$0.00	Implement a "Complete Streets" Pedestrian	$380,000.00	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	2/26/2021	$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	$158,105.51	Pedestrian Access Improvements, Bicycle L	$305,110.49	No
ML16083	City of El Monte	4/1/2016	4/30/2021	4/30/2023	$57,210.00	$25,375.60	Install EV Charging Infrastructure	$31,834.40	No
ML16126	City of Palm Springs	7/31/2019	7/30/2020	10/30/2020	$22,000.00	$19,279.82	Install Bicycle Racks, and Implement Bicycle	$2,720.18	Yes
MS16029	Orange County Transportation Autho	1/12/2018	6/11/2020		$836,413.00	$567,501.06	TCM Partnership Program - OC Bikeways	$268,911.94	No
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		$800,625.00	$530,127.84	Freeway Service Patrols	$270,497.16	No
MS16090	Los Angeles County MTA	10/27/2016	4/26/2020	10/26/2020	$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	6/30/2021	$450,000.00	$0.00	EV Charging Infrastructure	$450,000.00	No
MS16110	City of Riverside	10/6/2017	2/5/2025	2/5/2026	$300,000.00	$71,250.00	Expansion of Existing CNG Station and Main	$228,750.00	No
MS16115	City of Santa Monica	4/14/2017	7/13/2025		$870,000.00	$427,500.00	Repower 58 Transit Buses	$442,500.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16117	Omnitrans	4/21/2017	6/20/2023		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	No
MS16118	Omnitrans	4/21/2017	6/20/2023		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	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	5/14/2020	$253,239.00	$226,551.89	Extended Freeway Service Patrols	$26,687.11	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: 42									
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	Yes
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	Yes
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 Gove	4/27/2016	4/26/2018		$250,000.00	$250,000.00	Street Sweeping Operations in Coachella Val	$0.00	Yes
ML16035	City of Wildomar	4/1/2016	11/1/2017		$500,000.00	$0.00	Install Bicycle Lanes	$500,000.00	No
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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	Yes
ML16061	City of Murrieta	4/27/2016	1/26/2020		$11,642.00	$9,398.36	Installation of EV Charging Infrastructure	$2,243.64	Yes
ML16062	City of Colton	6/3/2016	7/2/2020		$21,003.82	$21,003.82	Installation of EV Charging Infrastructure	$0.00	Yes
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	Yes
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 Bic	$1,195.28	Yes
ML16079	City of Yucaipa	4/1/2016	3/31/2020		$5,000.00	$5,000.00	Purchase Electric Lawnmower	$0.00	Yes
ML16122	City of Wildomar	6/8/2018	6/7/2019		$500,000.00	$500,000.00	Install Bicycle Lanes	$0.00	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 County	$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
MS16030	Better World Group Advisors	12/19/2015	12/31/2017	12/31/2019	$271,619.00	$245,355.43	Programmic Outreach Services to the MSRC	$26,263.57	Yes
MS16084	Transit Systems Unlimited, Inc.	5/6/2016	2/28/2018		$565,600.00	$396,930.00	Implement Special Shuttle Service from Unio	$168,670.00	No
MS16085	Southern California Regional Rail Aut	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	Yes
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	Yes
MS16095	Orange County Transportation Autho	7/22/2016	5/31/2017		$694,645.00	$672,864.35	Implement Special Bus Service to Orange C	$21,780.65	Yes
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 Aut	5/5/2017	9/30/2017		$80,455.00	$66,169.43	Provide Metrolink Service to Autoclub Speed	$14,285.57	Yes
Total: 36									
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	Yes
ML16016	City of Los Angeles Dept of General	2/5/2016	12/4/2022		$630,000.00	$630,000.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML16019	City of Los Angeles, Dept of General	1/25/2017	3/24/2023		$102,955.00	$102,955.00	Install EV Charging Infrastructure	$0.00	Yes
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		$49,400.00	$49,399.00	Install EV Charging Infrastructure	$1.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16023	City of Banning	12/11/2015	12/10/2021		$30,000.00	$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	$0.00	Yes
ML16024	City of Azusa	4/27/2016	2/26/2022		$30,000.00	$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	$0.00	Yes
ML16027	City of Whittier	1/8/2016	11/7/2022		$30,000.00	$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	$0.00	Yes
ML16037	City of Rancho Cucamonga	2/5/2016	11/4/2022		$30,000.00	$30,000.00	Purchase One Heavy-Duty Natural Gas Vehi	$0.00	Yes
ML16050	City of Westminster	5/6/2016	7/5/2020	5/5/2022	$115,000.00	$93,925.19	Installation of EV Charging Infrastructure	$21,074.81	No
ML16055	City of Ontario	5/6/2016	5/5/2022		$270,000.00	$270,000.00	Purchase Nine Heavy-Duty Natural-Gas Vehi	$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
ML16058	Los Angeles County Department of P	10/7/2016	4/6/2024		$371,898.00	$371,898.00	Purchase 11 H.D. Nat. Gas Vehicles and Ins	$0.00	No
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
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
ML16069	City of West Covina	3/10/2017	6/9/2021		$54,199.00	$54,199.00	Installation of EV Charging Infrastructure	$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	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	Yes
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

FY 2016-2018 Contracts

Open Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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	1/2/2021	$50,000.00	$0.00	Traffic Signal and Synchronization Project	$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	$24,650.00	Purchase 1 Heavy-Duty Near-ZEV	$0.00	No
ML18034	City of Calabasas	6/8/2018	3/7/2022	3/7/2023	$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
ML18038	City of Anaheim	10/5/2018	5/4/2025	5/4/2026	$221,500.00	$84,363.27	Purchase 5 Light-Duty ZEVs and Install EVS	$137,136.73	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	10/7/2023	$50,000.00	$0.00	Install EV Charging Infrastructure	$50,000.00	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	$45,564.00	Purchase 5 Heavy-Duty Near-Zero Emission	$68,346.00	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 ZE	$227,040.00	No
ML18053	City of Paramount	9/7/2018	3/6/2023		$64,675.00	$0.00	Install EV Charging Infrastructure	$64,675.00	No
ML18055	City of Long Beach Fleet Services Bu	11/29/2018	11/28/2026		$622,220.00	$103,465.30	Install EV Charging Stations	$518,754.70	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	$50,000.00	Purchase 5 Zero-Emission Vehicles and Infr	$56,250.00	No
ML18058	City of Perris	10/12/2018	11/11/2024		$94,624.00	$0.00	Purchase 1 Med. H.D. ZEV and EV Charging	$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 Vehic	$1,367,610.00	No
ML18063	City of Riverside	6/7/2019	1/6/2027		$383,610.00	$0.00	Expand Existing CNG Station	$383,610.00	No
ML18064	City of Eastvale	11/29/2018	4/28/2026		$80,400.00	$28,457.43	Purchase 2 Light-Duty, One Medium-Duty. Z	$51,942.57	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	$10,000.00	Purchase 2 Light-Duty ZEVs, Install EVSE &	$115,690.00	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
ML18072	City of Anaheim	12/18/2018	11/17/2026		$239,560.00	$239,560.00	Purchase 9 Light-Duty ZEVs & 2 Med/Hvy-D	$0.00	No
ML18078	County of Riverside	10/5/2018	10/4/2028		$425,000.00	$175,000.00	Purchase 17 Heavy-Duty Vehicles	$250,000.00	No
ML18080	City of Santa Monica	1/10/2019	12/9/2023		$121,500.00	$14,748.62	Install EV Charging Stations	$106,751.38	No
ML18081	City of Beaumont	10/5/2018	10/4/2022	10/4/2023	$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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18084	City of South El Monte	10/18/2019	9/17/2023		$30,000.00	$0.00	EV Charging Infrastructure	$30,000.00	No
ML18087	City of Murrieta	3/29/2019	3/28/2025		$143,520.00	$143,520.00	Install Four EV Charging Stations	$0.00	No
ML18088	City of Big Bear Lake	11/29/2018	8/28/2020	8/28/2021	$50,000.00	$0.00	Install Bicycle Trail	$50,000.00	No
ML18089	City of Glendora	7/19/2019	4/18/2025	4/18/2026	$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
ML18096	City of Highland	12/13/2019	8/12/2024		$70,210.00	$9,918.84	Purchase Light-Duty ZEV and Install Three E	$60,291.16	No
ML18097	City of Temple City	11/29/2018	7/28/2022		$16,000.00	$12,000.00	Purchase Two Light-Duty ZEVs	$4,000.00	No
ML18098	City of Redondo Beach	2/1/2019	3/31/2023	3/31/2024	$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
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
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 Dept of General	5/3/2019	5/2/2028		$290,000.00	$0.00	Purchase Five Medium-Duty ZEVs	$290,000.00	No
ML18135	City of Azusa	12/6/2019	12/5/2029		$55,000.00	$0.00	Purchase Three Light-Duty ZEVs and One H	$55,000.00	No
ML18136	City of Orange	4/12/2019	8/11/2024		$42,500.00	$30,000.00	Purchase Four Light-Duty ZEVs and Install	$12,500.00	No
ML18137	City of Wildomar	3/1/2019	5/31/2021	12/1/2021	$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	$32,588.07	Install Four EVSEs and Install Bicycle Racks	$17,411.93	No
ML18139	City of Calimesa	8/30/2019	7/29/2020	11/29/2021	$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
ML18141	City of Rolling Hills Estates	2/14/2020	1/13/2024		$40,000.00	$0.00	Purchase One Light-Duty ZEV and Install Tw	$40,000.00	No
ML18142	City of La Quinta	4/24/2019	2/23/2023	8/23/2023	$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
ML18145	City of Los Angeles Dept of Transpor	1/10/2020	4/9/2027		$1,400,000.00	$0.00	Provide One Hundred Rebates to Purchaser	$1,400,000.00	No
ML18146	City of South Gate	3/1/2019	11/30/2023		$127,400.00	$50,000.00	Purchase Five Light-Duty ZEVs and Install T	$77,400.00	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
ML18154	City of Hemet	11/22/2019	9/1/2023		$30,000.00	$0.00	Purchase Two Light-Duty ZEV and EV Charg	$30,000.00	No
ML18156	City of Covina	2/1/2019	3/31/2023	12/31/2023	$63,800.00	$42,713.00	Purchase Four Light-Duty ZEVs and EV Cha	$21,087.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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
ML18159	City of Rialto	12/13/2019	5/12/2024		$135,980.00	$0.00	Purchase Nine Light-Duty ZEVs and EV Cha	$135,980.00	No
ML18161	City of Indio	5/3/2019	10/2/2025		$50,000.00	$10,000.00	Purchase 1 Light-Duty Zero Emission, 1 Hea	$40,000.00	No
ML18162	City of Costa Mesa	1/10/2020	7/9/2026		$148,210.00	$0.00	Purchase Four Light-Duty ZEVs and EV Cha	$148,210.00	No
ML18163	City of San Clemente	3/8/2019	12/7/2024		$85,000.00	$70,533.75	Purchase Four Light-Duty ZEVs and EV Cha	$14,466.25	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 Emissi	$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
ML18170	City of Laguna Niguel	1/10/2020	8/9/2028		$85,100.00	$0.00	Purchase Two Light-Duty ZEVs and EV Char	$85,100.00	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	$17,500.00	Purchase Two Light-Duty ZEVs and EV Char	$31,500.00	No
ML18174	City of Bell	11/22/2019	7/21/2026		$25,000.00	$0.00	Purchase One Heavy-Duty ZEV	$25,000.00	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 Emissi	$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	$60,556.71	Design, Host and Maintain MSRC Website	$9,896.29	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
MS18015	Southern California Association of G	7/13/2018	2/28/2021	8/31/2021	$2,000,000.00	$0.00	Southern California Future Communities Part	$2,000,000.00	No
MS18023	Riverside County Transportation Co	6/28/2018	6/27/2021		$500,000.00	$186,116.88	Weekend Freeway Service Patrols	$313,883.12	No
MS18024	Riverside County Transportation Co	6/28/2018	8/27/2021		$1,500,000.00	$556,355.00	Vanpool Incentive Program	$943,645.00	No
MS18025	Los Angeles County MTA	11/29/2018	5/31/2019		$1,324,560.00	$961,246.86	Special Bus and Train Service to Dodger Sta	$363,313.14	Yes
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	$1,664,525.31	Implement Metrolink Line Fare Discount Pro	$335,474.69	No
MS18066	El Dorado National	12/6/2019	2/5/2026		$100,000.00	$0.00	Install New Limited-Access CNG Station	$100,000.00	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	$1,146,000.00	Implement OC Flex Micro-Transit Pilot Proje	$0.00	No
MS18103	Orange County Transportation Autho	2/8/2019	9/7/2020		$642,000.00	$613,303.83	Install Hydrogen Detection System	$28,696.17	No
MS18104	Orange County Transportation Autho	2/21/2020	3/31/2021		$212,000.00	$165,235.92	Implement College Pass Transit Fare Subsid	$46,764.08	No
MS18106	R.F. Dickson Co., Inc.	7/19/2019	1/18/2026		$265,000.00	$250,000.00	Expansion of Existing Infrastructure/Mechani	$15,000.00	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 District	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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS18114	Los Angeles County Department of P	11/15/2019	11/14/2026		$175,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$175,000.00	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
MS18116	Los Angeles County Department of P	11/15/2019	11/14/2026		$175,000.00	$0.00	Install New Limited-Access CNG Infrastructu	$175,000.00	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	$275,000.00	Install New Limited-Access CNG Infrastructu	$0.00	No
MS18122	Universal Waste Systems, Inc.	2/1/2019	3/31/2025	3/31/2026	$200,000.00	$0.00	Install New Limited Acess CNG Infrastructur	$200,000.00	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	U.S. Venture	5/9/2019	8/8/2025		$200,000.00	$180,000.00	Install New Limited-Access CNG Infrastructu	$20,000.00	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: 118									
Pending Execution Contracts									
ML18100	City of Brea				$56,500.00	$0.00	Install Thirteen EV Charging Stations	$56,500.00	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 Cont				$108,990.00	$0.00	Purchase Five Heavy-Duty Near Zero Emissi	$108,990.00	No
ML18158	City of Inglewood				$146,000.00	$0.00	Purchase 4 Light-Duty Zero Emission, 4 Hea	$146,000.00	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 Emissi	$25,000.00	No
MS18121	City of Montebello				$70,408.00	$0.00	Expansion of Existing CNG Infrastructure	$70,408.00	No
Total: 10									
Declined/Cancelled Contracts									
ML18075	City of Orange				$25,000.00	$0.00	One Heavy-Duty Vehicle	$25,000.00	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
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
MS18107	Huntington Beach Union High School				$225,000.00	$0.00	Expansion of Existing Infrastructure	$225,000.00	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 District				$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: 10									
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

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
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	Yes
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	Yes
MS18006	Anaheim Transportation Network	10/6/2017	2/28/2020		$219,564.00	$9,488.22	Implement Anaheim Circulator Service	$210,075.78	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 Aut	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 Aut	2/9/2018	6/30/2018		$239,565.00	$221,725.12	Special Train Service to Festival of Lights	$17,839.88	Yes
MS18014	Regents of the University of Californi	10/5/2018	12/4/2019	3/4/2020	$254,795.00	$251,455.59	Planning for EV Charging Infrastructure Inve	$3,339.41	Yes
MS18016	Southern California Regional Rail Aut	1/10/2019	3/31/2019		$87,764.00	$73,140.89	Special Train Service to Auto Club Speedwa	$14,623.11	Yes
MS18105	Southern California Regional Rail Aut	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: 10									
Open/Complete Contracts									
ML18019	City of Hidden Hills	5/3/2018	5/2/2022	5/2/2023	$49,999.00	$49,999.00	Purchase Two Light-Duty ZEVs and EVSE	$0.00	Yes
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
ML18028	City of Artesia	6/28/2018	3/27/2025		$50,000.00	$50,000.00	Install EVSE	$0.00	Yes
ML18033	City of Duarte	8/8/2018	2/7/2025		$50,000.00	$50,000.00	Purchase 1-HD ZEV	$0.00	Yes
ML18035	City of Westlake Village	8/8/2018	11/7/2022		$50,000.00	$50,000.00	Install EVSE	$0.00	Yes
ML18037	City of Westminster	6/28/2018	6/27/2024	12/27/2026	$120,900.00	$120,900.00	Install EVSE, Purchase up to 3-LD ZEV & 1-	$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
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
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	Yes
ML18048	City of Lynwood	6/28/2018	10/27/2024		$93,500.00	$44,505.53	Purchase Up to 3 Medium-Duty Zero-Emissi	$48,994.47	No
ML18049	City of Downey	7/6/2018	5/5/2023		$148,260.00	$148,116.32	Install EV Charging Stations	$143.68	Yes
ML18052	City of Garden Grove	8/8/2018	10/7/2022		$53,593.00	$46,164.28	Purchase 4 L.D. ZEVs and Infrastructure	$7,428.72	No
ML18054	City of La Habra Heights	8/8/2018	4/7/2022		$9,200.00	$9,200.00	Purchase 1 L.D. ZEV	$0.00	Yes
ML18061	City of Moreno Valley	4/9/2019	2/8/2025		$25,000.00	$25,000.00	Purchase 1 Heavy-Duty Near-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
ML18070	City of Lomita	11/29/2018	6/28/2022		$6,250.00	$6,250.00	Purchase 1 Light-Duty ZEV	$0.00	No
ML18071	City of Chino Hills	9/7/2018	10/6/2022		$20,000.00	$20,000.00	Purchase 2 Light-Duty ZEVs	$0.00	Yes
ML18074	City of Buena Park	12/14/2018	6/13/2026		$107,960.00	$107,960.00	EV Charging Infrastructure	$0.00	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	Yes
ML18077	City of Orange	11/2/2018	10/1/2022		$59,776.00	$59,776.00	Four Light-Duty ZEV and EV Charging Infras	$0.00	Yes
ML18079	City of Pasadena	12/7/2018	11/6/2023		$183,670.00	$183,670.00	EV Charging Infrastructure	$0.00	Yes
ML18085	City of Orange	4/12/2019	10/11/2026		$50,000.00	$50,000.00	Purchase Two Heavy-Duty Near-Zero Emissi	$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	Yes
ML18127	City of La Puente	2/1/2019	2/28/2023		$10,000.00	$7,113.70	Purchase Light-Duty Zero Emission Vehicle	$2,886.30	Yes
ML18131	City of Los Angeles, Police Departme	5/3/2019	12/2/2022		$19,294.00	$19,294.00	Purchase Three Light-Duty ZEVs	$0.00	Yes
ML18155	City of Claremont	7/31/2019	9/30/2023		$50,000.00	$35,608.86	Install EV Charging Infrastructure	$14,391.14	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML18160	City of Irwindale	3/29/2019	12/28/2022		$14,263.00	$14,263.00	Purchase Two Light-Duty ZEVs	$0.00	Yes
MS18012	City of Hermosa Beach	2/2/2018	2/1/2024		$36,000.00	$36,000.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS18123	City Rent A Bin DBA Serv-Wel Dispo	12/14/2018	2/13/2025		$200,000.00	$200,000.00	Install New Limited-Access CNG Infrastructu	$0.00	Yes

Total: 29

FY 2018-2021 Contracts

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
Open Contracts									
MS21001	Los Angeles County MTA	8/30/2019	7/29/2020		$1,148,742.00	$249,664.87	Implement Special Transit Service to Dodger	$899,077.13	No
MS21002	Better World Group Advisors	11/1/2019	12/31/2022		$265,079.00	$42,283.45	Programmatic Outreach Services	$222,795.55	No
MS21003	Orange County Transportation Autho	7/8/2020	5/31/2021		$468,298.00	$0.00	Provide Express Bus Service to the Orange	$468,298.00	No
Total: 3									
Pending Execution Contracts									
MS21004	Los Angeles County MTA				$2,188,899.00	$0.00	Clean Fuel Bus Service to Dodger Stadium	$2,188,899.00	No
Total: 1									

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 25

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board held a meeting on September 10, 2020, and September 24, 2020. The following are summaries of the meetings.

RECOMMENDED ACTION:
Receive and file.

Judith Mitchell, Member
South Coast AQMD Governing Board

ft

The California Air Resources Board (CARB or Board) held a meeting remotely on September 10, 2020 via a web-based videoconferencing service. Key items presented are summarized below.

DISCUSSION ITEMS

20-10-1: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program - Community Emissions Reduction Program for Wilmington, Carson, West Long Beach Community

The Board approved the Community Emissions Reduction Program (Program) for Wilmington, Carson, West Long Beach community. The Program was developed through a partnership between the South Coast Air Quality Management District (District) and the community steering committee comprised of residents, non-profits, business groups, and local government in the Wilmington, Carson, West Long Beach community. CARB staff reviewed the Program and determined it met the criteria set out in the Assembly Bill 617 (AB 617) legislation and the Community Air Protection Blueprint (Blueprint), and reflected important community priorities. In addition, the Board adopted the findings that the project was consistent with the California Environmental Quality Act (CEQA) and directed CARB staff and the District to continue to work with the community steering committee to define and implement strategies to reduce exposure to air pollution caused by the refineries, ports, railyards

and truck traffic through the neighborhoods in Wilmington, Carson, West Long Beach community. The Board directed the District to provide updates on identified actions in annual reports.

20-10-2: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program - Community Emissions Reduction Program for East Los Angeles, Boyle Heights, West Commerce Community

The Board approved the Community Emissions Reduction Program (Program) for the East Los Angeles, Boyle Heights, West Commerce Community, and adopted the findings that the project was consistent with CEQA. The Program was developed through a partnership between the District and the East Los Angeles, Boyle Heights, West Commerce community steering committee. CARB staff reviewed the Program and determined it met the criteria set out in AB 617, the Blueprint, and reflected important community priorities. In addition, the Board directed CARB staff and the District to continue to work with the community steering committee to define and implement strategies to reduce exposure to air pollution caused by the railyards, truck traffic and large facilities in the community. The Board directed the District to provide updates on identified actions in annual reports.

20-10-3: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program - Community Emissions Reduction Program for San Bernardino, Muscoy Community

The Board approved the San Bernardino, Muscoy community Emissions Reduction Program (Program) and adopted the findings that the project was consistent with CEQA. The Program was developed through a partnership between the District and the San Bernardino, Muscoy community steering committee. CARB staff reviewed the Program and determined it met the criteria set out in AB 617, the Blueprint, and reflected important community priorities. The Board directed CARB staff and the District to continue to work with the community steering committee to define and implement strategies to reduce exposure to air pollution caused by the railyards, warehouses, neighborhood truck traffic and large facilities in the community. The Board directed the District to provide updates on identified actions in annual reports.

South Coast AQMD Staff Comments/Testimony: Staff presented an overview of the Community Emissions Reduction Plans (CERPs) for Year 1 AB 617 communities: Wilmington, Carson, West Long Beach; East Los Angeles, Boyle Heights, West Commerce; and San Bernardino, Muscoy. The presentation highlighted air quality priorities, actions to address air quality priorities, and emissions and exposure reductions targets in the CERPs. Staff emphasized the collaborative efforts with the AB 617 community steering committees to develop the CERPs. Additionally, staff summarized the emission reductions resulting from CERP implementation through June

2020. Members of each Year 1 community steering committee testified in support of adopting the CERPs and recommended improvements to the AB 617 program.

The California Air Resources Board (CARB or Board) held a meeting remotely on September 24, 2020 via a web-based videoconferencing service. Key items presented are summarized below.

DISCUSSION ITEMS

20-9-2: Public Hearing to Consider Proposed Amendments to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear

The Board approved amendments to the Regulation for Reducing Sulfur Hexafluoride (SF6) emissions from Gas Insulated Switchgear (Regulation). The Board first adopted the Regulation in 2010 due to SF6's extremely high global warming potential. The effect of SF6 on the climate is 22,800 times that of carbon dioxide and it has a lifetime of 3,200 years. Because of the extremely strong effect of this gas on the climate, the Regulation was first enacted as an early action measure pursuant to Assembly Bill 32 (Núñez, Statutes of 2006, Chapter 488). While the original Regulation set an annual emission rate limit that each equipment owner may not exceed, staff's analysis indicates that the use of SF6 in switchgear equipment will grow, leading to the increased release of SF6 into the atmosphere. The regulatory changes are intended to phase out the use of SF6. The approved amendments to the Regulation will expand the scope of the Regulation to include other greenhouse gases beyond SF6, accelerate the transition to technologies that do not use SF6, improve the ability of equipment owners to comply with the Regulation, and specify reporting and accounting procedures to increase reporting accuracy and facilitate tracking of greenhouse gases covered under the Regulation. The amendments will also improve staff's ability to verify reported data. The Board also approved modifications to be developed with stakeholders through a 15-day comment period.

20-9-3: Public Meeting to Hear an Informational Update on California's Air Toxics Program

The Board heard an informational update on California's Air Toxics Program, and adopted a resolution that described California's Air Toxics Program for 2020 and beyond. In the presentation, CARB staff outlined future CARB actions that could be developed to reduce localized health impacts. These include plans to transition from the use of hexavalent chromium in chrome plating, and the use of formaldehyde in composite wood products to less toxic alternatives that will reduce the public's exposure to these toxins. The adopted resolution directed CARB staff to enhance the agency's

focus on air toxics within disadvantaged and AB 617-selected communities, and to work with local communities, local air pollution control districts, and other stakeholders. The resolution also directed staff to develop tools and methodologies to evaluate and mitigate cumulative impacts to inform the development of regulations and other strategies to reduce the impacts from airborne toxic emissions and provide health benefits for all Californians.

20-9-4: Public Meeting to Hear an Informational Update on Assembly Bill 617 Community Emissions Reduction Program Implementation

The Board heard an informational update on progress being made to implement the AB 617 Community Emissions Reduction Programs (Programs) in the communities of West Oakland, South Central Fresno, Shafter, and El Centro/Heber/Calexico. The Programs for these communities were approved by the Board between December 5, 2019, and February 13, 2020. Following Board approval, the local community members, air districts, environmental justice organizations, industry, CARB staff and other interested stakeholders began implementing these Programs. This report to the Board on the status of implementation of the Programs in the West Oakland, South Central Fresno, Shafter, and El Centro/Heber/Calexico communities meets the requirement to provide annual updates to the Board on Program implementation. Staff also outlined proposed next steps for the Programs. In addition, staff provided a summary of how CARB staff and stakeholders are adapting to a new virtual working and meeting environment in implementing the Program's goals.

Attachments
CARB September 10, 2020 and September 24, 2020 Meeting Agendas

CALIFORNIA AIR RESOURCES BOARD

PUBLIC MEETING AGENDA

Thursday, September 10, 2020

In accordance with Governor Newsom's Executive Orders N-29-20 and N-33-20 as well as recommendations from the California Department of Public Health, the September 10, 2020, Board Meeting will not have a physical location to attend in person. This will be a remote-only meeting.

The Board Meeting will be conducted remotely via a web-based videoconferencing service called Zoom. Members of the public who wish to comment verbally can register for the webinar.

Register for the Webinar – for those that plan to comment at the hearing.

Alternatively, during the Board Meeting, members of the public can offer verbal comments by calling in via telephone. Members of the public do not have to register beforehand if they call in using the number below.

Phone Number: (669) 900-6833
Webinar ID: 850 0750 4117

To watch the webinar only and not provide verbal comments, please view the webcast. The webcast is the same video stream offered by CARB during normal Board Meetings. If you do not wish to provide verbal comments, we strongly recommend watching the webcast as this will free up space on the webinar for those who are providing verbal comments.

Webcast – for those that only plan to observe the hearing.

How to Participate in the Remote Board Meeting
Como Participar en la Reunión de la Junta a distancia

Spanish translation will be provided at the September 10, 2020, Board Meeting

Thursday
September 10, 2020
12:00 p.m.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item #

20-10-1: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program – Community Emissions Reduction Program for Wilmington, Carson, West Long Beach Community

The community emissions reduction program was developed through a partnership between the South Coast Air Quality Management District and the community steering committee. The California Air Resources Board (CARB or Board) will consider the Wilmington, Carson, West Long Beach community emissions reduction program as required by Assembly Bill 617, and it will also consider adopting required findings consistent with applicable provisions of the California Environmental Quality Act.

More Information *Presentation* *Board Item Materials* *Written Comments*

The following Board Items will not be heard prior to 4:00 p.m.

20-10-2: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program – Community Emissions Reduction Program for East Los Angeles, Boyle Heights, West Commerce Community

The community emissions reduction program was developed through a partnership between the South Coast Air Quality Management District and the community steering committee. The Board will consider the East Los Angeles, West Commerce, Boyle Heights community emissions reduction program as required by Assembly Bill 617, and it will also consider adopting required findings consistent with applicable provisions of the California Environmental Quality Act.

More Information *Presentation* *Board Item Materials* *Written Comments*

20-10-3: Public Meeting to Consider Assembly Bill 617 Community Air Protection Program – Community Emissions Reduction Program for San Bernardino, Muscoy Community

The community emissions reduction program was developed through a partnership between the South Coast Air Quality Management District and the community steering committee. The Board will consider the San Bernardino, Muscoy community emissions reduction program as required by Assembly Bill 617, and it will also consider adopting required findings consistent with applicable provisions of the California Environmental Quality Act.

More Information *Presentation* *Board Item Materials* *Written Comments*

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak. The public will also have an opportunity to submit written comments for open session the morning of the Board Meeting.

Submit Comments Electronically the Day of the Board Meeting

View Submitted Comments

PLEASE NOTE: PowerPoint presentations to be displayed during public comment at the Board meeting must be electronically submitted via email to the Clerks' Office at cotb@arb.ca.gov no later than noon on the business day prior to the scheduled Board meeting.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERKS' OFFICE:
1001 I Street, 23rd Floor, Sacramento, California 95814
cotb@arb.ca.gov or (916) 322-5594
CARB Homepage: www.arb.ca.gov

SPECIAL ACCOMMODATION REQUEST

Consistent with California Government Code section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerks' Office at cotb@arb.ca.gov or at (916) 322-5594 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor contacte la oficina del Consejo al (916) 322-5594 o por correo electronico al cotb@arb.ca.gov lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

CALIFORNIA AIR RESOURCES BOARD

REVISED 9/17/20

PUBLIC MEETING AGENDA

Thursday, September 24, 2020

In accordance with Governor Newsom's Executive Orders N-29-20 and N-33-20 as well as recommendations from the California Department of Public Health, the September 24, 2020, Board Meeting will not have a physical location to attend in person. This will be a remote-only meeting.

The Board Meeting will be conducted remotely via a web-based videoconferencing service called Zoom. Members of the public who wish to comment verbally can register for the webinar.

Register for the Webinar – for those who wish to comment verbally at the hearing.

Alternatively, during the Board Meeting, members of the public can offer verbal comments by calling in via telephone. Members of the public do not have to register beforehand if they call in using the number below.

Phone Number: (669) 900-6833
Webinar ID: 821 3422 9207

To only watch the Board Meeting and not provide verbal comments, please view the webcast. The webcast is the same video stream offered by CARB during normal Board Meetings. If you do not wish to provide verbal comments, we strongly recommend watching the webcast as this will free up space on the webinar for those who are providing verbal comments.

Webcast – for those who only plan to observe the hearing.

How to Participate in the Remote Board Meeting
Como Participar en la Reunión de la Junta a distancia

Spanish translation will be provided at the September 24, 2020, Board Meeting.

Thursday
September 24, 2020
12:00 p.m.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item #

20-9-5 **Public Meeting to Consider Proposed Portola PM2.5 Plan Contingency Measure State Implementation Plan Submittal**
(THIS ITEM HAS BEEN POSTPONED UNTIL THE NOVEMBER 2020 BOARD MEETING)

20-9-2: Public Hearing to Consider Proposed Amendments to the Regulation for Reducing Sulfur Hexafluoride Emissions from Gas Insulated Switchgear

The Board adopted the SF6 Switchgear Regulation in 2010 due to the extremely high global warming potential of SF6. In response to the State's climate goals and the increasing availability of equipment that does not use SF6, staff proposes to amend the Regulation to cover other greenhouse gases, drive further emissions reductions, and accelerate the transition to equipment that does not use SF6.

More Information *Presentation* *Board Item Materials* *Written Comments*

20-9-3: Public Meeting to Hear an Informational Update on California's Air Toxics Program

The Board will hear an informational update on California's Air Toxics Program, including the ongoing efforts to reduce community exposure to toxic air contaminants.

More Information *Presentation* *Board Item Materials* *Written Comments*

The following Board Item will not be heard prior to 4:00 p.m.

20-9-4: Public Meeting to Hear an Informational Update on Assembly Bill 617 Community Emissions Reduction Program Implementation

The Board will hear an informational update on the status of implementation for Assembly Bill 617 community emissions reduction programs.

More Information *Presentation* *Board Item Materials* *Written Comments*

CLOSED SESSION

The Board may hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation:

Alliance for California Business v. California State Transportation Agency, et al., Sacramento County Superior Court, Case No. 34-2016-80002491.

American Coatings Association, Inc. v. State of California and California Air Resources Board, Sacramento County Superior Court, Case No. 04CS01707.

American Lung Association, et al. v. United States Environmental Protection Agency, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 19-1140.

California v. Stout, et al., United States District Court, Central District of California, Case No. 2:20-cv-00371.

California v. Wheeler, et al., United States Court of Appeals, District of Columbia Circuit, Case No. 19-1239.

California Air Resources Board v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 18-1085.

California Air Resources Board v. United States Environmental Protection Agency and National Highway Traffic and Safety Administration, United States District Court, District of Columbia Case No. 1:19-cv-00965-CKK.

California Natural Gas Vehicle Coalition v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 20CECG02250.

Dalton Trucking, Inc. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 13-1283 (dismissed), U.S. Court of Appeals, Ninth Circuit, Case No. 13-74019.

Friends of Oceano Dunes, Inc. v. California Coastal Commission, et al., San Luis Obispo County Superior Court, Case No. 17CV-0576; U.S. District Court for the Central District of California, Case No. 2:17-cv-8733.

In re Pacific Gas and Electric Company, U.S. Bankruptcy Court, Northern District of California, Case No. 19-30089.

John R. Lawson Rock & Oil, Inc. et al. v. California Air Resources Board et al., Fresno County Superior Court, Case No. 14-CECG01494; ARB's appeal, Court of Appeal, Fifth District, Case No. F074003.

State of California v. United States Environmental Protection Agency, United States Court of Appeals, District of Columbia Circuit, Case No. 18-1096.

State of California, et al., v. Chao, et al., United States District Court, District of Columbia, Case No. 1:19-cv-02826.

State of California, et al. v. David Bernhardt, et al., United States District Court, Northern District of California, Case No. 3:18-cv-5712-DMR.

State of California, et al. v. United States Environmental Protection Agency, United States Court of Appeals, District Court of Columbia Circuit, Case No. 19-1227.

State of California, et al., v. United States Environmental Protection Agency, United States District Court, Northern District of California, Case No. 4:18-cv-03237.

State of New York, et al. v. Andrew Wheeler and the United States Environmental Protection Agency, U.S. District Court, District of Columbia, Case No. 1:18-cv-00773.

State of North Dakota v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1381.

State of North Dakota, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1242.

State of Wyoming, et al. v. United States Department of the Interior, et al., U.S. District Court, District of Wyoming, Case No. 16-CV-285-SWS.

Truck Trailer Manufacturers Association, Inc. v. United States Environmental Protection Agency, et al., U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1430.

People v. Southern California Gas Company, Los Angeles Superior Court, Case No. BC 602973.

The Two Hundred, et al. v. California Air Resources Board, et al., Fresno County Superior Court, Case No. 18CECG01494.

United States v. California, United States District Court, Eastern District of California, Case No. 2:19-cv-02142-WBS-EFB.

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak. The public will also have an opportunity to submit written comments for open session the morning of the Board Meeting.

Submit Comments Electronically the Day of the Board Meeting

View Submitted Comments

PLEASE NOTE: PowerPoint presentations to be displayed during public comment at the Board meeting must be electronically submitted via email to the Clerks' Office at cotb@arb.ca.gov no later than noon on the business day prior to the scheduled Board meeting.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERKS' OFFICE:
1001 I Street, 23rd Floor, Sacramento, California 95814
cotb@arb.ca.gov or (916) 322-5594
CARB Homepage: www.arb.ca.gov

SPECIAL ACCOMMODATION REQUEST

Consistent with California Government Code section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerks' Office at cotb@arb.ca.gov or at (916) 322-5594 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor contacte la oficina del Consejo al (916) 322-5594 o por correo electronico al cotb@arb.ca.gov lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

Back to Agenda

Agenda Item #26

Budget and Economic Outlook Update

Board Meeting

October 2, 2020

South Coast AQMD

Presentation Topics

- Data through September 25, 2020
- Economic Indicators
- South Coast AQMD Metrics and Economic Implications
- Summary Charts

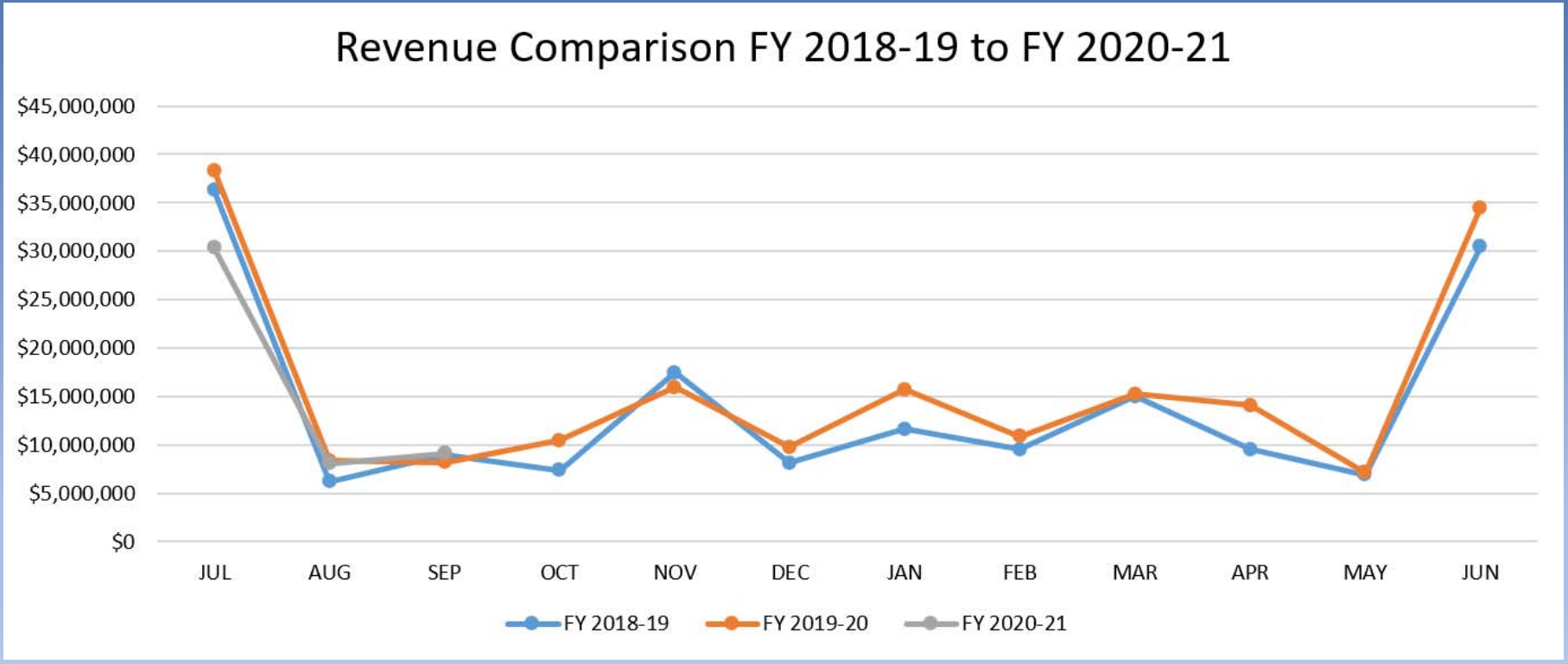
Summary of Metrics – Monthly

Metric			
State Economic Indicators	**August 2019**	**August 2020**	**Notes**
Statewide Refinery Activity (Million Barrels Crude Oil Input)	61.5	36.8	Some So. CA gasoline going to Northern CA due to closed Martinez refinery
Port TEU Throughput (Million TEUs)	1.5	1.7	Record volume at POLA
Statewide Unemployment %	4.2%	11.6%	LA-16.6%, OR-9.9%, Riv./SB-11%
South Coast AQMD	**Sept. 2019**	**Sept. 25, 2020**	
Revenue	$8.2 million	$9.1 million	
Expenditures	$12.5 million	$11.0 million	
Vacancy Rate	17.6%	16.3%	
Permit Applications Received	716	590	Sept. 2020 preliminary data
Expired Permits	62	529	1 year to reinstate
Fee Review Requests	2	5	
CEQA Activity	67	63	

Summary of Metrics – Year to Date

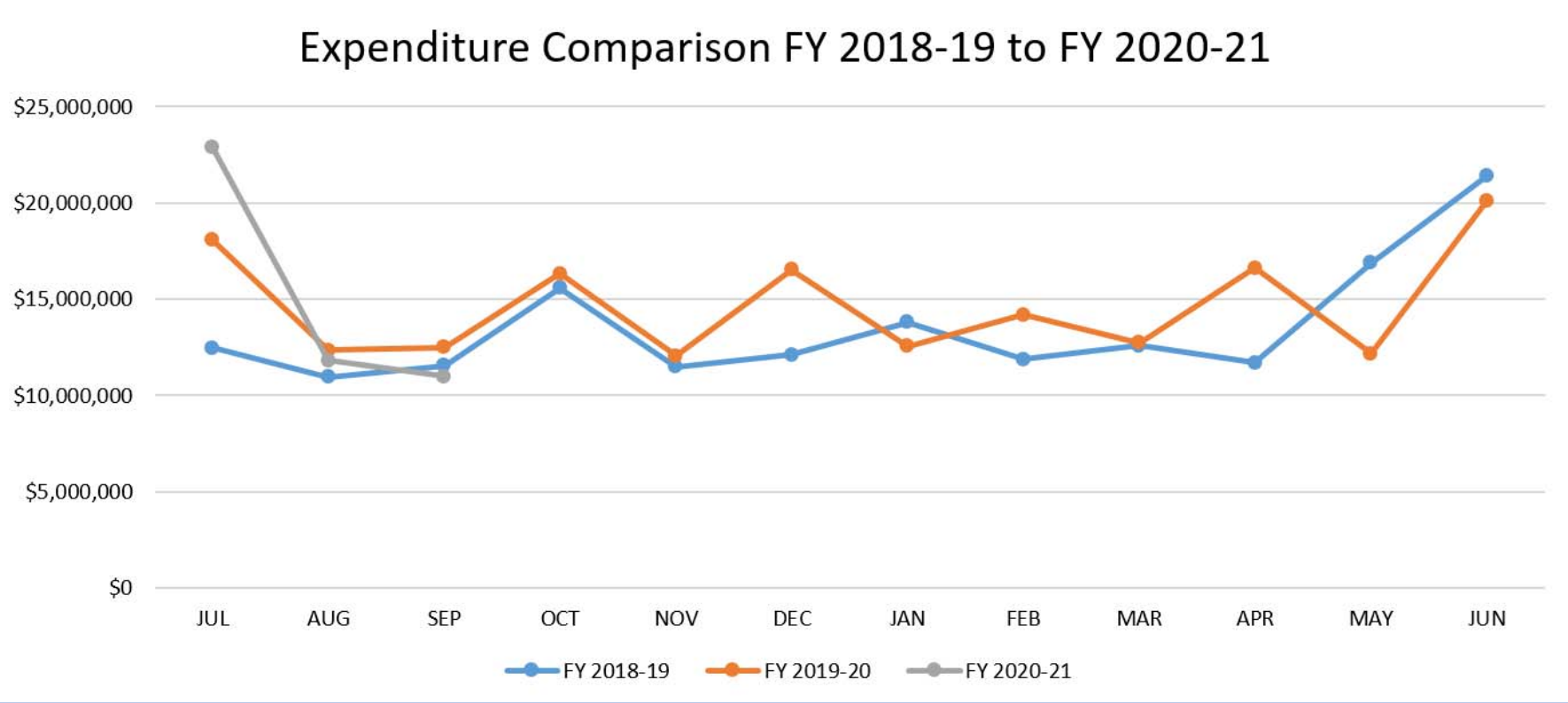
Metric	Jan. - August 2019	Jan. - August 2020	Notes
U.S. GDP (2nd Quarter, $ trillions)	21.3	19.5	As of 7-30-20
State Economic Indicators			
Refinery Activity (Million Barrels Crude Oil Input)	428	349	
Port TEU Throughput (Million TEUs)	11.3	10.5	
South Coast AQMD	**Jan. – Sept. 2019**	**Jan. – Sept. 25, 2020**	
Revenue	$137.9 million	$145.1 million	
Expenditures	$131.1 million	$134.0 million	
Vacancy Rate, end of September	17.6%	16.3%	
Permit Applications Received	5,891	5,087	
Expired Permits	856	1,878	1 year to reinstate
Fee Review Requests	30	105	
CEQA Activity	598	441	

Revenue



*As of September 25, 2020

Expenditures



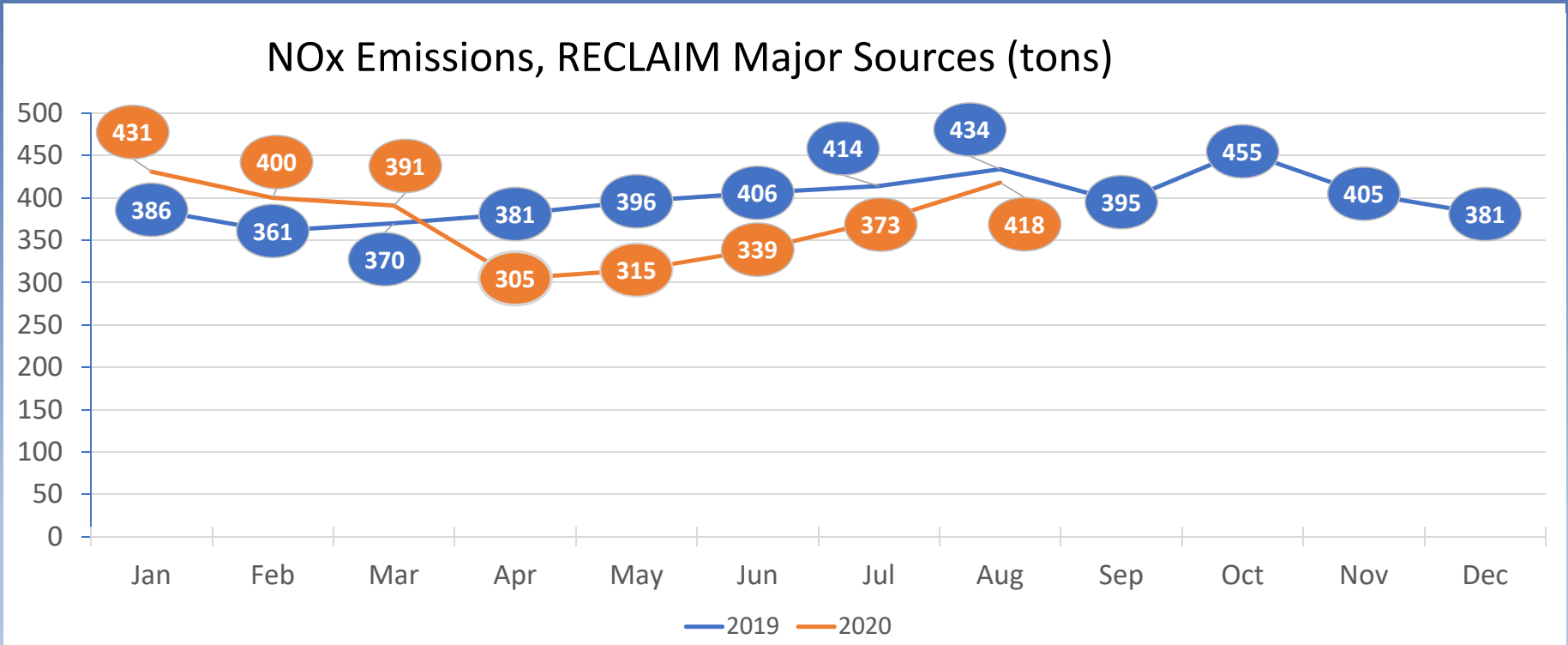
*As of September 25, 2020

Staffing Levels as of 9/25/20

- 945 budgeted FTEs
- 154 vacant positions
- 791 filled positions
- 16.3 % vacancy rate

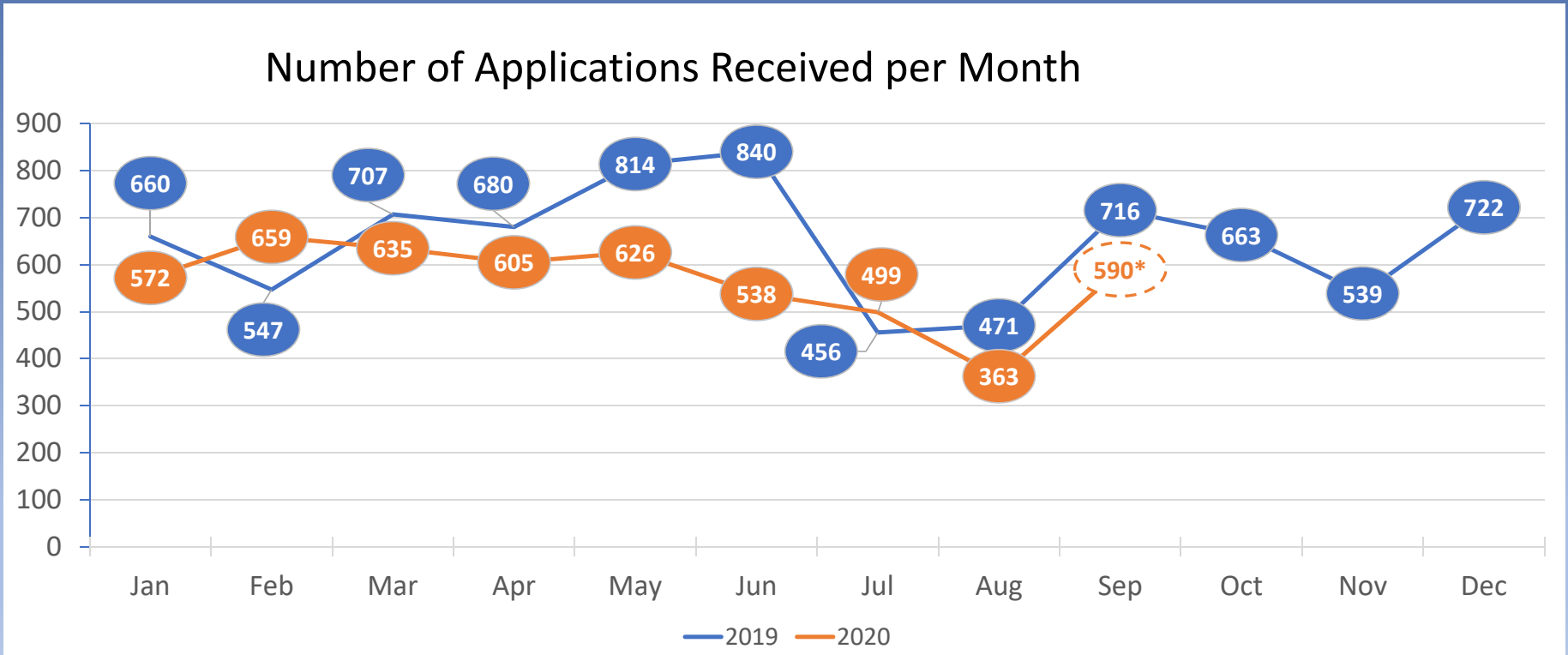
- Another potential SBCERA action may increase number of employees abruptly retiring

Emission Trends



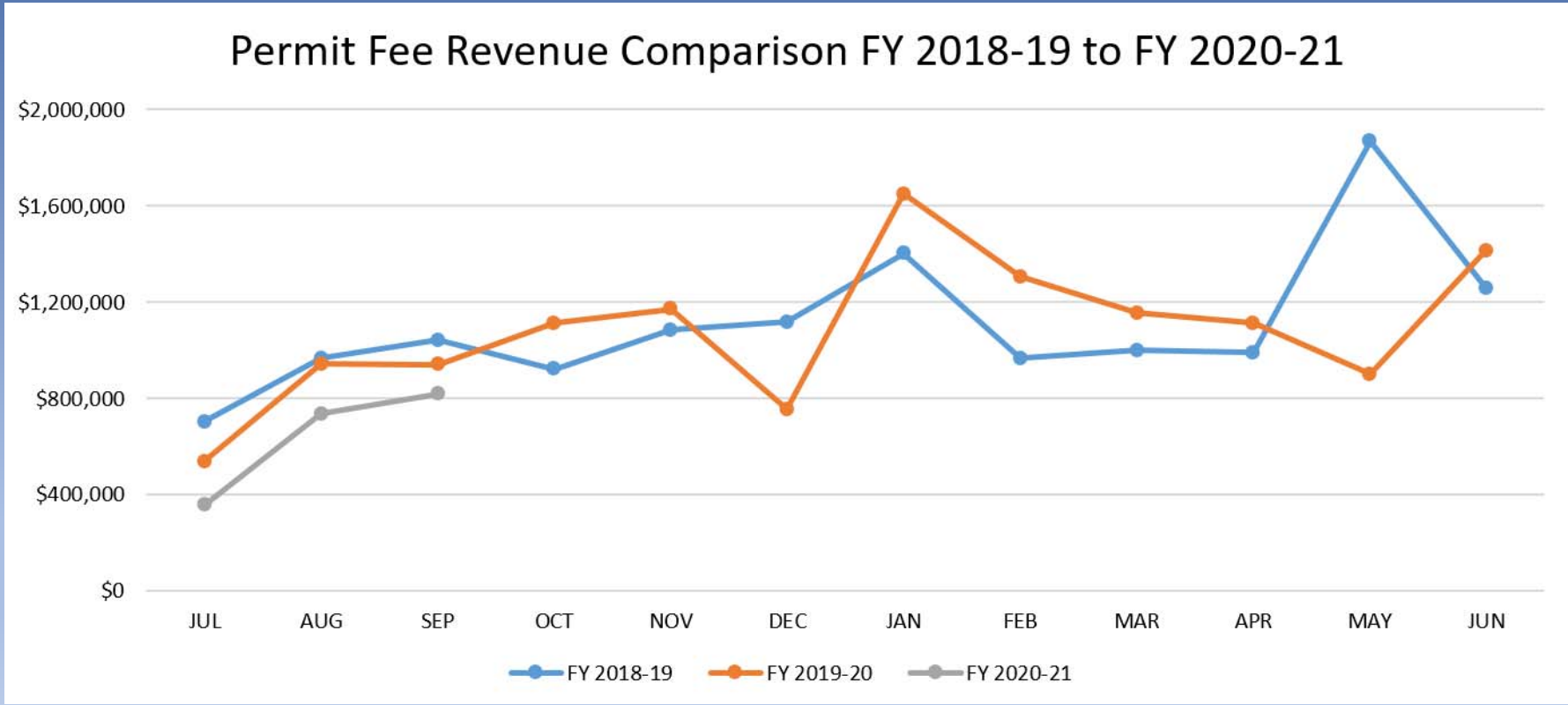
As of September 25, 2020

Permit Activity



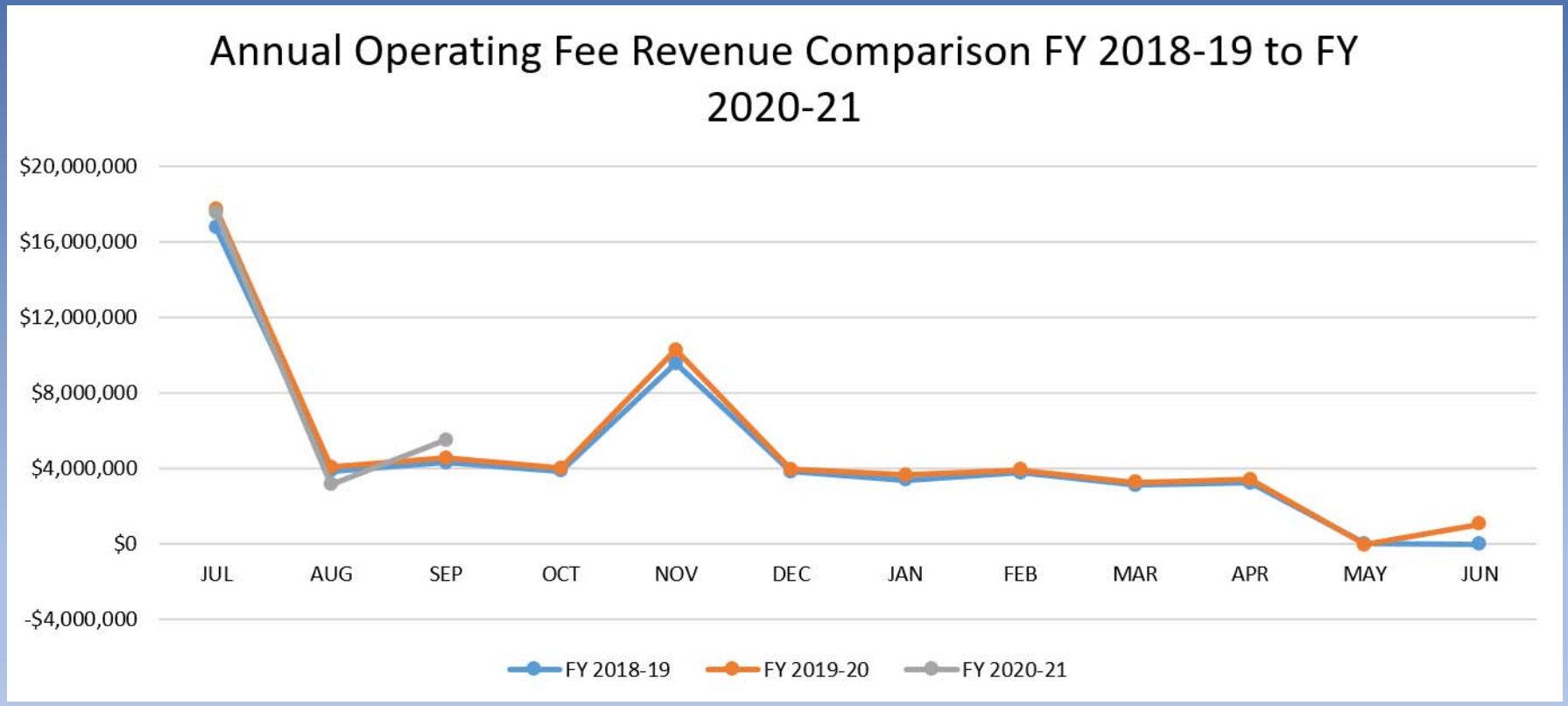
*Preliminary data as of September 25, 2020

Permit Revenue



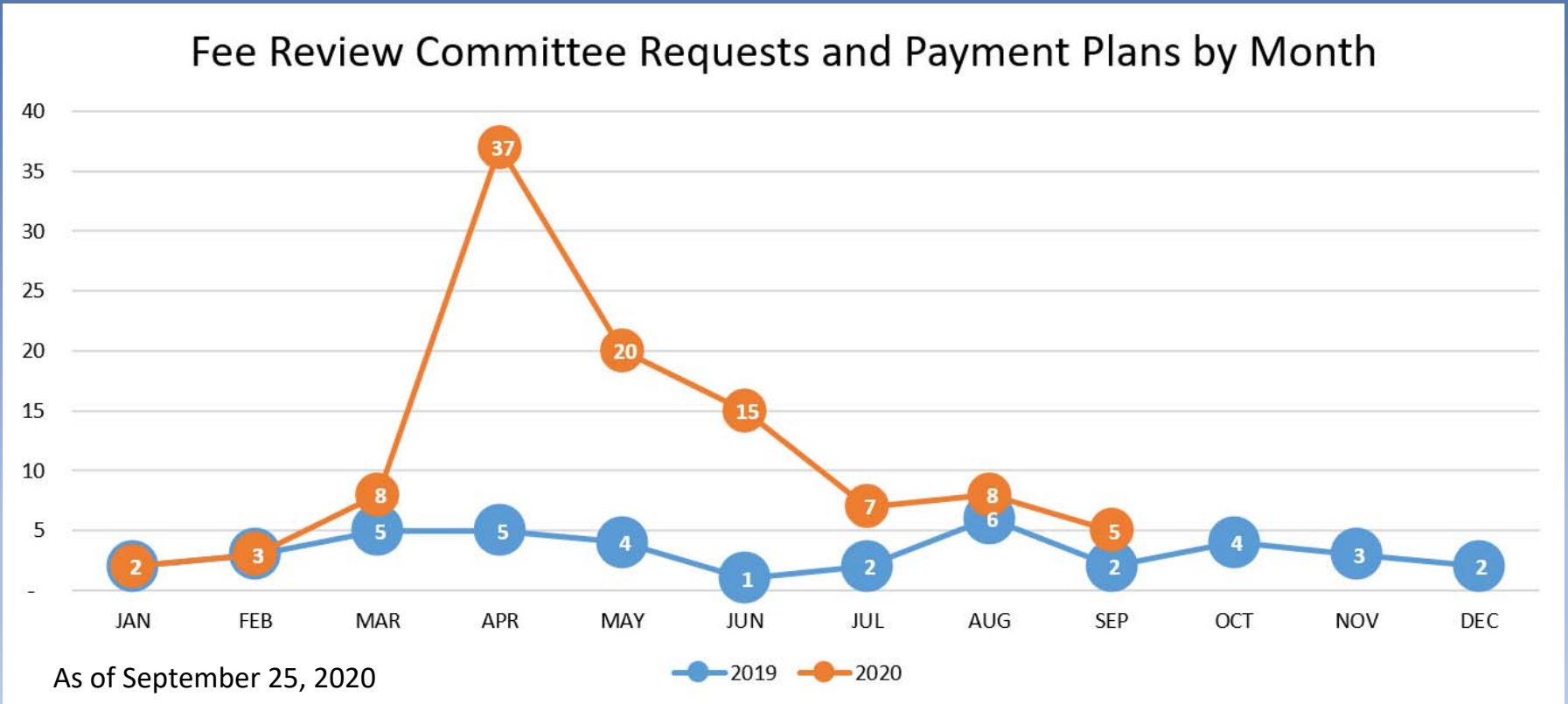
As of September 25, 2020

Annual Operating Fee Revenue



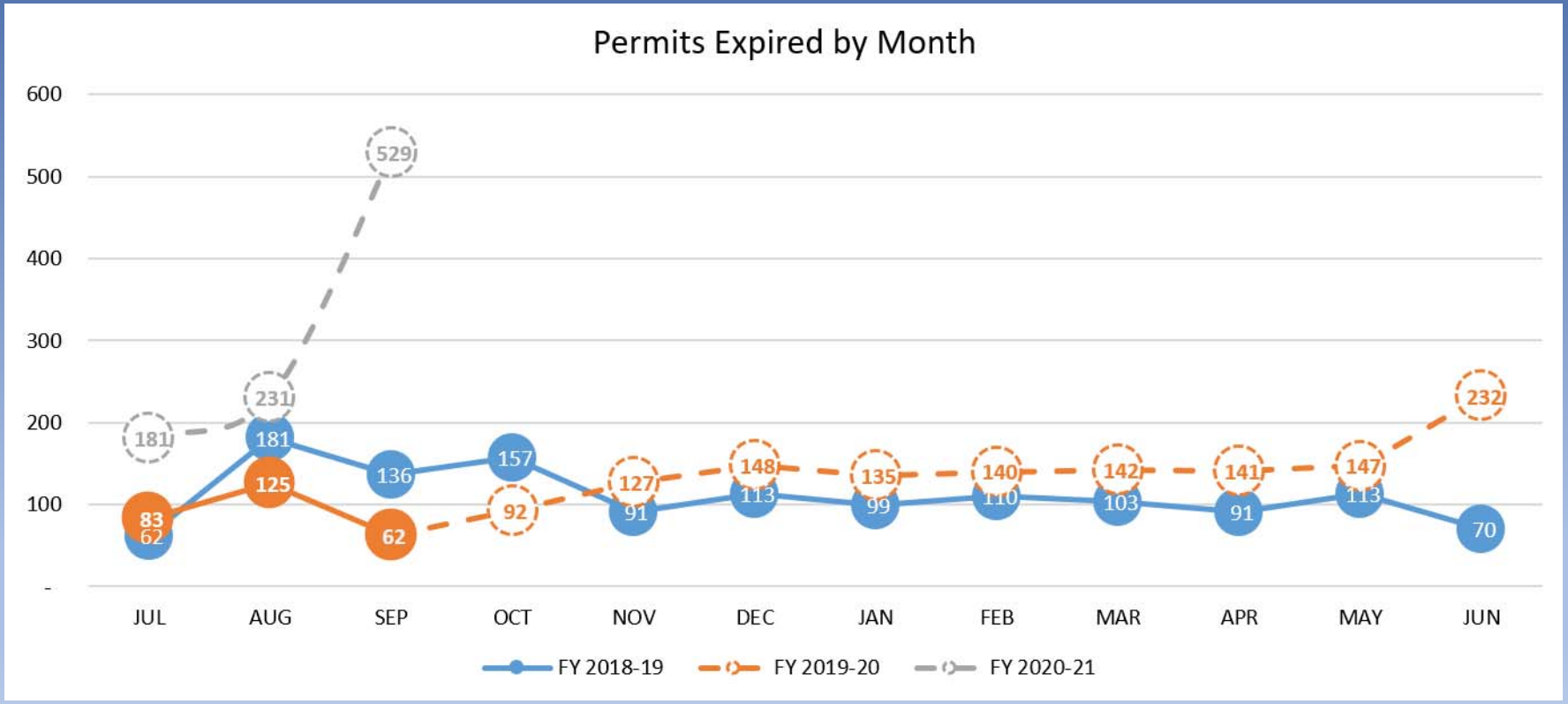
As of September 25, 2020

Fee Review Committee Requests



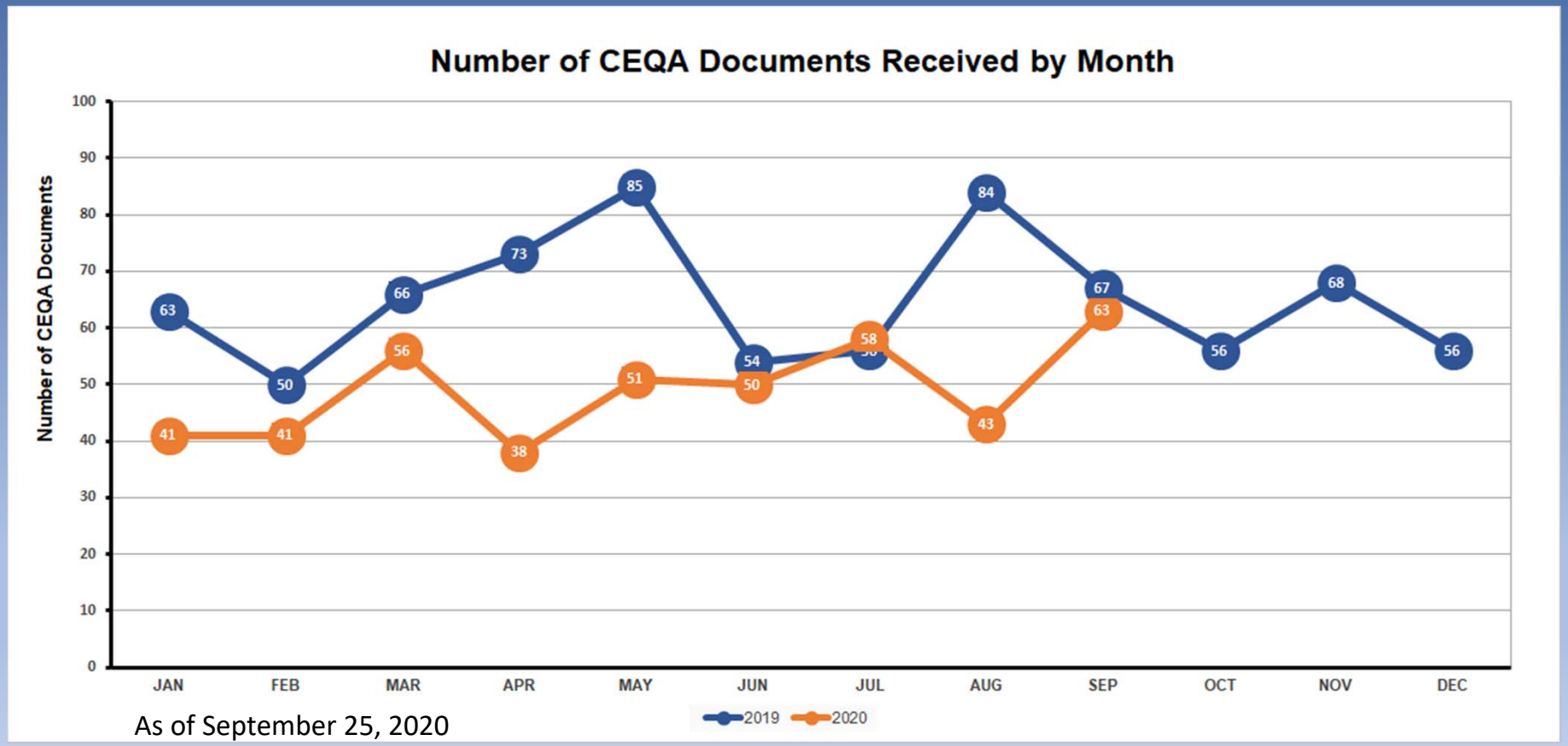
As of September 25, 2020

Expired Permits



As of September 25, 2020
Dotted lines represent permits that have time to be reinstated

CEQA Activity



As of September 25, 2020

Summary of Metrics – Monthly

Metric			
State Economic Indicators	**August 2019**	**August 2020**	**Notes**
Statewide Refinery Activity (Million Barrels Crude Oil Input)	61.5	36.8	Some So. CA gasoline going to Northern CA due to closed Martinez refinery
Port TEU Throughput (Million TEUs)	1.5	1.7	Record volume at POLA
Statewide Unemployment %	4.2%	11.6%	LA-16.6%, OR-9.9%, Riv./SB-11%
South Coast AQMD	**Sept. 2019**	**Sept. 25, 2020**	
Revenue	$8.2 million	$9.1 million	
Expenditures	$12.5 million	$11.0 million	
Vacancy Rate	17.6%	16.3%	
Permit Applications Received	716	590	Sept. 2020 preliminary data
Expired Permits	62	529	1 year to reinstate
Fee Review Requests	2	5	
CEQA Activity	67	63	

Summary of Metrics – Year to Date

Metric	Jan. - August 2019	Jan. - August 2020	Notes
U.S. GDP (2nd Quarter, $ trillions)	21.3	19.5	As of 7-30-20
State Economic Indicators			
Refinery Activity (Million Barrels Crude Oil Input)	428	349	
Port TEU Throughput (Million TEUs)	11.3	10.5	
South Coast AQMD	**Jan. – Sept. 2019**	**Jan. – Sept. 25, 2020**	
Revenue	$137.9 million	$145.1 million	
Expenditures	$131.1 million	$134.0 million	
Vacancy Rate, end of September	17.6%	16.3%	
Permit Applications Received	5,891	5,087	
Expired Permits	856	1,878	1 year to reinstate
Fee Review Requests	30	105	
CEQA Activity	598	441	

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 27

PROPOSAL: Recommendation for Year 3 Implementation of Assembly Bill 617

SYNOPSIS: Assembly Bill (AB) 617 requires CARB, in consultation with air districts, to annually select communities for community air monitoring and the preparation of community emissions reduction programs as appropriate. AB 617 specifies that the highest priority locations shall be disadvantaged communities with a high exposure burdens for criteria pollutants and toxic air contaminants. Staff recommends the South Los Angeles community for consideration in the AB 617 program.

COMMITTEE: Stationary Source, September 18, 2020; Reviewed

RECOMMENDED ACTIONS:

1. Approve the recommendation of the South Los Angeles community to CARB for their consideration in selecting communities for the AB 617 program; and
2. Direct staff to seek funding from the Legislature, in the amount of $4-$6 million per year for at least six years, to support the development and implementation of the community plans in the South Los Angeles community.

Wayne Nastri
Executive Officer

PF:JKG:DG:NS

Background

Assembly Bill (AB) 617 focuses on addressing local air pollution in environmental justice communities. AB 617 requires CARB to select communities on an annual basis to develop community emissions reduction plans and air monitoring plans ("community plans"), as appropriate. Air districts submit community recommendations to CARB for consideration.

In 2018 (Year 1), CARB designated ten communities statewide, including three communities in the South Coast AQMD, to implement AB 617. In 2019 (Year 2), CARB designated three additional communities statewide, including two South Coast

AQMD communities. Communities may be designated for the development of a Community Emissions Reduction Plan (CERP), a Community Air Monitoring Plan (CAMP), or both. Each of the five communities in South Coast AQMD designated for the AB 617 program were designated for both types of plans. Considerations for community designation include existing community partnerships, local resources, and community engagement that can assist with developing statewide models for future community plans. The Year 1 and Year 2 designated AB 617 communities in South Coast AQMD are:

- Year 1 – AB 617 Communities
  - East Los Angeles, Boyle Heights, West Commerce
  - San Bernardino, Muscoy
  - Wilmington, Carson, West Long Beach
- Year 2- AB 617 Communities
  - Eastern Coachella Valley
  - Southeast Los Angeles

In the previous two years, staff conducted a technical evaluation and public process to develop a list of communities prioritized for the AB 617 program. In 2019, staff identified 18 communities that would likely be considered for the program between Years 3-7.[1]

Summary of Public Process

Outreach

In August 2020, staff conducted a virtual public meeting to gather community input on the selection of additional communities for AB 617 implementation.[2] Approximately 40 people participated in the meeting. Staff presented an overview of South Coast AQMD's regulatory authority, an overview of the AB 617 program, and the selection process for designating Year 3 communities. Members of community organizations and the public participated in the meeting.

South Coast AQMD staff also accepted community self-nominations through the website, with an August 17, 2020 deadline to submit nominations. Self-nominations provide information about community characteristics that may make a community a good candidate for the AB 617 program.

[1] http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2019/2019-sep6-022.pdf?sfvrsn=6

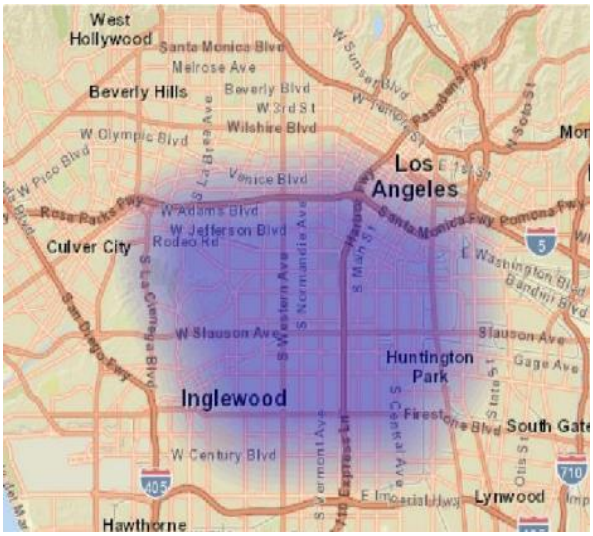
[2] Pursuant to Governor Newsom's Executive Orders N-25-20 (March 12, 2020) and N-29-20 (March 17, 2020), the meeting was conducted virtually to help prevent the spread of COVID-19.

Summary of Community Input
At the August public meeting, two commenters spoke in support for recommending the South Los Angeles community for designation this year for the AB 617 program. During the 2020 self-nomination period, staff received self-nominations for the communities listed below.

City	Number of Nominations	Type
Inglewood	1	University Student Intern
Santa Ana	1	Community-based organization
South Los Angeles/South Central Los Angeles	127	Agencies, Community-based organizations, Elected officials, Residents
Van Nuys	1	Community-based organization

Proposal
Recommendations
Staff built upon the prioritization process from the previous two years and considered additional community input and recommendations received for the 2020 (Year 3). Based on the technical assessment and consideration of community readiness, staff recommends the South Los Angeles community for Year 3 implementation of the AB 617 program.

South Los Angeles:
The South Los Angeles community is a densely populated urban community located south and southwest of Downtown Los Angeles. There are multiple sources of pollution in this area which include both mobile sources (e.g., truck and vehicle traffic along I-10 and I- 110) and stationary sources, such as industrial facilities (e.g., petroleum production and facilities that emit hexavalent chrome). Of the 130 community nominations received, 127 were nominations for the South Central/South Los Angeles community. Including South Los Angeles in the AB 617 program would be an opportunity to develop a South Coast AQMD model for improving air quality in an urban community through strengthened collaboration with community leaders.



In 2019, based on the results of the technical assessment and public process, the community of South Los Angeles, South Central Los Angeles and Hyde Park was listed as a candidate community for years 3-7 of the AB 617 program. This geographic area

includes the neighborhoods of University Park, Exposition Park, Jefferson Park, Leimert Park, Manchester Square, Chesterfield Square, Vermont, and Florence. This community has an average score in the 80.7 percentile for MATES IV and in the 90.6 percentile for CalEnviroScreen 3.0, indicating that this area has a high air toxics burden, as well as impacts from other environmental pollution, public health burdens, and social and economic disadvantages. If approved and designated, staff will work with the future Community Steering Committee (CSC) of South Los Angeles to finalize the community boundary for this area. Some additional adjacent neighborhoods that could be included in this South Los Angeles community boundary include Baldwin Hills/Crenshaw, View Park-Windsor Hills, West Adams, Gramercy Park, Westmont, Vermont Vista, Broadway-Manchester, Green Meadows, Watts, and Willowbrook.

Staff has established partnerships with agencies and organizations that serve this community, which enhances our ability to implement the AB 617 program in this community. Oil field and gas production facilities have been a concern for community members in this area, including the AllenCo oil drilling site. This led to enforcement and special monitoring efforts between 2010 and 2014, where South Coast AQMD inspectors responded to community complaints, conducted facility inspections, and took enforcement actions. In 2013, South Coast AQMD staff initiated monitoring at sites near the facility. Organizations, such as Esperanza Community Housing Corporation, have been working with the community for over a decade regarding their concerns about urban oil drilling sites. Other organizations, such as Physicians for Social Responsibility – Los Angeles (PSR-LA), have participated in South Coast AQMD efforts by serving as a member of the Environmental Justice Community Partnership (EJCP) Advisory Council, which is designed to strengthen relationships and build alliances with community members and organizations across the region with the goal of achieving clean air and healthy, sustainable communities for everyone. South Coast AQMD staff has also collaborated with the Los Angeles (LA) County Department of Public Health, LA County Department of Regional Planning, and the City of Los Angeles in development of AB 617 CERPs in Year 1 communities. Representatives from these LA County and City departments are currently serving on the AB 617 Community Steering Committees for two Year 1 communities in LA County and have been engaged throughout this process.

Self-nominations for South Los Angeles provided additional information that demonstrates community readiness for this program. In particular, two organizations have demonstrated leadership and grassroots community engagement around air quality issues: Strategic Concepts in Organizing and Policy Education (SCOPE) and PSR-LA. Both organizations have an extensive history in the community that demonstrates the level of community engagement necessary for implementing the AB 617 program. For nearly three decades, the SCOPE organization has worked with the community to build grassroots power to advance racial, economic, and environmental justice. In their past and current work, PSR-LA has collaborated with a broad range of community-based

organizations, health professionals and residents who are impacted by the cumulative impacts of poverty and pollution. This work includes tackling complex issues of toxic chemicals, air pollution, healthy land use, and equitable development.

In recent years, PSR-LA and SCOPE partnered together to address the lack of local air pollution data in the South Los Angeles/South Central Los Angeles, due to not having a regulatory monitoring station in this community. They worked to address this concern by having residents install 10 Purple Air sensors to provide information about fine particulate matter (PM2.5) pollution in the community. PSR-LA also spearheaded the South Central Los Angeles Project to Understand the Sources of Air Pollution and Health Impacts (SCLA-PUSH) project, which is funded by the CARB AB 617 Community Air Grants. The SCLA-PUSH project builds capacity of organizations and community residents to better understand the state of air quality and health in their community, and to engage in air monitoring and data analysis. Since its launch in January 2019, the coalition has trained over 70 South Central Los Angeles community residents to engage in air quality policy at the local, regional, and state levels and build the community's collective capacity to understand and assess the scale and character of poor air quality.

These programs and efforts demonstrate the community's ability to partner with other community-based organizations in addition to local, regional and state agencies to leverage the resources necessary to advance environmental, public health and economic opportunity in the region, which is necessary for successful implementation of AB 617 community plans.

Recommendations received in 2020 for this community included nominations from residents, the City of Los Angeles Office of Petroleum and Natural Gas Administration & Safety, the Office of Senator Holly J. Mitchell, the Office of Assemblymember Mike A. Gipson, the Office of Councilmember Marqueece Harris-Dawson, the Office of Councilmember Herb J. Wesson, Jr., Esperanza Community Housing Corporation, Community Development Technologies Center (CDTech), T.R.U.S.T. South L.A, Surfrider Foundation Los Angeles, Community Health Councils, Sunrise Movement Los Angeles, The Los Angeles Trust for Children's Health, Los Angeles Neighborhood Land Trust, PSR-LA, and SCOPE.

Benefits to South Coast AQMD

Implementation of AB 617 will help advance our environmental justice goals to clean the air at a community scale, especially in the most impacted and disadvantaged communities within South Coast AQMD's jurisdiction. The efforts in Year 3 will follow the models set by Year 1 and Year 2 communities for the development of community air monitoring and emission reduction plans and reinforce South Coast AQMD's leadership role in tackling complex local air quality issues. Furthermore, the selection of the South Los Angeles community will demonstrate a commitment to a diversity of communities affected by sources from urban emissions.

Resource Impacts

The AB 617 program implementation costs for future years depend on the number of communities that are designated within the South Coast AQMD and the amount of funding that is available. Although staff continues to work with the California state legislature to secure sustained funding for AB 617 statewide, in June 2020, no additional funding was allocated by the state to support the community plan process for any additional communities for the program. Therefore, staff is seeking direction from the Board to seek additional funding from the California state legislature specifically for development and implementation for potential Year 3 community designation within South Coast AQMD's jurisdiction.

The anticipated additional resource needs for South Coast AQMD's development and implementation of community plans for the South Los Angeles community is $4 to $6 million per year for six years. This estimated cost is based on development and implementation efforts conducted by South Coast AQMD staff for the five total Year 1 and Year 2 communities currently in the AB 617 program.

Attachments

1. Draft Report to CARB (Final Submittal from South Coast AQMD: Year 3 Community Recommendation for AB 617 Implementation)
2. Board Meeting Presentation

Attachment 1

Draft Report to CARB

Final Submittal from South Coast AQMD: Year 3 Community Recommendation for AB 617 Implementation

South Coast AQMD: Community Recommendation for AB 617 Year 3 Community Plan Implementation

Introduction

Background

Assembly Bill (AB) 617, signed into law in 2017, addresses air pollution issues in environmental justice communities through community-focused actions. The law requires the California Air Resources Board (CARB), in consultation with air districts, to select communities for community air monitoring and/or the preparation of community emission reduction programs. AB 617 specifies that the highest priority areas shall be disadvantaged communities with a high cumulative exposure burden for criteria pollutants and toxic air contaminants.

AB 617 requires CARB to select communities on an annual basis to be included in the program for the development of community emissions reduction plans and/or air monitoring plans ("community plans"), as appropriate. Air districts submit annual recommendations to CARB for consideration. In 2018 (Year 1), South Coast AQMD staff submitted a report to CARB with a comprehensive description of South Coast AQMD's public process and technical methodology to identify and assess communities for the AB 617 program, and recommendations for Year 1 communities (see 2018 report to CARB for more information[3]). South Coast AQMD staff followed a similar process and methodology to recommend communities for 2019 (Year 2) as well. In Year 1, CARB designated ten communities statewide, including three communities in the South Coast AQMD, to implement AB 617. In Year 2, CARB designated three additional communities statewide, including two South Coast AQMD communities. The Year 1 and Year 2 designated AB 617 communities in South Coast AQMD are:

- Year 1 – AB 617 Communities
  - East Los Angeles, Boyle Heights, West Commerce
  - San Bernardino, Muscoy
  - Wilmington, Carson, West Long Beach
- Year 2- AB 617 Communities
  - Eastern Coachella Valley
  - Southeast Los Angeles

[3] South Coast AQMD (2018). "Community Recommendations for AB 617 Implementation, Final Submittal from South Coast AQMD", July 31, 2018. Available at: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/submittal-to-carb.pdf

This report contains South Coast AQMD's recommendations for South Los Angeles to be added in Year 3 of the program. The report includes an overview of the approach used to determine the communities for the selection process.

Year 3 Community Selection

Based on the assessment used in Year 1 and Year 2, eighteen communities remained under consideration for implementation in Years 3-7 of the program. Community recommendations for Year 3 selection are based on the existing community identification process from Year 1 and Year 2, along with additional community input and nominations received from outreach conducted in 2020. The following factors were used to identify and prioritize the most heavily burdened community for AB 617 Year 3 implementation:

- Existing community identification and prioritization process used in prior years, including:
  - Prioritizing disadvantaged communities that are disproportionately affected by air pollution. Disadvantaged communities are defined in the California Health and Safety Code Section 39711: "based on geographic, socioeconomic, public health, and environmental hazard criteria"
  - Utilizing appropriate existing data and tools, especially those that have gone through the public process (e.g., air pollution data)
  - Considering school proximity to sources
  - Past community plans or programs
- Additional public input, new air pollution data, and nominations received from outreach meetings
- Additional consideration for geographical diversity and diverse air pollution issues
- Prioritizing communities that demonstrate readiness for collaboration with South Coast AQMD to implement AB 617 plans, such as demonstrating:
  - Knowledge of local air pollution sources
  - Experience and willingness to work with government agencies, organizations, business or business organizations, schools, hospitals, etc.
  - Community engagement and organization around air pollution issues
  - Having resources from local agencies and organizations that would contribute to the rapid implementation of this program
  - Progress with science-based community air pollution projects (e.g., community air sensor projects)

These considerations are reflected as part of the public process, the technical work, and the recommendations described in this report.

Summary of Outreach and Public Input

Outreach

In past years without COVID-19 impacts, extensive outreach was conducted through in-person meeting, flyer distribution, and engagement with environmental justice organizations and community health advocates to support outreach efforts. Due to these impacts, the Community Identification (ID) meeting information was distributed to more than 3,400 subscribers via South Coast AQMD's email distribution and was announced via social media.

In August 2020, staff conducted a virtual Community ID public outreach meeting to gather community input on the selection of Year 3 communities for AB 617 implementation.[4] Approximately 40 people participated in the meeting. Staff presented an overview of South Coast AQMD's regulatory authority, an overview of the AB 617 program, and the selection process for designating Year 3 communities. The presentation containing this information was also provided on the webpage: http://www.aqmd.gov/nav/about/initiatives/community-efforts/environmental-justice/ab617-134/community-identification-prioritization. Members of community organizations and the public participated in the meeting.

During the Community ID public outreach meeting, two commenters spoke in support of South Coast AQMD recommending the South Los Angeles community for Year 3 of the AB 617 program. One commenter expressed concerns about the deadline to submit community self-nominations. To address the commenters' concerns, South Coast AQMD staff extended the deadline from July 31st to August 17th.

Summary of Community Nominations (Self-Recommendations) Received

During the 2020 self-nomination period, staff received self-nominations for the communities listed in the **Table 1** – Year 3 Self-Nominations Received, below.

Table 1 – Year 3 Self-Nominations Received*

Name of the Community Grouping	Nominations (& Number) Received for	Type of Nomination
Inglewood, Hawthorne, Westmont, Vermont	Inglewood (1)	University Student Intern
Santa Ana	Santa Ana (1)	Community-based organization
South Los Angeles, South Central Los Angeles, Hyde Park	South Los Angeles/ South Central Los Angeles (127)	Agencies, Community-based organizations, Elected Officials, Residents
Van Nuys	Van Nuys (1)	Community-based organization

[4] Pursuant to Governor Newsom's Executive Orders N-25-20 (March 12, 2020) and N-29-20 (March 17, 2020), the meeting was conducted virtually to help prevent the spread of COVID-19.

*The community groupings that appear on this list are based on the Year 1 and Year 2 community input and technical analysis. Some adjustments were made to the 2018 community profiles based on the finalized community boundaries of the Year 1 and Year 2 communities.

In the self-recommendation forms, community members provided information on their community, including the purpose of their recommendation and characteristics that make their community a good candidate for the program. Some community self-recommendations were comprehensive and provided a thorough description of the community's air quality priorities and highlighted examples of community readiness. Some communities received several nominations. However, the quality of the content was exhaustively considered in the prioritization process.

Data Sources and Methodology for Community Prioritization

Several technical data sources were used to inform the prioritization methodology, including air toxics cancer risk data from the Multiple Air Toxics Exposure Study (MATES) IV[5], environmental pollution, socioeconomic factors and public health factors from CalEnviroScreen 3.0[6], a metric developed to identify areas with schools near air pollution sources, and air pollution monitoring data from special studies. These data sources are described in detail in the 2018 report to CARB.[7] No new data from MATES or CalEnviroScreen was available as of September 2020.

Methodology for Community Identification and Prioritization

In 2018, staff applied a systematic approach to identify and prioritize communities for AB 617 and to recommend an initial implementation schedule. The Year 3 prioritization adopts this same approach, but information provided in the self-recommendation forms was used to update the "Additional Factors" considered in Step 4, as well as any additional communities identified for consideration. The same list of identified communities from Year 1 had updated boundaries and communities based on Year 1 and Year 2 development. This list was incorporated for Year 3 prioritization with minor modifications. For example, **Figure 1** summarizes the systematic approach used to recommend Year 3 communities:

[5] http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iv
[6] https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30
[7] South Coast AQMD (2018). "Community Recommendations for AB 617 Implementation, Final Submittal from South Coast AQMD", July 31, 2018. Available at: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/submittal-to-carb.pdf

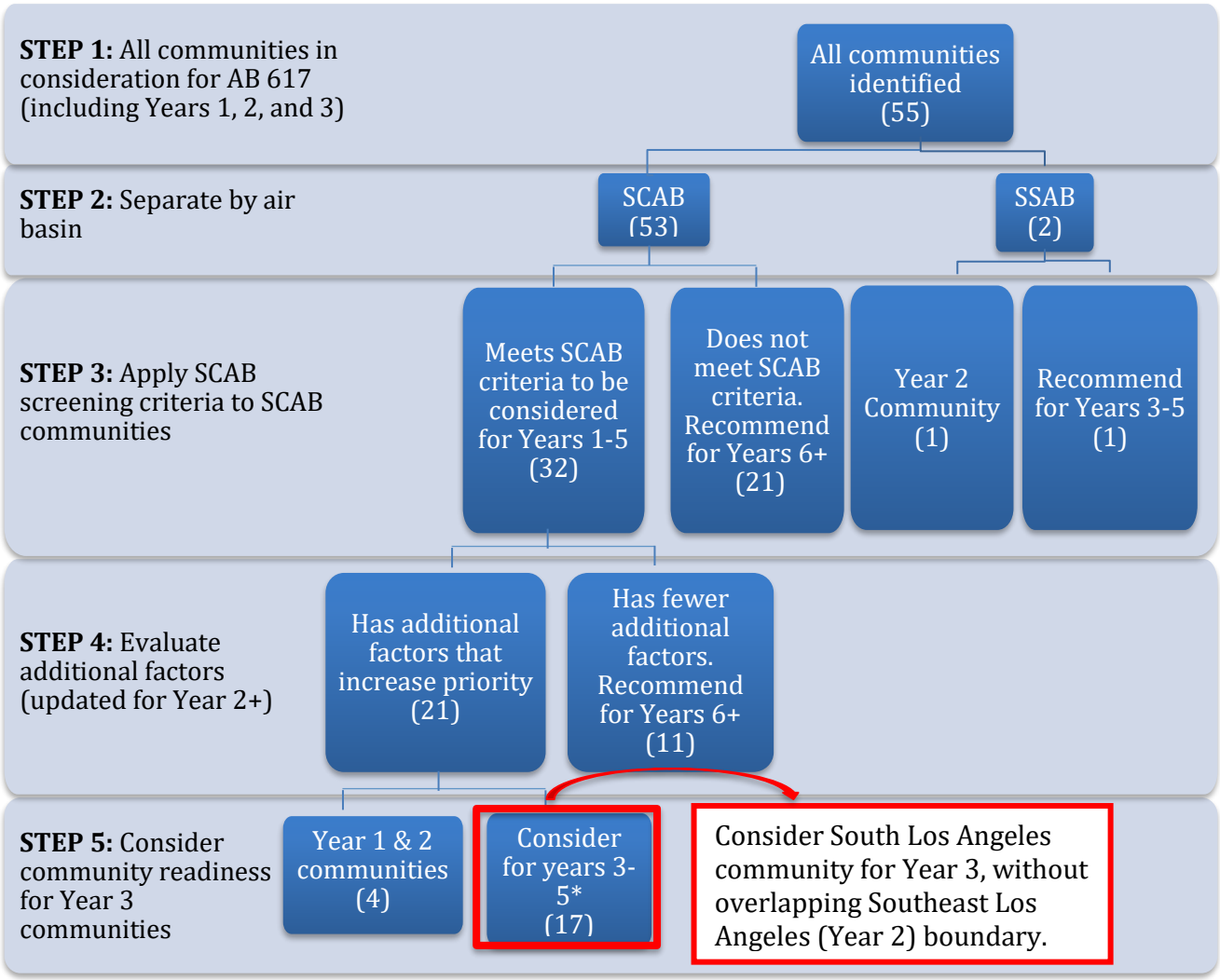


Figure 1. Flow chart to illustrate prioritization methodology. Number in parenthesis represents the number of communities in each category.

Steps 1 through 5 were from the existing process used to determine communities from Year 1 and Year 2 prioritization and selection. Year 3 community recommendations build upon the efforts completed in Year 1 and Year 2. Therefore, communities already selected for Year 1 and Year 2 implementation are included in the following counts. Steps 1 through 5 are outlined below:

STEP 1: To identify communities for consideration for AB 617, staff utilized a broadly inclusive approach, beginning by including census tracts that met one or more of the following three criteria:

a) CalEnviroScreen 3.0 score in the top 25% statewide

b) MATES IV air toxics cancer risk in the top 25% in the South Coast Air Basin (SCAB)
c) Average percentage of industrial land use and freeways within 1,000 feet from school/daycare boundaries was in the top 20%

In addition, communities were included in the preliminary list if South Coast AQMD staff received a community self-recommendation form prior to August 17, 2020. Census tracts were grouped into communities by geographic clustering, often following city or typically understood neighborhood boundaries, as well as communities with common known air pollution sources. A total of 55 communities were identified from both Year 1 and Year 2 combined efforts. However, since three communities were designated for Year 1 and two communities were selected for Year 2, the list of all communities considered for Year 3 includes 50 communities within South Coast AQMD's jurisdiction (**Figure 2**). These community boundaries should be considered preliminary, and the specific boundaries may change with Community Steering Committee input. However, these were the boundaries that South Coast AQMD staff used in order to complete the technical analysis for community prioritization.

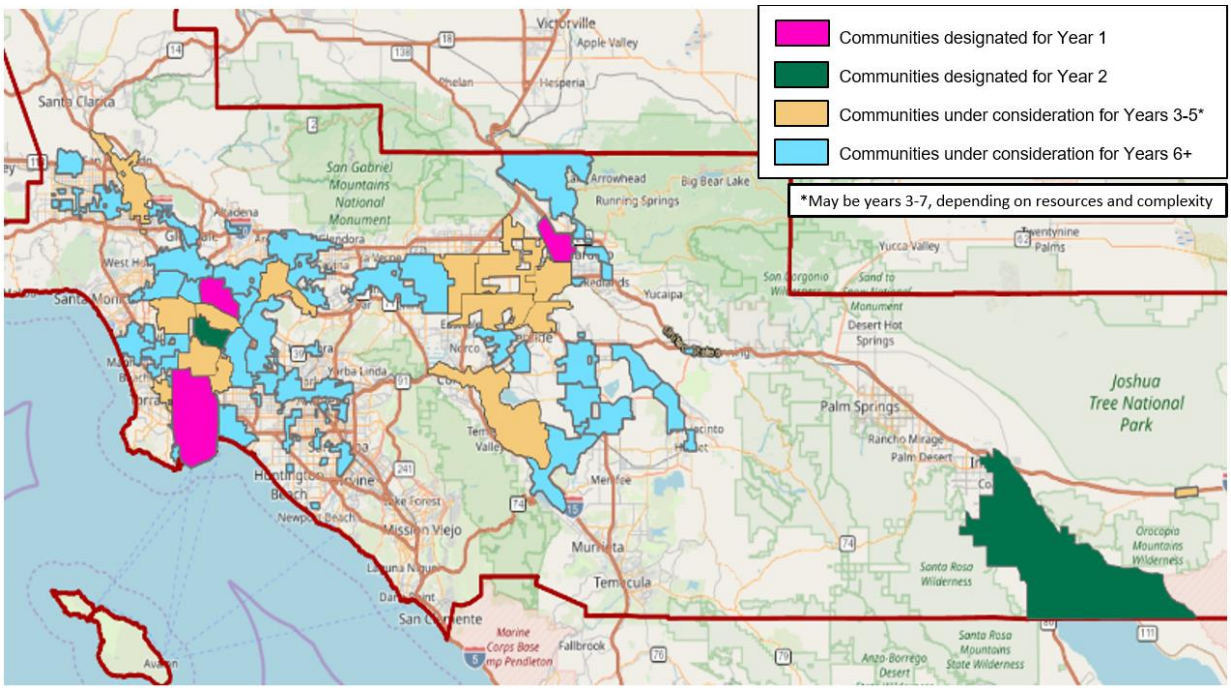


Figure 2. Map showing the preliminary boundaries of the communities under consideration.

STEP 2: During the Year 2 self-nomination process, it was widely recognized that the Coachella Valley has many unique air pollution issues (e.g., the Salton Sea, agricultural pollution, and particulate matter (PM10) in windblown dust) that are very different from those for the SCAB. Therefore, the communities in the Salton Sea Air Basin (SSAB),

were considered independently from communities in the SCAB during Year 2. Based upon the Year 2 self-recommendation forms, two communities were in the SSAB: 1) Eastern Coachella Valley and 2) Chiriaco Summit. The Chiriaco Summit community is geographically separated from the Eastern Coachella Valley community by more than 20 miles; thus, was not considered as part of the Eastern Coachella Valley community for recommendation nor designation for Year 2. This step will continue to be part of the existing assessment process in the event that a future community is nominated from the SSAB that is within South Coast AQMD's jurisdiction for future AB 617 implementation years.

STEP 3: To prioritize 53 communities in the SCAB, staff identified the census tract within each community with the highest percentile score for CalEnviroScreen 3.0 and MATES IV. The following screening criteria was applied for the SCAB communities:

SCAB criteria:

a) Has one or more census tract(s) with a CalEnviroScreen 3.0 score in the top 5% statewide; AND
b) MATES IV air toxics cancer risk in the top 50% in the South Coast AQMD jurisdiction

This step provides a focus on the most heavily burdened communities. Since CalEnviroScreen includes several non-air quality factors, the MATES metric was added to ensure that there is a significant air toxic burden addressed by air-related measures under AB 617. A total of 32 SCAB communities met both these screening criteria.

STEP 4: To further prioritize among the 32 high priority communities in the SCAB, the following additional factors were considered:

a) Self-recommendations received;
b) Past or current air monitoring study findings;
c) Past or current community plans; and
d) School proximity metric in the highest category.

Among the 32 communities in the SCAB that met the Step 3 screening criteria (including Year 1 and Year 2 communities), there were 16 communities that had two or more of these factors and three communities that had a self-recommendation received on or prior to August 17, 2020. These 21 communities are recommended to be considered for Years 3-5 or 3-7, depending on available resources. The remaining 11 communities that had zero or only one factor, but were not self-nominated, are recommended for implementation in Years 6+.

STEP 5: In recommending a Year 3 community, staff evaluated the community's readiness for implementing AB 617. This includes the types of resources that are already available in the communities that would contribute to the rapid and successful

implementation of air monitoring and community emissions reduction plans. These include areas where South Coast AQMD already has placed monitoring resources, where previous emission reduction efforts have occurred, and where additional resources available through AB 617 would expedite air quality improvements in those communities. Other considerations include having broad-based community support, factors demonstrating community readiness, and geographic diversity, with special consideration for communities that could serve as models for future AB 617 communities in California. Such criteria are consistent with the statewide guidance provided by CARB.

For the prioritization, the maximum census tract scores for CalEnviroScreen 3.0, MATES IV, and the school proximity metric were used. A sensitivity analysis using the average of each metric within each community was also conducted. More information about this analysis and the values for the prioritization factors for all communities under consideration for AB 617 implementation can be found in the 2018 report to CARB.

Recommendations

Recommended Implementation Schedule (Year 3, Years 4-5 or 4-8, Years 6+)

Table 2 and **Figure 3** include the initial recommendations for the implementation schedule for all South Coast AQMD communities under consideration for AB 617 implementation. This implementation schedule is subject to change in subsequent years of the program as additional information becomes available that may change the prioritization.

Table 2. List of all South Coast AQMD communities under consideration for AB 617 implementation (grouped by recommended implementation timeframe, then in alphabetical order, by County). This list does not include the communities selected for Year 1 and Year 2.

Community Recommended for Year 3: LOS ANGELES COUNTY • South Los Angeles, South Central Los Angeles, Hyde Park*
Communities Considered for Years 4-5 or 4-8*: LOS ANGELES COUNTY • Compton, Rancho Dominguez, Willowbrook, Lynwood, Watts* • Maywood, Commerce (east), Vernon, Bell, Bell Gardens (north) • El Monte, South El Monte, Avocado Heights, Hacienda Heights, La Puente (west), Bassett • Gardena, Alondra Park, Lawndale • Inglewood, Hawthorne, Westmont, Vermont • Pacoima, North Hollywood, Sun Valley, San Fernando Sylmar • Paramount, North Long Beach • Torrance • Westlake, Korea Town, Midcity, Mid-Wilshire RIVERSIDE COUNTY

- Corona, Temescal Valley
- Mira Loma, Jurupa Valley, Eastvale, Pedley
- Central and East Riverside, Rubidoux
- Chiriaco Summit

SAN BERNARDINO COUNTY
- Bloomington, Fontana, Rialto
- Colton, Grand Terrace, San Bernardino (southwest)
- Rancho Cucamonga, Ontario (east)

ORANGE COUNTY
- Buena Park, Anaheim, Fullerton, Orange

Communities Initially Recommended for Years 6+:

LOS ANGELES COUNTY
- Azusa, Duarte, Monrovia, Arcadia, North 605
- Canoga Park, Northridge, Reseda, Van Nuys, Panorama City, Winnetka, Tarzana
- East Culver City, East Palms
- Downey, Bellflower, North Lakewood, North Cerritos
- Downtown Los Angeles
- Central and South Glendale, Burbank
- Hollywood, Los Feliz, Atwater Village, Echo Park, Silver Lake
- La Puente, Covina, West Covina, Baldwin Park
- East Long Beach
- LAX, Lennox, El Segundo
- Montebello
- Pasadena near I-210
- Porter Ranch
- San Gabriel, Rosemead, Monterey Park, South Alhambra
- San Pedro, Harbor City (east)
- Santa Fe Springs, Norwalk, West Whittier, Los Nietos, Pico Rivera

ORANGE COUNTY
- Costa Mesa
- Huntington Beach
- La Habra
- Santa Ana
- Westminster, Garden Grove, Stanton

RIVERSIDE COUNTY
- Beaumont
- Hemet, San Jacinto
- Lake Elsinore
- Moreno Valley
- Perris, Nuevo
- West Riverside

SAN BERNARDINO COUNTY
- Highland, Crestline
- Redlands, Loma Linda

CROSS-COUNTY
- Cerritos, Artesia, La Mirada, Hawaiian Gardens
- West Ontario, Montclair, Upland, Claremont (south)
- Pomona, Chino, East Walnut, San Dimas (south)

*The community may have some boundary adjustments after Year 3 designation and development process is initiated.

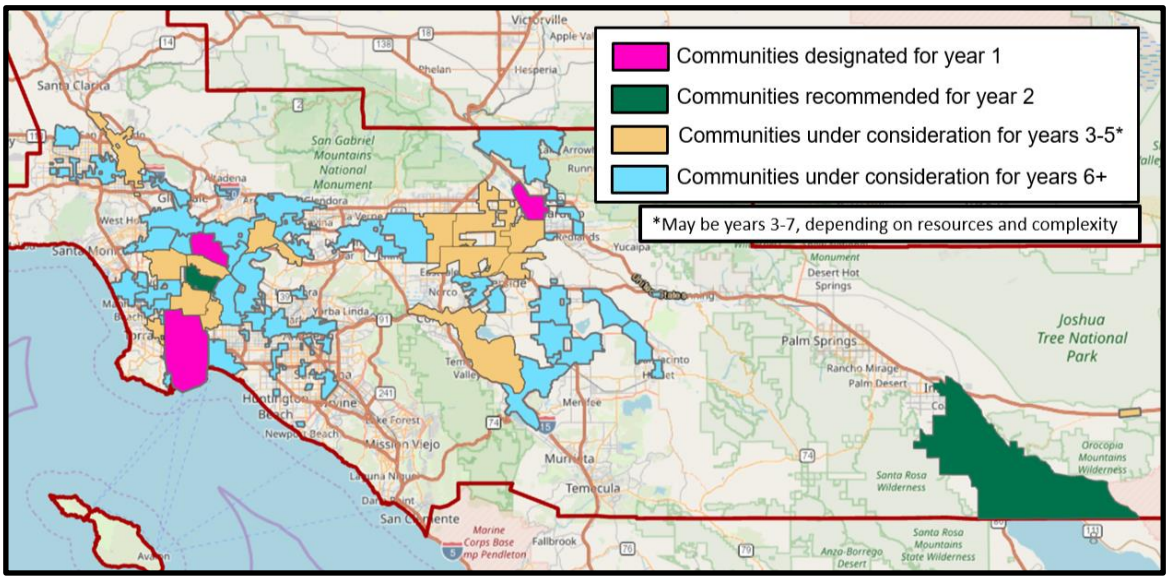


Figure 3. Map showing the Year 1 and Year 2 communities and the recommended implementation schedule for the remaining 50 identified communities.

Communities Recommended for Year 3 Implementation

Below is the summary of the recommended community for Year 3 implementation.

South Los Angeles (Figure 4)

The South Los Angeles community is a densely populated urban community located south and southwest of Downtown Los Angeles. There are multiple sources of pollution in this area which include both mobile sources (e.g., truck and vehicle traffic along I-10 and I- 110) and stationary sources, such as industrial and toxic facilities (e.g., petroleum production and hexavalent chrome facilities). Of the 130 community nominations received, 127 were nominations for the South Central/South Los Angeles community. Including South Los Angeles in the AB 617 program would be an opportunity to

develop a South Coast AQMD model for improving air quality in an urban community through strengthened collaboration with community leaders.

In 2019, based on the results of the technical assessment and public process, the community of South Los Angeles, South Central Los Angeles and Hyde Park was listed a candidate community for years 3-7 of the AB 617 program. This geographic area also includes the neighborhoods of University Park, Exposition Park, Jefferson Park, Leimert Park, Manchester Square, Chesterfield Square, Vermont, and Florence. This community has an average score in the 80.7th percentile for MATES IV and in the 90.6th percentile for CalEnviroScreen 3.0, indicating that this area has a high air toxics burden, as well as impacts from other environmental pollution, public health burdens, and social and economic disadvantages. If approved and designated, staff will work with the future Community Steering Committee (CSC) of South Los Angeles to finalize the community boundary for this area.

South Coast AQMD staff have established partnerships with agencies and organizations that serve this community, which enhances our ability to implement the AB 617 program in this community. Oil field and gas production facilities have been a concern for community members in this area, including the AllenCo oil drilling site. This led to enforcement and special monitoring efforts between 2010 and 2014, where South Coast AQMD inspectors responded to community complaints, conducted facility inspections, and took enforcement actions. In 2013, South Coast AQMD staff initiated monitoring at sites near the facility. Organizations, such as Esperanza Community Housing Corporation, have been working with the community for over a decade around their concerns about urban oil drilling sites. Other organizations, such as PSR-LA, have participated in South Coast AQMD efforts by serving as a member of the Environmental Justice Community Partnership (EJCP) Advisory Council, which is designed to strengthen relationships and build alliances with community members and organizations across the region with the goal of achieving clean air and healthy, sustainable communities for everyone. South Coast AQMD staff has also collaborated with the Los Angeles (LA) County Department of Public Health, LA County Department of Regional Planning, and the City of Los Angeles in development of AB 617 CERPs in Year 1 communities. Representatives from these LA County and City departments are currently serving on the AB 617 Community Steering Committees for two Year 1 communities in LA County and have been engaged throughout this process.

Self-nominations for South Los Angeles provided additional information that demonstrates community readiness for this program. In particular, two organizations have demonstrated leadership and grassroots community engagement around air quality issues: Strategic Concepts in Organizing and Policy Education (SCOPE) and Physicians for Social Responsibility Los Angeles (PSR-LA). Both organizations have an extensive

history in the community that demonstrates the level of community engagement necessary for implementing the AB 617 program. For nearly 3 decades, the SCOPE organization has worked with the community to build grassroots power to advance racial, economic, and environmental justice. In their past and current work, PSR-LA has collaborated with a broad range of community-based organizations, health professionals and residents who are impacted by the cumulative impacts of poverty and pollution. This work includes tackling complex issues of toxic chemicals, air pollution, healthy land use, and equitable development.

In recent years, PSR-LA and SCOPE partnered together to address the lack of local air pollution data in the South Los Angeles/South Central Los Angeles, due to not having a regulatory monitoring station in this community. They worked to address this concern by having residents install 10 Purple Air sensors to provide information about fine particulate matter (PM2.5) pollution in the community. PSR-LA also spearheaded the South Central Los Angeles Project to Understand the Sources of Air Pollution and Health Impacts (SCLA-PUSH) project, which is funded by the California Air Resources Board AB 617 Community Air Grants. The SCLA-PUSH project builds capacity of organizations and community residents to better understand the state of air quality and health in their community, and to engage in air monitoring and data analysis. Since its launch in January 2019, the coalition has trained over 70 South Central Los Angeles community residents to engage in air quality policy at the local, regional, and state levels and build the community's collective capacity to understand and assess the scale and character of poor air quality.

These programs and efforts demonstrate the community's ability to partner with other community-based organizations in addition to local, regional and state agencies to leverage the resources necessary to advance environmental, public health and economic opportunity in the region, which is necessary for successful implementation of AB 617 community plans.

Recommendations received in 2020 for this community included nominations from residents, the City of Los Angeles Office of Petroleum and Natural Gas Administration & Safety, the Office of Senator Holly J. Mitchell, the Office of Assemblymember Mike A. Gipson, the Office of Councilmember Marqueece Harris-Dawson, the Office of Councilmember Herb J. Wesson, Jr., Esperanza Community Housing Corporation, Community Development Technologies Center (CDTech), T.R.U.S.T. South L.A, Surfrider Foundation Los Angeles, Community Health Councils, Sunrise Movement Los Angeles, The Los Angeles Trust for Children's Health, Los Angeles Neighborhood Land Trust, Physicians for Social Responsibility-Los Angeles (PSR-LA), and Strategic Concepts in Organizing and Policy Education (SCOPE).

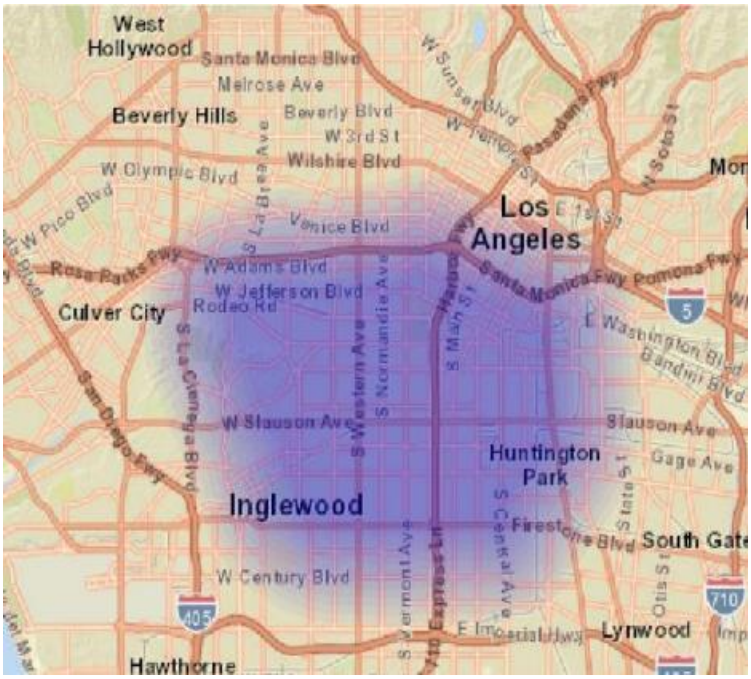


Figure 4. Map showing the general area of South Los Angeles, South Central Los Angeles, and Hyde Park community included in this profile. The community boundary will be finalized after the Community Steering Committee is established and has provided input.

Conclusion and Next Steps

In the coming months, South Coast AQMD will seek additional funding from the California state legislature to support development and implementation of community plans for a Year 3 community. Staff will also conduct targeted community outreach in the Year 3 community of South Los Angeles to establish a steering committee and for each community. In December 2020, CARB will consider these recommendations when designating Year 3 communities for AB 617 community plans, and South Coast AQMD staff looks forward to working with CARB staff on the implementation of AB 617 in the South Los Angeles community.

Appendices

Appendix A: Community Profile for Year 3 Community Recommendation for AB 617 Implementation

Appendix B: Year 3 Outreach Materials

Appendix A

Community Profile for Year 3 Community Recommendation for AB 617 Implementation

Introduction

The community profile in this appendix contains detailed information about the community recommended for Year 3 implementation, the factors that contributed to community selection and prioritization, and existing or previous community monitoring and resources. This profile features a map of the approximate location of the community along with a narrative description of the geographical area, land use characteristics, socioeconomic factors, and major air pollution sources within or near that community. The community profiles also contain summaries of special monitoring studies, incentive measures, and risk reduction programs, such as Assembly Bill (AB) 2588 Risk Reduction Plans (http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588), pertinent to this community. The information is not meant to be exhaustive lists, but a summary of key projects that South Coast AQMD has implemented that help provide air quality information and/or improve air quality in these communities.

Within the profile is a table of key metrics that helped inform the prioritization of communities for the AB 617 program implementation, and other descriptive factors. Some metrics contain both the average value across the community and the maximum value of all the census tracts within the community. South Coast AQMD's jurisdictional average value is also presented in the table, to provide a reference value for comparison.

Each community profile also contains a description of the nearest regulatory monitor(s), which may be located within the community or within close proximity to the community, and the pollutants measured at each monitor. A brief description of past and ongoing special monitoring studies is also presented to highlight the findings of key South Coast AQMD studies within the community, along with webpage links to related information and reports. Additionally, brief summaries of previous or current air toxics risk reduction plans conducted in each community are included.

South Los Angeles

About this Community

The neighborhoods of South Los Angeles, South Central Los Angeles, and Hyde Park are located within the City of Los Angeles where the combined land use is 68% residential, 21% commercial, 7% industrial, 1% transportation, communications, and utility, 1% mixed, and 2% open space. The area has a population of 396,292, including the following race/ethnicity groups: Hispanic or Latino (65.3%), Black or African American (29.3%), White (2.2%), Asian (1.6%), American Indian or Alaska Native (0.1%), and other races (1.5%) . The average percentile scores for this community are 90.6 for CalEnviroScreen 3.0, 80.7 for South Coast AQMD's MATES IV, and 76.4 for diesel particulate matter. Within this area, there are two facilities in the AB 2588 core program, and six facilities that regularly process hexavalent chromium, lead, and/or arsenic. There are also three Title V facilities in this area.

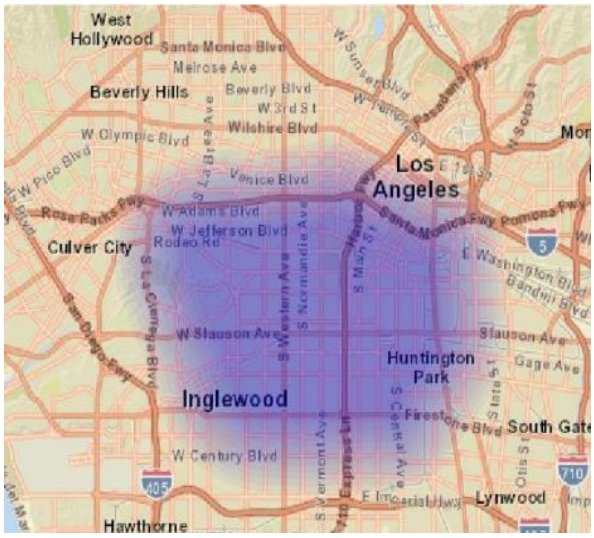


Figure 4: Map showing the general area of South Los Angeles, South Central Los Angeles, and Hyde Park community included in this profile. The community boundary will be finalized after the Community Steering Committee is established and has provided input.

AB 617 Community Data

	Community Average	Community Maximum	Average in SCAQMD's Jurisdiction
MATES			
MATES IV Cancer Risk [percentile]	80.7	99.4	43
MATES IV Cancer Risk [add'l cancer cases per million]	1167.4	1707.3	897
MATES IV non-Diesel Cancer Risk [percentile]	91.1	99.8	

MATES IV non-Diesel Cancer Risk [add'l cancer cases per million]	300.5	631.0	
CalEnviroScreen 3.0			
Overall Score [percentile]	90.6	99.8	60
Ozone [percentile]	40.5	40.5	66
PM2.5 [percentile]	78.6	84.2	68
Diesel Particulate Matter [percentile]	76.4	94.6	58
Population Below Poverty Line [percentile]	89.2	99.9	53
Age-Adjusted Asthma ER Visit Rate [percentile]	81.4	98.2	48
Age-Adjusted Heart Attack ER Visit Rate per 10,000 [percentile]	65.0	93.5	52
Low Birth Weight [percentile]	83.6	99.8	53
Toxic Releases [percentile]	77.1	85.4	72
Age Profile	**Percentage**		
Population under 10 years old [%]	16.6		
Population over 65 years old [%]	7.3		
Diesel Mobile Sources			
Length of Freeways [km]	7.6		
Number of Freight Railyards	0		
Schools and Daycares Near Industrial Sources or Freeways [score]	205.4	1928.0	
Community Self-Nomination Received	Yes		
Overall Prioritization	Year 2-5 or 2-6		

Regulatory monitors in or near the Community

Los Angeles (Central) - North Main Street: CO, NOx, NOy, O3, SO2, PM2.5, PM10, Lead (Pb), continuous PM2.5, continuous PM10, speciated PM2.5, VOCs, multi-metals, hexavalent chromium (Cr6+), carbonyls, PAHs, black carbon (BC), total carbon (TC) The Central Los Angeles Station is a central urban core site in Los Angeles that reflects concentrations and trends due primarily to urban mobile source emissions. Central Los Angeles site is part of STN, NCore, NATTS, and PAMS network.

AT&SF (Exide): Lead (Pb)

Reghrig (Exide): Lead (Pb)

PM2.5 Speciation Trends Network (STN): The PM2.5 chemical speciation urban trends sites include analysis for elements, selected anions, cations, and carbon.

NCore Multipollutant Monitoring Network: The NCore Multipollutant Monitoring Network is a multi-pollutant network that integrates several advanced measurement systems for particles, pollutant gases and meteorology.

National Air Toxics Trends Station (NATTS): The NATTS program was developed to fulfill the need for long-term Hazardous Air Pollutant (HAP) monitoring data of consistent quality nationwide. NATTS monitoring began in February 2007 at the Central Los Angeles station and continues.

Photochemical Assessment Monitoring Stations (PAMS): The PAMS monitoring stations were established to provide an air quality database of ozone and ozone precursors and to track Volatile Organic Compounds (VOCs) and oxides of nitrogen (NOx) emission inventory reductions.
More information about these stations can be found at:
http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-monitoring-network-plan

Special Monitoring Studies in or near the Community

AllenCo Energy, Inc. Special Monitoring

AllenCo Energy, Inc. is an oil field and gas production facility located in the University Park area of the City of Los Angeles. Between 2010 and 2014, SCAQMD inspectors responded to almost 300 odor complaints, conducted more than 150 inspections, and issues 18 notices of violation. In October 2013, the SCAQMD initiated monitoring at sites near the facility, including monitoring for volatile organic compounds (VOCs) at Mount Saint Mary's College, located across the street from AllenCo. In November 2013, AllenCo temporarily shut down operations to repair equipment which was believed to cause the odors. SCAQMD continued to collect VOC samples while AllenCo was shut down. SCAQMD continues to collect samples from this facility.

Diesel Particulate Matter Incentive Programs in the Community

Goods Movement Emission Reduction Projects (Prop. 1B Program)

The Prop. 1B Program provides funding for projects that reduce emissions from goods movement operations. Emissions from diesel equipment, locomotives and vehicles involved in goods movement greatly impact the health of communities located near ports, rail yards, distribution centers and roads with high truck traffic. The Prop. 1B Program is intended to reduce diesel air pollution from goods movement operations and achieve the earliest possible health risk reduction in nearby communities.

Voucher Incentive Program (VIP)

The VIP is a streamlined approach to reduce emissions by replacing old, high-polluting vehicles with newer, lower-emission vehicles. This program is limited to owners/operators with fleets of 10 or fewer vehicles that have been operating at least 75% (mileage-based) in California during the previous 24 months. The goal of this program is to reduce emissions from in-use heavy-duty trucks in small fleets by replacing Engine Model Years 2009 and older with Engine Model Years 2013 (or newer) emissions compliant models.

Carl Moyer Program (CMP)

The purpose of the CMP is to obtain emission reductions of NOx, PM10 and Reactive Organic Gases (ROG) from heavy-duty vehicles and other equipment operating in

California as early and as cost-effectively as possible. The CMP provides financial incentives to assist in the purchase of cleaner-than-required engine and equipment technologies to achieve emission reductions that are real, surplus, quantifiable and enforceable.

Clean School Buses

Under this program SCAQMD provides substantial incentives to public school districts to purchase new very clean natural gas buses and low-emitting diesel buses. SCAQMD has provided further incentives to both school districts and private operators to install particulate trap filters that eliminate 85 percent or more of particulates in diesel exhaust. As of 2016, SCAQMD has awarded nearly $300 million to replace nearly 1,600 pre-1994 school buses with clean alternative school buses having the latest safety features. Overall, as a result of these awards, about 4,900 school buses are currently operating that meet stringent air quality standards. At about 60 to 70 kids being transported per bus, this translates to nearly 300,000 kids traveling daily in some of the cleanest school buses in the country, the vast majority of them in Environmental Justice areas. The SCAQMD program is, thus, the largest of its kind in the country.

Ongoing and Prior AB 2588 Risk Reduction Plans (RRP)

Palace Plating

Palace Plating was a metal finishing facility located at 710 E 29th Street in the City of Los Angeles and it is currently inactive. In January 2004, the facility's RRP was approved, which was subsequently fully implemented. The cancer risk driver was hexavalent chromium and the non-cancer chronic and acute risk drivers were chlorine.

Appendix B

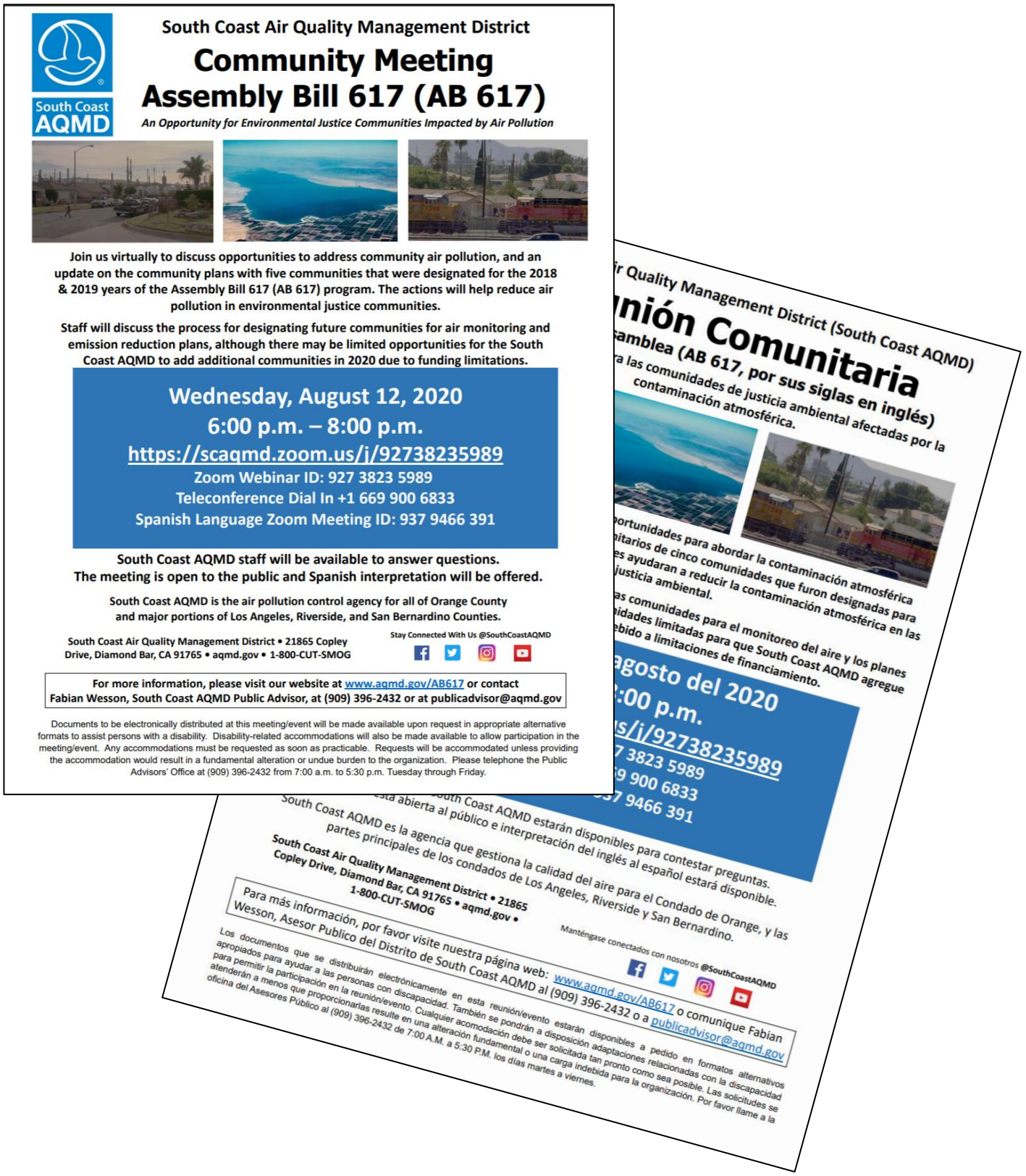
Outreach Materials

Introduction

In an effort to solicit public input from community members and stakeholders, South Coast AQMD staff generated specialized outreach materials that informed the general public about AB 617 at the Community Identification Meeting conducted virtually in August 2020. Appendix B contains the materials used to disseminate information to the public through electronic distribution and social media in English and Spanish. Translation services were also available at this meeting. The outreach materials are listed below.

- **Image 1a & 1b** – Outreach Flyers – Virtual Community Meeting (English/ & Spanish)
    - http://www.aqmd.gov/docs/default-source/ab-617-ab-134/community-id-meeting-flyer-august-12-2020.pdf
- **Image 2** – Social Media Graphic – Virtual Community Meeting (English/Spanish)
- **Image 3a** – Community Self-Recommendation Form (English)
    - English: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/2020-community-self-recommendation-form.pdf
- **Image 3b** – Community Self-Recommendation Form (Spanish)
    - Spanish: http://www.aqmd.gov/docs/default-source/ab-617-ab-134/2020-self-rec-form-span.pdf
- **Image 3c** – Community Self-Recommendation Web-based Form (Website can toggle to English/Spanish)
    - http://www.aqmd.gov/nav/about/initiatives/community-efforts/environmental-justice/ab617-134/ab617form
- **Image 4** – AB 617 Webpage
    - http://www.aqmd.gov/nav/about/initiatives/community-efforts/environmental-justice/ab617-134
- **Image 5** – Interactive Map
    - http://xappprod.aqmd.gov/AB617CommunityAirMonitoring/Home

Images 1a & 1b – Outreach Flyers – Virtual Community Meeting (English & Spanish)



South Coast Air Quality Management District

Community Meeting
Assembly Bill 617 (AB 617)

An Opportunity for Environmental Justice Communities Impacted by Air Pollution

Join us virtually to discuss opportunities to address community air pollution, and an update on the community plans with five communities that were designated for the 2018 & 2019 years of the Assembly Bill 617 (AB 617) program. The actions will help reduce air pollution in environmental justice communities.

Staff will discuss the process for designating future communities for air monitoring and emission reduction plans, although there may be limited opportunities for the South Coast AQMD to add additional communities in 2020 due to funding limitations.

Wednesday, August 12, 2020
6:00 p.m. – 8:00 p.m.
https://scaqmd.zoom.us/j/92738235989
Zoom Webinar ID: 927 3823 5989
Teleconference Dial In +1 669 900 6833
Spanish Language Zoom Meeting ID: 937 9466 391

South Coast AQMD staff will be available to answer questions.
The meeting is open to the public and Spanish interpretation will be offered.

South Coast AQMD is the air pollution control agency for all of Orange County and major portions of Los Angeles, Riverside, and San Bernardino Counties.

South Coast Air Quality Management District • 21865 Copley Drive, Diamond Bar, CA 91765 • aqmd.gov • 1-800-CUT-SMOG

Stay Connected With Us @SouthCoastAQMD

For more information, please visit our website at www.aqmd.gov/AB617 or contact Fabian Wesson, South Coast AQMD Public Advisor, at (909) 396-2432 or at publicadvisor@aqmd.gov

Documents to be electronically distributed at this meeting/event 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 meeting/event. Any accommodations must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to the organization. Please telephone the Public Advisors' Office at (909) 396-2432 from 7:00 a.m. to 5:30 p.m. Tuesday through Friday.

ir Quality Management District (South Coast AQMD)

nión Comunitaria

amblea (AB 617, por sus siglas en inglés)

a las comunidades de justicia ambiental afectadas por la contaminación atmosférica.

ortunidades para abordar la contaminación atmosférica
itarios de cinco comunidades que furon designadas para
es ayudaran a reducir la contaminación atmosférica en las
justicia ambiental.

as comunidades para el monitoreo del aire y los planes
idades limitadas para que South Coast AQMD agregue
ebido a limitaciones de financiamiento.

agosto del 2020
:00 p.m.
s/j/92738235989
7 3823 5989
9 900 6833
7 9466 391

South Coast AQMD estarán disponibles para contestar preguntas.
sta abierta al público e interpretación del inglés al español estará disponible.

South Coast AQMD es la agencia que gestiona la calidad del aire para el Condado de Orange, y las partes principales de los condados de Los Angeles, Riverside y San Bernardino.

South Coast Air Quality Management District • 21865 Copley Drive, Diamond Bar, CA 91765 • aqmd.gov • 1-800-CUT-SMOG

Manténgase conectados con nosotros @SouthCoastAQMD

Para más información, por favor visite nuestra página web: www.aqmd.gov/AB617 o comunique Fabian Wesson, Asesor Publico del Distrito de South Coast AQMD al (909) 396-2432 o a publicadvisor@aqmd.gov

Los documentos que se distribuirán electrónicamente en esta reunión/evento estarán disponibles a pedido en formatos alternativos apropiados para ayudar a las personas con discapacidad. También se pondrán a disposición adaptaciones relacionadas con la discapacidad para permitir la participación en la reunión/evento. Cualquier acomodación debe ser solicitada tan pronto como sea posible. Las solicitudes se atenderán a menos que proporcionarlas resulte en una alteración fundamental o una carga indebida para la organización. Por favor llame a la oficina del Asesores Público al (909) 396-2432 de 7:00 A.M. a 5:30 P.M. los días martes a viernes.

Image 2 – Social Media Graphic – Virtual Community Meeting (English/Spanish)

Image 3a – Community Self-Recommendation Form (English)

South Coast AQMD

2020
AB 617 Community Self-Recommendation Form

Please fill out this form by **August 17, 2020 at 5 p.m.** and

Email it to: *ab617@aqmd.gov* OR Mail it to: *Attn: AB617 forms, 21865 Copley Dr., Diamond Bar, CA 91765*

Note: Information provided by you on this worksheet (including contact or other personal information) is a public record and may be released in response to a California Public Records Act request

Date:

Contact Information

1. First and Last Name:
2. Phone:
3. Email:
4. Organization (if applicable):

Input on Community Selection and Priorities

5. Was this community or community area recommended in the previous year?
6. Is there any new information available from 2019-2020 that could be considered in prioritizing communities for this program?

Community Information

7. Community Name (as known by community members):
8. What areas does this community include? (City Name, Neighborhood Name, and Zip Code):

Page 1 of 2

a community air
issions reduction

it a good candidate for this
ngaged community
ng community plans, and
ith diverse stakeholders
ses, schools, hospitals,

Additional Information

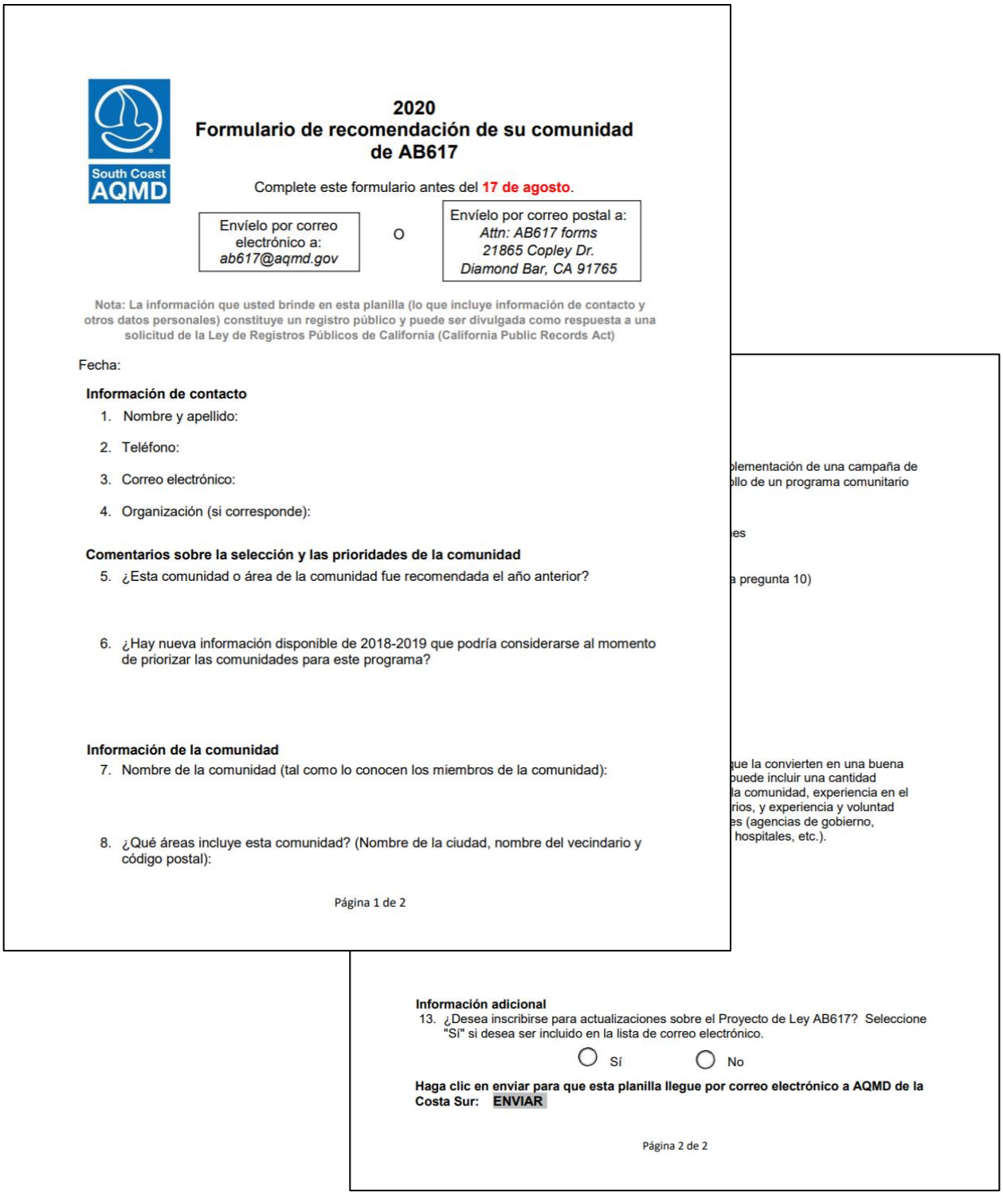
12. Would you like to sign up for updates on AB617? Select "Yes" to be included in the e-mail list.

Yes No

Please save and email this worksheet to *ab617@aqmd.gov*

Page 2 of 2

Image 3b – Community Self-Recommendation Form (Spanish)



2020
Formulario de recomendación de su comunidad de AB617

Complete este formulario antes del **17 de agosto**.

Envíelo por correo electrónico a: *ab617@aqmd.gov*

O

Envíelo por correo postal a: *Attn: AB617 forms 21865 Copley Dr. Diamond Bar, CA 91765*

Nota: La información que usted brinde en esta planilla (lo que incluye información de contacto y otros datos personales) constituye un registro público y puede ser divulgada como respuesta a una solicitud de la Ley de Registros Públicos de California (California Public Records Act)

Fecha:

Información de contacto

1. Nombre y apellido:
2. Teléfono:
3. Correo electrónico:
4. Organización (si corresponde):

Comentarios sobre la selección y las prioridades de la comunidad

5. ¿Esta comunidad o área de la comunidad fue recomendada el año anterior?
6. ¿Hay nueva información disponible de 2018-2019 que podría considerarse al momento de priorizar las comunidades para este programa?

Información de la comunidad

7. Nombre de la comunidad (tal como lo conocen los miembros de la comunidad):
8. ¿Qué áreas incluye esta comunidad? (Nombre de la ciudad, nombre del vecindario y código postal):

Página 1 de 2

lementación de una campaña de
llo de un programa comunitario

es

a pregunta 10)

que la convierten en una buena
puede incluir una cantidad
la comunidad, experiencia en el
rios, y experiencia y voluntad
es (agencias de gobierno,
hospitales, etc.).

Información adicional

13. ¿Desea inscribirse para actualizaciones sobre el Proyecto de Ley AB617? Seleccione "Sí" si desea ser incluido en la lista de correo electrónico.

○ Sí ○ No

Haga clic en enviar para que esta planilla llegue por correo electrónico a AQMD de la Costa Sur: ENVIAR

Página 2 de 2

Image 3c – Community Self-Recommendation Web-based Form

Image 4 – AB 617 Webpage

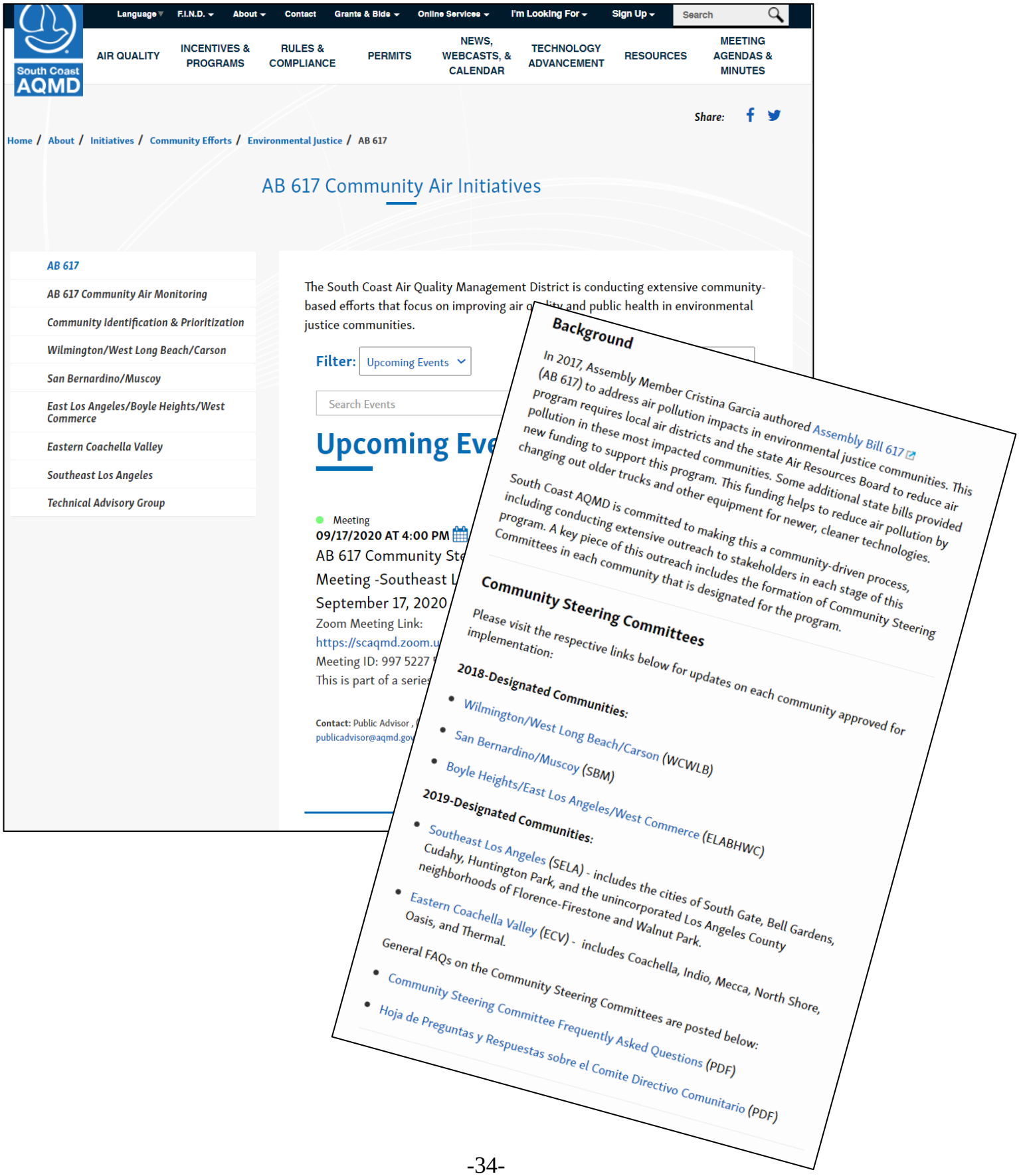


Image 4 – AB 617 Webpage (continued)

Community Identification & Prioritization Process, Meetings and Documents

South Coast AQMD is hosting a series of meetings to seek input on how to prioritize communities in our region for future air monitoring and emission reduction programs. These pages will contain meeting documents such as presentations, fact sheets, an infographic, community input and South Coast AQMD's recommendations to CARB:

- 2020 Community Identification & Prioritization
- 2019 Community Identification & Prioritization
- 2018 Community Identification & Prioritization

Forms

Community Steering Committee Interest:

To be considered for a Community Steering Co
Community Steering Committee Interest Form

- Community Steering Committee Interest F

AB 617 Program Components

AB 617 is a wide-reaching program, and co
including:

1. **Community Plans:** Communities may
Reduction Plan (CERP), a Community
plans are developed in close collabor
Community Steering Committees. Te
with the AB 617 Technical Advisory
order to address the community's t
of strategies, including commitmer
enforcement, outreach to busines
projects, and collaborations with
2. **"BARCT" Implementation:** Sout
reduce air pollution and adopt o
Retrofit Control Technology (BA
greenhouse gas cap and trade
share the BARCT information

South Coast AQMD

Language | F.I.N.D. | About | Contact | Grants & Bids | Online Services | I'm Looking For | Sign Up | Search

AIR QUALITY | INCENTIVES & PROGRAMS | RULES & COMPLIANCE | PERMITS | NEWS, WEBCASTS, & CALENDAR | TECHNOLOGY ADVANCEMENT | RESOURCES | MEETING AGENDAS & MINUTES

Home / About / Initiatives / Community Efforts / Environmental Justice / AB 617 / Community Identification & Prioritization

Share:

2020 Community Identification & Prioritization

South Coast AQMD will host a series of meetings to seek input on how to prioritize communities in our region for future air monitoring and emission reduction programs.

2020 Meetings & Activity

Communities may submit self-recommendations for the AB 617 program. However, please note that the funding for this program may be limited and there may be limited opportunities for the South Coast AQMD to add additional communities in 2020. To submit a self-recommendation, please send a letter to ab617@aqmd.gov with the Subject line "Community Self-Recommendation". The letter should include your contact information, the name and description of the community you are recommending, a description of the air pollution issues in this community, and the reasons why this community is a good candidate for the AB 617 program.

Community Self-Recommendation Form:

(The deadline for self-recommendation form submission was August 17, 2020.)

- Web Form
- Fillable Form: English (PDF) Español (PDF)

2020 Meetings & Activity

Wednesday, August 12, 2020 - Community Identification Workshop

- Meeting Flyer: English/Español (PDF)
- Meeting Presentation: English/Español (PDF)
- Facebook Live - archived video

- 2019 Community Identification & Prioritization
- 2018 Community Identification & Prioritization

Image 5 – Interactive Map – Community Air Monitoring

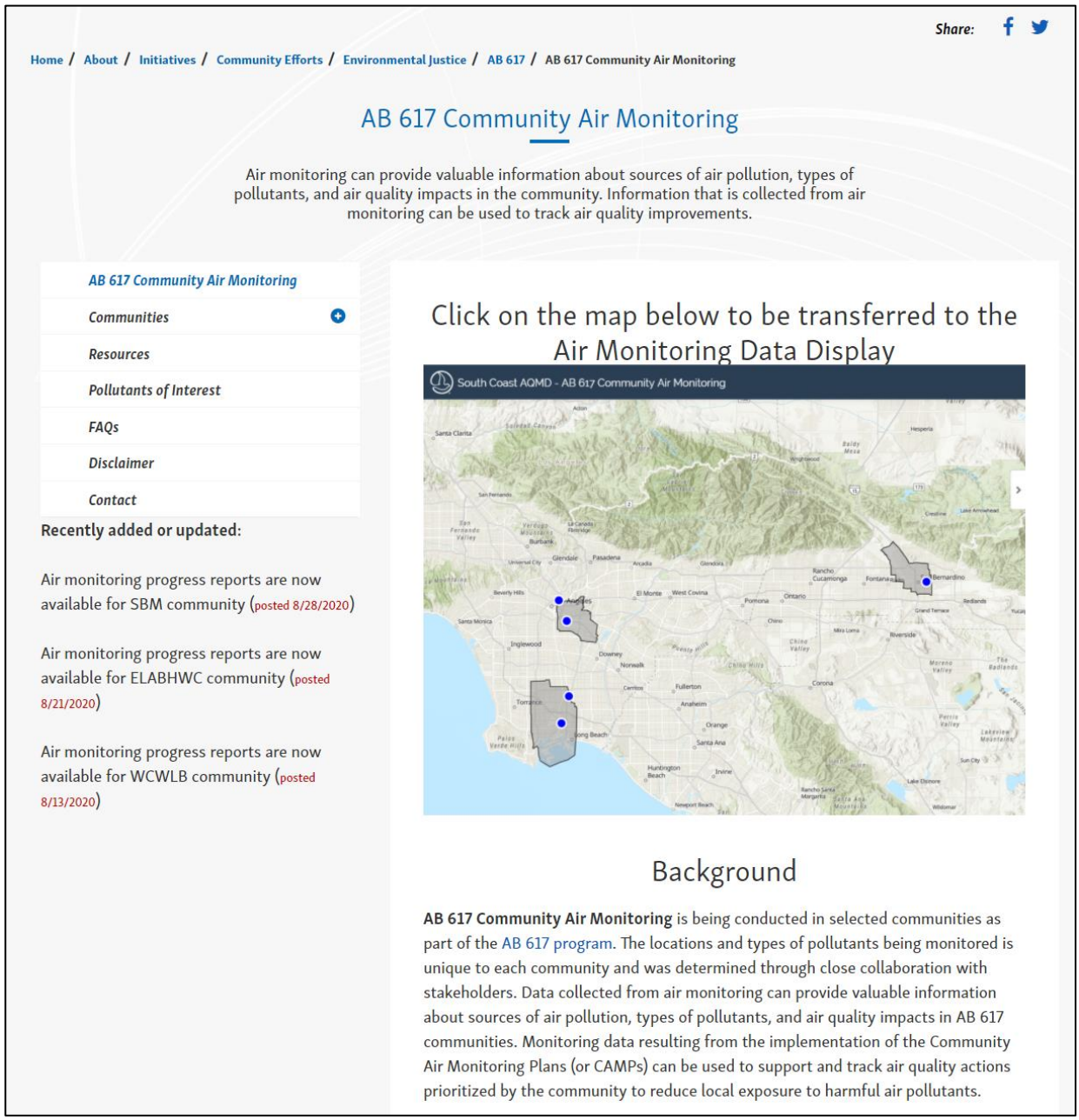
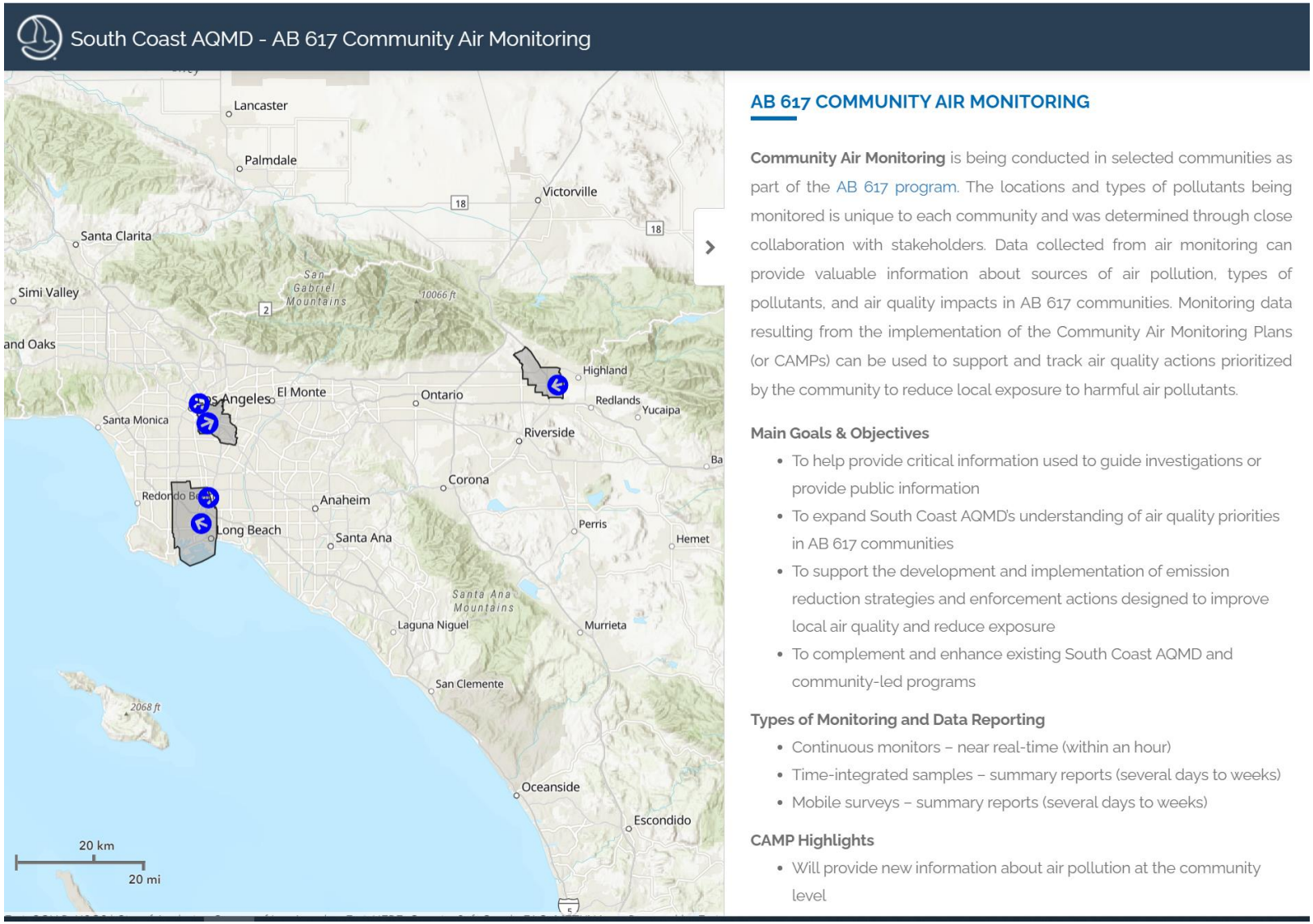


Image 5 – Interactive Map – Community Air Monitoring (continued)



Recommendation for Year 3 Implementation of Assembly Bill 617

Board Meeting
October 2, 2020

South Coast AQMD

ASSEMBLY BILL (AB) 617

- Signed into law July 26, 2017
- Requires a statewide strategy to reduce toxic air contaminants and criteria pollutants in disadvantaged communities
- Requires the selection of additional communities or locations annually as appropriate*

*Health and Safety Code §44391.2(c)(1)

AB 617 DESIGNATED COMMUNITIES IN SOUTH COAST AQMD

Designated in 2018 (Year 1)

Wilmington, Carson, West Long Beach

San Bernardino, Muscoy

East Los Angeles, Boyle Heights, West Commerce

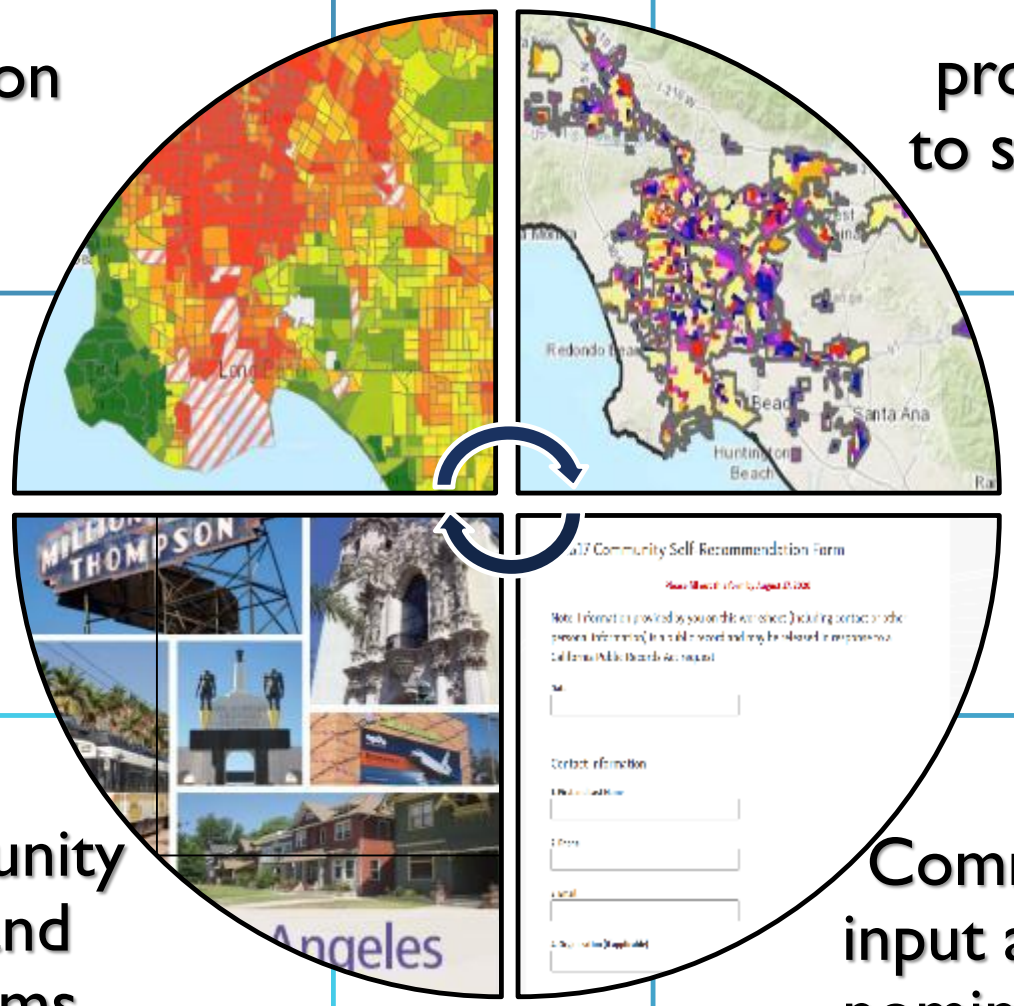
Designated in 2019 (Year 2)

Southeast Los Angeles

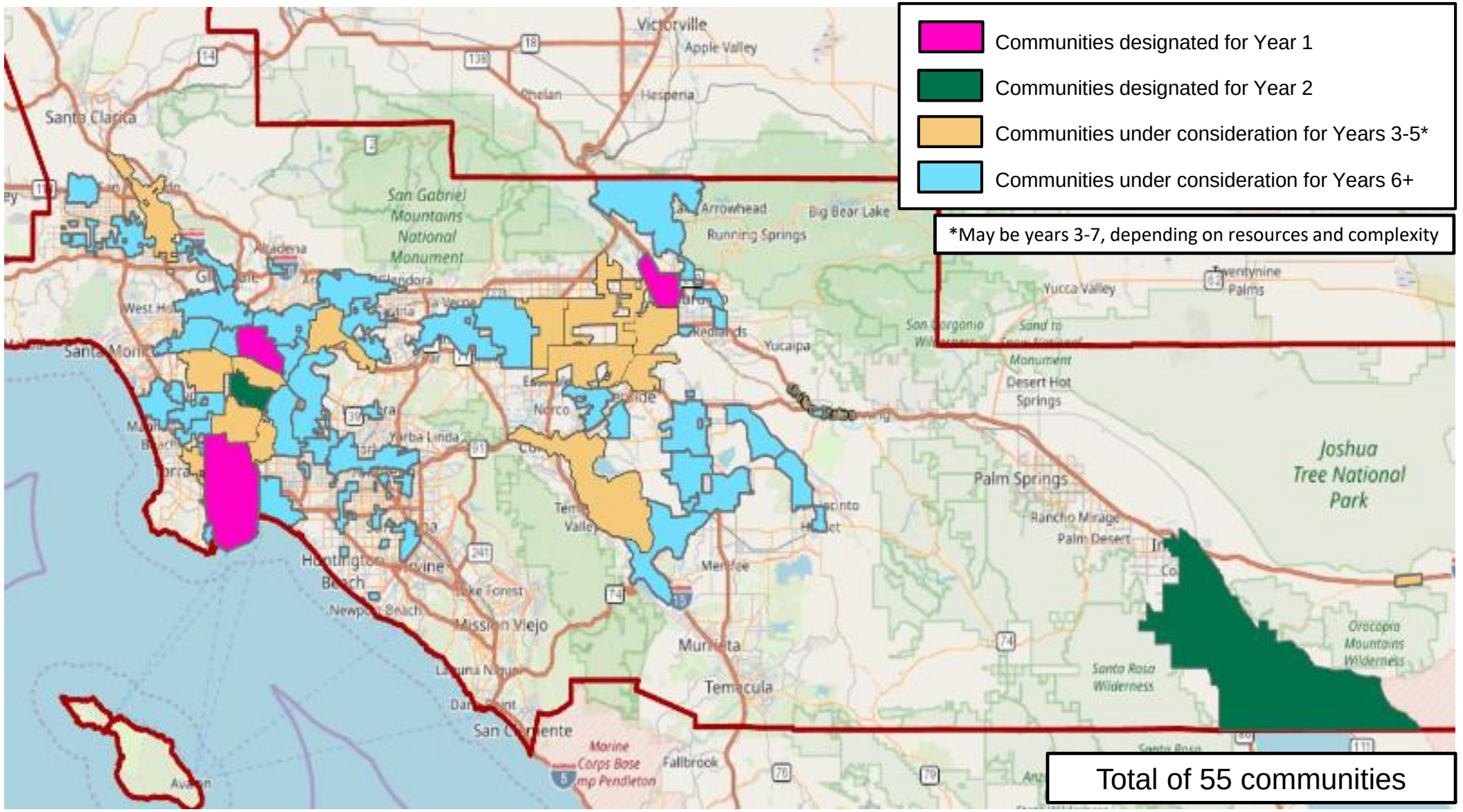
Eastern Coachella Valley

COMMUNITY IDENTIFICATION AND PRIORITIZATION PROCESS

- Building on 2018 & 2019 efforts
- Virtual community meeting (August 2020)



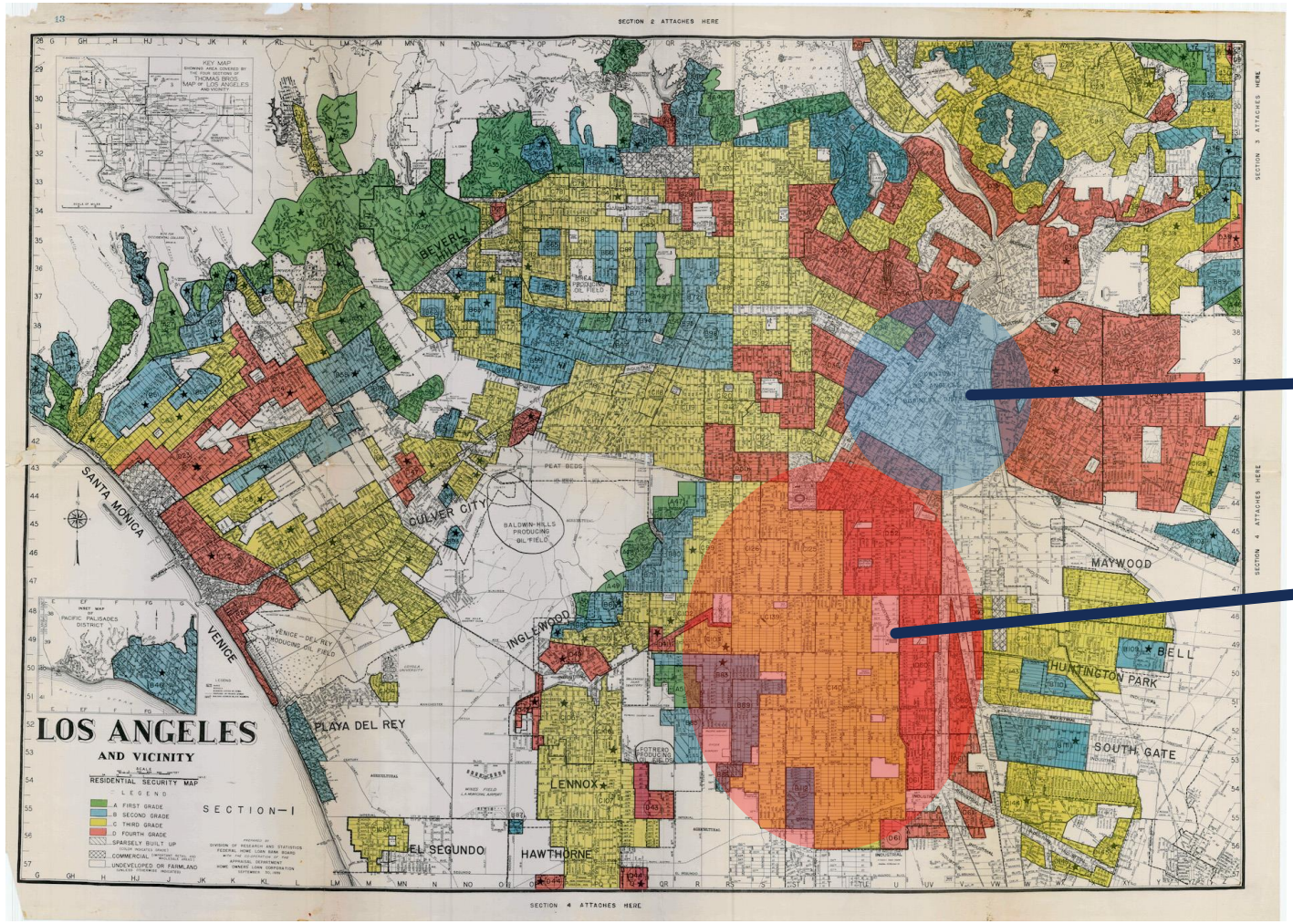
COMMUNITIES UNDER CONSIDERATION



YEAR 3 NOMINATIONS RECEIVED

- 130 nominations received including:
  - South Los Angeles, South Central Los Angeles, Inglewood (128)
  - Van Nuys (1)
  - Santa Ana (1)
- Nominations from residents, elected officials, and community-organizations highlight burdens on communities
  - "Overexposed to a variety of air pollutants emitted by a range of air pollution sources and health disparities are further compounded by social stressors and incompatible land uses" – elected official
  - "South Central Los Angeles (SCLA) community [has] a range of issues: toxics, air pollution & climate change, land use & community development, displacement, and oil and gas extraction." – Physicians for Social Responsibility-Los Angeles (PSR-LA)

THE SOUTH LOS ANGELES COMMUNITY: A HISTORICAL PERSPECTIVE

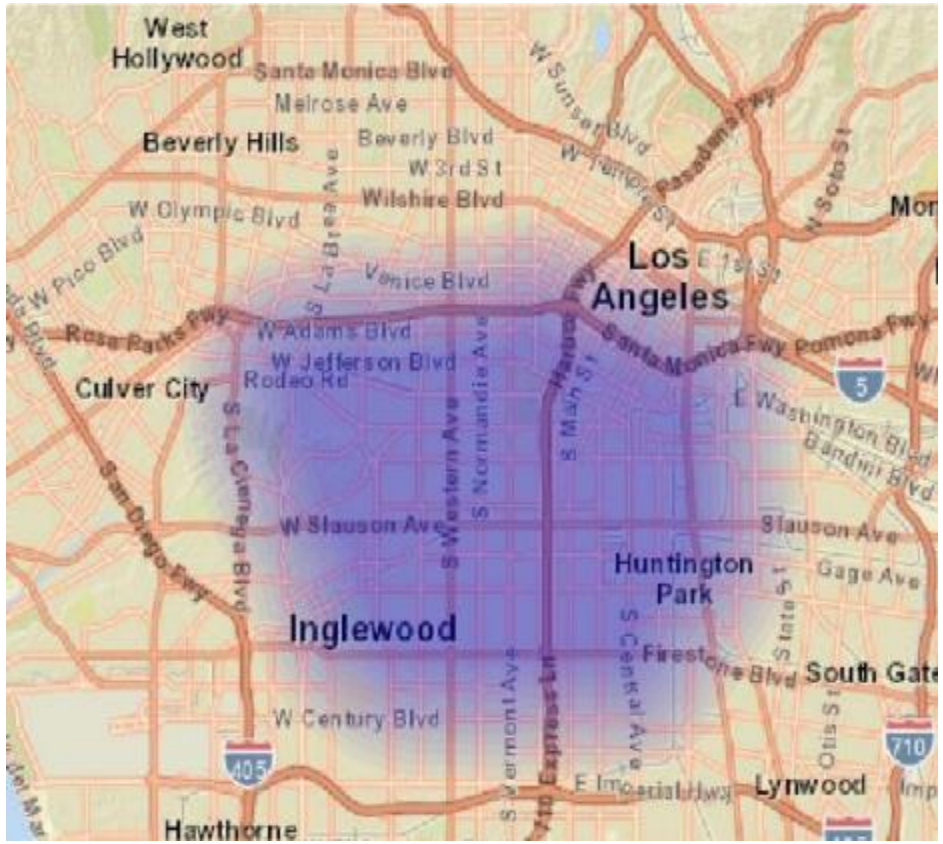


Downtown LA

South LA

Photo credit: https://www.kcet.org/shows/lost-la/segregation-in-the-city-of-angels-a-1939-map-of-housing-inequality-in-la

STAFF RECOMMENDATION: SOUTH LOS ANGELES* FOR YEAR 3 AB 617 COMMUNITY SELECTION



**Final community boundary will be determined as part of community engagement process*

- Community ranks in the 90.6th percentile in CalEnviroSceen 3.0 and in the 80.7th percentile for MATES IV
- Preliminary boundary includes: Hyde Park, Jefferson Park, University Park, Exposition Park, Historic South Central, Vermont, Florence
- Population: 396,292
- Race/Ethnicity: Hispanic or Latino (65.3%), Black or African American (29.3%), White (2.2%), Asian (1.6%), American Indian or Alaska Native (0.1%), and other races (1.5%)

SOUTH LOS ANGELES COMMUNITY SUPPORT FOR INCLUSION IN AB 617 PROGRAM

- September Stationary Source Committee: public comments provided by community-based organizations, residents, and agencies supporting the South Los Angeles community
- Organizations conveyed community readiness:
  - Community-led air pollution data collection
  - Training program to build community capacity to support air quality improvement efforts
  - Experience working with land use agencies and other agencies' policy development efforts
  - Participation in AB 617 statewide consultation group
  - Willingness to work to secure resources or develop partnerships to identify resources to support community plan development and implementation

Photo courtesy of SCLA-PUSH project and PSR-LA

PSR LA
Physicians for Social Responsibility Los Angeles

SCOPE
STRATEGIC COMMUNITY AGENDA

Esperanza
COMMUNITY HOUSING

SCLA PUSH

CHC Community Health Councils

Photo courtesy of SCLA-PUSH project and PSR-LA

STAFF RECOMMENDATION: REQUEST FOR FUNDING FOR SOUTH LOS ANGELES

- Staff recommends working with the Legislature to seek $4-$6 million annually for at least six years to support AB 617 implementation in the South Los Angeles community
- Significant resources required to implement community emissions reduction and air monitoring plans
- State budget (2020-2021) for AB 617 implementation remained at the same level as previous year

NEXT STEPS

- October 2020
  - Staff submits Year 3 recommendation to CARB staff, as approved by Board
- October – December 2020
  - Seek funding for Year 3 implementation, as directed by Board
- December 2020
  - CARB considers communities for AB 617 designation

RECOMMENDED ACTIONS

- Approve the recommendation of the South Los Angeles community to CARB for their consideration in selecting communities for the AB 617 program; and
- Direct staff to seek funding from the Legislature, in the amount of $4-$6 million per year for at least six years, to support the development and implementation of the community plans in the South Los Angeles community.

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 28

PROPOSAL: Certify Final Environmental Assessment and Adopt Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

SYNOPSIS: Proposed Rule 1179.1 (PR 1179.1) establishes NOx, VOC, and CO emission limits for boilers, process heaters, engines, and turbines at Publicly Owned Treatment Works facilities. PR 1179.1 will consolidate requirements from existing source-specific rules and incorporates new requirements for turbines, which are currently exempt from existing source-specific rules. PR 1179.1 also includes provisions for starting up and shutting down equipment, and monitoring, reporting and recordkeeping.

COMMITTEE: Stationary Source, August 21, 2020, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached Resolution:
1. Certifying the Final Environmental Assessment for Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities; and
2. Adopting Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities.

Wayne Nastri
Executive Officer

PMF:SN:MM:KO:MG

Background

In 2018 during the rulemaking for Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters and Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, representatives from the Southern California Association of Publicly Owned Treatment Works highlighted challenges that are unique to treating municipal wastewater such as use of digester gas instead of natural gas in combustion equipment, financial constraints due to public funding and that they provide an essential public service. In response, staff recommended that provisions for combustion equipment at publicly owned treatment works (POTWs) and landfills be separated from existing source-specific rules and to

consolidate provisions for combustion equipment at POTWs and landfills in separate rules. Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities, (PR 1179.1) consolidates provisions for combustion equipment at POTWs from existing rules that establish emission limits for units using digester gas as well as establishing emission limits for units at POTWs that are currently not regulated under existing source-specific rules.

Public Process

The development of PR 1179.1 was conducted through a public process. A working group was formed that included POTW representatives, equipment vendors, other agencies, community and environmental groups and other interested parties. Five working group meetings were held to discuss rule concepts. A public workshop was held on July 22, 2020 to present the proposed rule to the general public and to stakeholders. Staff also conducted multiple site visits and has met with individual facility operators to better understand issues unique to their operations and work through key issues.

Proposal

Through the PR 1179.1 rulemaking process, a detailed BARCT analysis was performed for boilers and turbines recognizing the unique challenges of burning digester gas. PR 1179.1 incorporates the emission limits and other provisions related to the use of digester gas under Rules 1146 and 1146.1 for boilers and process heaters and Rule 1110.2 - Emissions from Gaseous- and Liquid-Fueled Engines, for engines. PR 1179.1 establishes NOx and CO emission limits for boilers, process heaters and engines burning digester gas or those units capable of burning digester and natural gas and VOC emission limits for engines. Emission limits for these units are the same as those in Rules 1146 and 1146.1 for boilers and heaters and Rule 1110.2 for engines. PR 1179.1 also includes NOx and CO emission limits for small boilers and process heaters at or below 2 MMBtu/hour using digester gas, which are currently unregulated.

Since turbines at POTWs are currently exempt from Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines, PR 1179.1 establishes NOx and CO emission limits for turbines burning digester gas, natural gas and units capable of burner digester and natural gas. Based on the BARCT analysis, turbines greater than or equal to 0.3 MW are required to meet a NOx emission limit of 18.8 ppm. PR 1179.1 also establishes NOx and CO emission limits for digester gas and dual fuel turbines that are less than 0.3 MW. Other provisions in PR 1179.1 include equipment-specific averaging times, and startup and shutdown requirements, and monitoring, reporting and recordkeeping requirements.

Emission Reductions

NOx emissions in 2019 were 0.20 tons per day. Implementation of PR 1179.1 would result in the reduction of NOx emissions from this baseline by 0.05 tons per day. Reductions would be achieved with a change to the control method process on three

turbines at one facility. PR 1179.1 and the NOx emission reductions will be submitted into the State Implementation Plan.

Key Issues
Throughout the rulemaking process, staff has worked with stakeholders to resolve issues regarding the applicability, emission limits for dual fuel units, proposed emission limits, startup and shutdown provisions and the implementation schedule. Staff is not aware of any remaining key issues.

California Environmental Quality Act
PR 1179.1 is considered a "project" as defined by the California Environmental Quality Act (CEQA) and the South Coast AQMD is the designated lead agency. Pursuant to South Coast AQMD's Certified Regulatory Program (Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l); codified in South Coast AQMD Rule 110) and CEQA Guidelines Section 15070, the South Coast AQMD has prepared a Final Environmental Assessment (EA) for PR 1179.1, which is a substitute CEQA document, prepared in lieu of a Negative Declaration. The environmental analysis in the Final EA concluded that PR 1179.1 would not generate any significant adverse environmental impacts. The Final EA is included as Attachment H.

Socioeconomic Analysis
Proposed Rule 1179.1 affects 30 POTW facilities with a total of 86 digester gas fueled boilers, turbines and engines. Only one facility is expected to incur increased annual compliance costs as a result of increased water injection to achieve the NOx emission limits for three turbines. Most permitted equipment at Title V and non-Title V facilities will require a one-time permit modification fee.

The cost for implementing PR 1179.1 is approximately $453,000 per year. The cost-effectiveness is estimated at $50,000 per ton of NOx reduced.

Resource Impacts
Existing staff resources are adequate to implement the proposed amendments.

Attachments
A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Rule 1179.1
G. Final Staff Report
H. Final Environmental Assessment
I. Board Meeting Presentation

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities
Applicability Applies to: • Digester gas and dual fuel boilers and process heaters over 400,000 Btu/hr • Digester gas and dual fuel turbines less than 0.3 MW • Turbines greater than or equal to 0.3 MW; and • Digester gas and dual fuel engines greater than 50 rated brake horsepower. *Emission limits* • Boiler and process heater NOx and CO limits (3% oxygen, averaged over 15 minutes) o Boilers and process heaters > 2 MMBtu/hr using digester gas is 15 ppm and natural gas units is 9 ppm with CO limits regardless of the fuel at 400 ppm (Same as Rules 1146 and 1146.1) o Boilers and heaters ≤ 2 MMBtu/hr using digester or natural gas is 30 ppm o Firing less than 90% digester gas and less than 100% natural gas – subject to a weighted limit • Turbine limits (15% oxygen, averaged over 1 hour) o Turbines ≥ 0.3 MW firing at least 60% digester gas – 18.8 ppm o Turbines ≥ 0.3 MW firing 100% natural gas, 2 ppm for combined cycle turbines and 2.5 ppm for simple cycle turbines o Firing less than 60% digester gas and less than 100% natural gas – subject to a weighted limit o Digester gas and dual fuel turbines < 0.3 MW is 9 ppm • Engine limits (15 percent oxygen, averaged over 15 minutes) o Engines using digester gas > 50 bhp is 11 ppm NOx, 250 ppm CO, and 30 ppm VOC (same as Rule 1110.2) *Averaging times for units with CEMS* • Fixed interval of 1 hour for boilers • Rolling period of 1 hour for turbines • Fixed interval of 1 hour for engines, with options for 24 and 48 hours under certain specific conditions

Startup and Shutdown

- Boilers: Until boiler and/or control equipment is properly operating and cannot exceed 6 hours
- Turbines: Until control equipment is properly operating and cannot exceed 2 hours for turbines with SCR and 3 hours for turbines without SCR
- Engines: Until engine and control equipment are properly operating and cannot exceed 30 minutes

Source Testing and Continuous Emissions Monitoring Systems (CEMS)

- Source testing frequency, test methods, and protocol submittals are consistent with other source-specific rules
- CEMS requirements for applicability and requirements consistent with other source-specific rules

Other Provisions

- Inspection and Monitoring Plans consistent with current Rule 1110.2 requirements
- Diagnostic emission checks for boilers and engines consistent with current source-specific rules

Recordkeeping

- Requirements for types of records and record retention time for all units
    - Startup and shutdown records for boilers
    - Operating logs for turbines and turbine control equipment
    - Operating logs and breakdown reporting for engines
    - Records of tuning and servicing and hours of operation subsequent to tuning and servicing and prior to emissions testing

Compliance schedule

- Establishes the schedule for permit revision applications to reflect PR 1179.1
    - Title V facilities can submit equipment permit applications on the same schedule as their Title V renewal application
    - Boilers > 2 MMBtu/hr: by January 1, 2023
    - Boilers ≤ 2 MMBtu/hr: by July 1, 2023
    - Engines and I&M plans: by January 1, 2024
    - Turbines: by July 1, 2024

- *Exemptions*
    - Applicable to certain low-use units, boilers, turbines ≤ 0.3 MW, and engines permitted to fire exclusively natural gas, smaller equipment without concentration limits, and units under variances

ATTACHMENT B

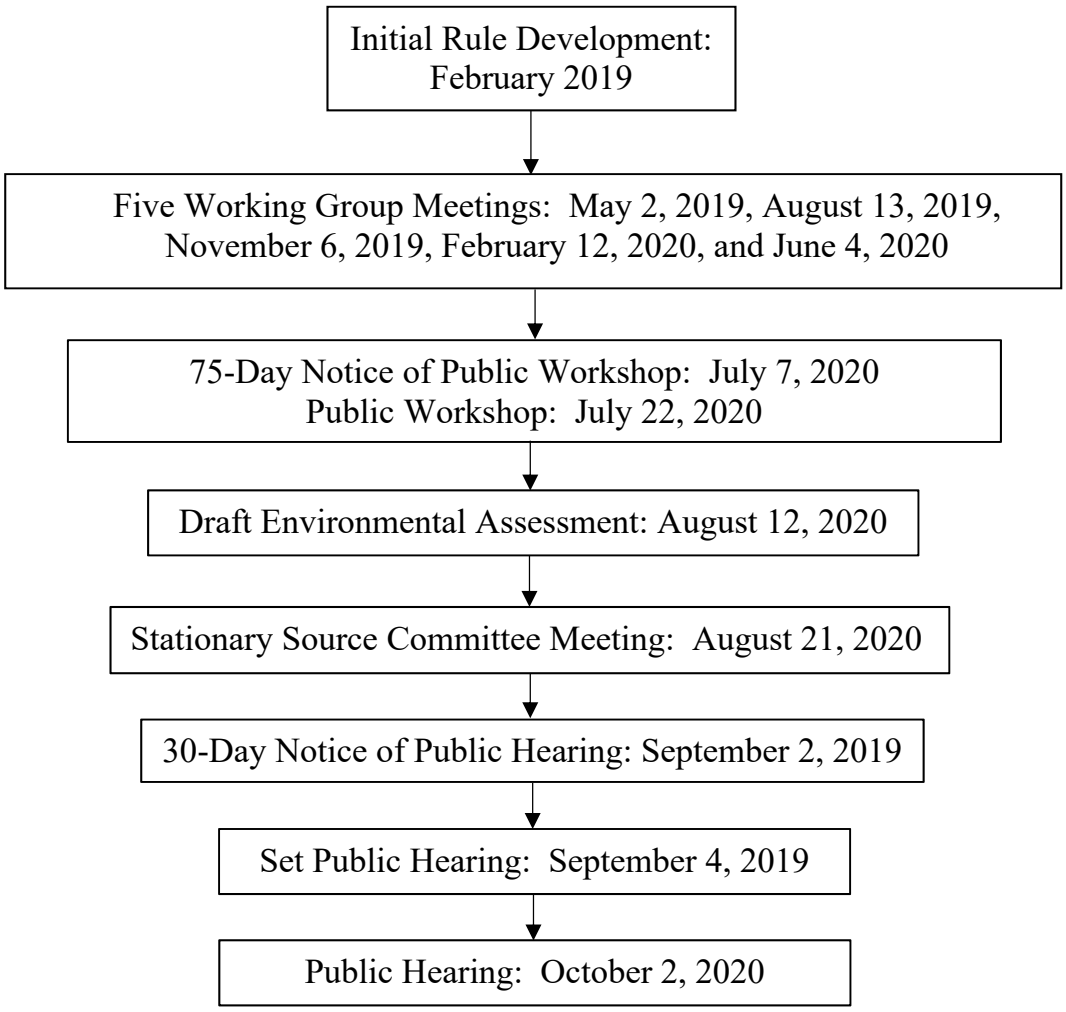
KEY ISSUES AND RESPONSES

Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities
Throughout the rulemaking process, staff worked closely with stakeholders to address their comments and have resolved all key issues. Staff is not aware of any remaining key issues.

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities



Twenty-two (22) months spent in rule development.

Five (5) Working Group Meetings

One (1) Public Workshop

One (1) Stationary Source Committee Meeting

ATTACHMENT D

KEY CONTACTS LIST

ALZETA Corporation
Banning City Wastewater Treatment Plant
Bryan Power Generation
California Boiler
Capstone Turbine
Corona City Department of Water & Power
Eastern Municipal Water District
Faber Burner Company
FERCo
GE
Generon
Inland Empire Utilities Agency
Irvine Ranch Water District
LA City Sanitation Bureau
LA City Terminal Island Treatment Plant
LA County Sanitation District
Las Virgenes Municipal Water District
Nationwide Boiler
Orange County Sanitation District
Parker Boiler
Pioneer Air Systems
Puretec
R.F. MacDonald Company
Redlands City Wastewater Treatment Plant
Rentech Boilers
Rialto City
Riverside City Water Quality Control
San Bernardino Municipal Water Department
San Clemente City
Santa Margarita Water District
Siemens
Solar Turbines
South Orange County Wastewater Authority
Southern California Association of Publicly Owned Treatment Works
Umicore Catalyst USA, LLC
Unison Solutions
Valley Sanitation District
Western Municipal Water District
Western Riverside County Regional Wastewater Authority Treatment Plant
Willexa Energy
Yucaipa Valley Water District

ATTACHMENT E

RESOLUTION NO. 20-____

A Resolution of the Governing Board of the South Coast Air Quality Management District (South Coast AQMD) certifying the Final Environmental Assessment (EA) for Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities.

A Resolution of the South Coast AQMD Governing Board adopting Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities.

WHEREAS, the South Coast AQMD Governing Board finds and determines with certainty that Proposed Rule 1179.1 is considered a "project" as defined by the California Environmental Quality Act (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 1179.1 pursuant to such program (South Coast AQMD Rule 110); and

WHEREAS, the South Coast AQMD Governing Board has determined that the requirements for a Negative Declaration have been triggered pursuant to its Certified Regulatory Program and CEQA Guidelines Section 15070, and that an Environmental Assessment (EA), a substitute document allowed pursuant to CEQA Guidelines Section 15252 and South Coast AQMD's Certified Regulatory Program, is appropriate; and

WHEREAS, the South Coast AQMD prepared a Draft EA pursuant to its Certified Regulatory Program and CEQA Guidelines Section 15070 setting forth the potential environmental consequences of Proposed Rule 1179.1 and determined that the proposed project would not have the potential to generate significant adverse environmental impacts; and

WHEREAS, a Draft EA was prepared and circulated for a 30-day public review and comment period from August 12, 2020 to September 11, 2020, and one comment letter was received; and

WHEREAS, the Draft EA has been revised to include the comment letter received on the Draft EA and the response, so that it is now a Final EA; and

WHEREAS, it is necessary that the South Coast AQMD Governing Board review the Final EA prior to its certification, to determine that it provides adequate information on the potential adverse environmental impacts that may occur as a result of

adopting Proposed Rule 1179.1, including the responses to the comment letter received relative to the Draft EA; and

WHEREAS, pursuant to CEQA Guidelines Section 15252 (a)(2)(B), since no significant adverse impacts were identified, no alternatives or mitigation measures are required for project approval; thus, a Mitigation, Monitoring, and Reporting Plan pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15097, has not been prepared; and

WHEREAS, Findings pursuant to Public Resources Code Section 21081.6 and CEQA Guidelines Section 15091 and Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 were not prepared because the analysis shows that Proposed Rule 1179.1 would not have a significant adverse effect on the environment, and thus, are not required; and

WHEREAS, the South Coast AQMD Governing Board voting to adopt Proposed Rule 1179.1 has reviewed and considered the information contained in the Final EA, including the responses to the comment letter, and all other supporting documentation, prior to its certification, and has determined that the Final EA, including the responses to the comment letter received, has been completed in compliance with CEQA; and

WHEREAS, Proposed Rule 1179.1 and supporting documentation, including but not limited to, the Final EA and Final Staff Report, 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 Final EA reflects the independent judgement of the South Coast AQMD; and

WHEREAS, the South Coast AQMD Governing Board finds and determines that all changes made in the Final EA after the public notice of availability of the Draft EA were not substantial revisions and do not constitute significant new information within the meaning of CEQA Guidelines Sections 15073.5 and 15088.5, because no new significant effects were identified, and no new project conditions or mitigation measures were added, and all changes merely clarify, amplify, or make insignificant modifications to the Draft EA, and recirculation is therefore not required; 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 the title of Proposed Rule 1179.1, Table 1, paragraph (e)(11), and subparagraphs (d)(4)(A), (d)(5)(B), and (d)(5)(C) since the notice of public hearing was published are clarifications 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 1179.1 does not cause significant impacts and therefore, alternatives are not required; and

WHEREAS, the South Coast AQMD Governing Board has determined that the Socioeconomic Impact Assessment of Proposed Rule 1179.1 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 the Socioeconomic Impact Assessment is consistent with the provisions of Health and Safety Code Sections 40440.8, 40728.5, and 40920.6; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Rule 1179.1 will result in increased costs to the affected industries, yet are considered to be reasonable, with a total annualized cost as specified in the Socioeconomic Impact Assessment; and

WHEREAS, the South Coast AQMD Governing Board has actively considered the Socioeconomic Impact Assessment and has made a good faith effort to minimize such impacts; and

WHEREAS, the South Coast AQMD staff conducted a Public Workshop regarding Proposed Rule 1179.1 on July 22, 2020; and

WHEREAS, Proposed Rule 1179.1 will be submitted for inclusion into the State Implementation Plan; 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 Final Staff Report; and

WHEREAS, the South Coast AQMD Governing Board has determined that a need exists to adopt Proposed Rule 1179.1 to address specific equipment located at publicly owned treatment works facilities that were not addressed in recently amended rules and that are currently not regulated; and

WHEREAS, the South Coast AQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Sections 39002, 40000, 40001, 40440, 40702, 40725 through 40728, 41508, and 41700 of the Health and Safety Code; and

WHEREAS, the South Coast AQMD Governing Board finds that there is an ozone problem that Proposed Rule 1179.1 will alleviate and will promote the attainment or maintenance of state or federal ambient air quality standards; and

WHEREAS, the South Coast AQMD Governing Board has determined that Proposed Rule 1179.1 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 Rule 1179.1 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 1179.1 does not impose the same requirements as any existing state or federal regulations, and the proposed rule 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 adopting Rule 1179.1, references the following statutes which the South Coast AQMD hereby implements, interprets, or makes specific: Assembly Bill 617, Health and Safety Code Sections 39002, 40001, 40702, 40440(a), 40440(b), 40406, and 40725 through 40728.5; and

WHEREAS, Health and Safety Code Section 40727.2 requires the South Coast AQMD to prepare a written analysis of existing federal air pollution control requirements applicable to the same source type being regulated whenever it adopts, or amends a rule, and the South Coast AQMD's comparative analysis of Proposed Rule 1179.1 in included in the Final Staff Report; and

WHEREAS, the 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; and

WHEREAS, the South Coast AQMD specifies the Planning and Rules Manager of Rule 1179.1 as 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

NOW, THEREFORE BE IT RESOLVED, that the South Coast AQMD Governing Board has considered the Final EA for Proposed Rule 1179.1 together with all comments received during the public review period, and, on the basis of the whole record before it, the South Coast AQMD Governing Board: 1) finds that the Final EA, including

the responses to the comment letter, was completed in compliance with CEQA and the South Coast AQMD's Certified Regulatory Program, 2) finds that the Final EA and all supporting documents were presented to the South Coast AQMD Governing Board, whose members exercised their independent judgment and reviewed, considered and approved the information therein prior to acting on Proposed Rule 1179.1, and 3) certifies the Final EA; and

BE IT FURTHER RESOLVED, that because no significant adverse environmental impacts were identified as a result of adopting Rule 1179.1, Findings, a Statement of Overriding Considerations, and a Mitigation, Monitoring, and Reporting Plan are not required and were not prepared; and

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Rule 1179.1 as set forth in the attached, and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board also finds pursuant to Health and Safety Code Section 40920.6, that PAR 1179.1 is adopted because the other analyzed potential control options are not viable.

BE IT FURTHER RESOLVED, that the South Coast AQMD Governing Board requests that Proposed Rule 1179.1 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 Rule 1179.1 and supporting documentation to the California Air Resources Board for approval and subsequently submittal to the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan.

DATE: _____ _____

CLERK OF THE BOARDS

ATTACHMENT F

(PR 1179.1 October 2, 2020)

PROPOSED RULE 1179.1 ~~NOX~~ EMISSION REDUCTIONS FROM COMBUSTION EQUIPMENT AT PUBLICLY OWNED TREATMENT WORKS FACILITIES

(a) Purpose

The purpose of this rule is to reduce emissions of Oxides of Nitrogen (NO_x) and Carbon Monoxide (CO) from boilers and turbines, and emissions of NOx, CO, and Volatile Organic Compounds (VOCs) from engines, located at publicly owned treatment works (POTW) facilities.

(b) Applicability

This rule applies to the following equipment located at a POTW facility:

(1) Digester gas and dual fuel boilers and process heaters over 400,000 Btu/hr;

(2) Digester gas and dual fuel turbines less than 0.3 MW;

(3) Turbines greater than or equal to 0.3 MW; and

(4) Digester gas and dual fuel engines greater than 50 rated brake horsepower.

(c) Definitions

(1) ANNUAL HEAT INPUT is the total heat input to a unit during a calendar year.

(2) BOILER is any combustion equipment fired with a liquid or gaseous fuel and used to produce steam or to heat water, and that is not used exclusively to produce electricity for sale. Boiler does not include any open heated tank, adsorption chiller unit, or waste heat recovery boiler that is used to recover sensible heat from the exhaust of a combustion turbine or any unfired waste heat recovery boiler that is used to recover sensible heat from the exhaust of any combustion equipment.

(3) BREAKDOWN is a physical or mechanical failure or malfunction of an engine, air pollution control equipment, or related operating equipment that is not the result of operator error, neglect, improper operation or improper maintenance procedures, which leads to excess emissions beyond rule related emission limits or equipment permit conditions.

(4) BTU is British thermal unit(s).

(5) COMBINED CYCLE TURBINE is a turbine that recovers heat from the gas turbine exhaust.

(6) CONTINUOUS EMISSION MONITORING SYSTEM (CEMS) is the total combined equipment and systems, including the sampling interface, analyzers, and data acquisition and handling system, required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent (as applicable).

(7) DIGESTER GAS is gas that is produced by anaerobic decomposition of organic material.

(8) DIGESTER GAS UNIT is any combustion equipment subject to this rule permitted to fire digester gas exclusively.

(9) DUAL FUEL UNIT is any combustion equipment subject to this rule permitted to fire digester gas and another fuel.

(10) ENGINE is any internal combustion equipment that is spark- or compression ignited and burns liquid and/or gaseous fuel to create heat that move pistons to do work.

(11) LEAN-BURN ENGINE is an engine that operates with high levels of excess air and an exhaust oxygen concentration of greater than 4 percent.

(12) NATURAL GAS is a mixture of gaseous hydrocarbons, with at least 80 percent methane by volume, and of pipeline quality, such as the gas sold or distributed by any utility company regulated by the California Public Utilities Commission.

(13) OXIDES OF NITROGEN (NOx) EMISSIONS is the sum of nitric oxides and nitrogen dioxides emitted, collectively expressed as nitrogen dioxide emissions.

(14) POST-COMBUSTION CONTROL is any air pollution control equipment which eliminates, reduces, or controls the issuance of air contaminants after combustion.

(15) PROCESS HEATER is any combustion equipment fired with liquid and/or gaseous fuel and which transfers heat from combustion gases to water or process streams. Process Heater does not include any kiln or oven used for drying, curing, baking, cooking, calcining, or vitrifying; or any unfired waste heat recovery heater that is used to recover sensible heat from the exhaust of any combustion equipment.

(16) PUBLICLY OWNED TREATMENT WORKS FACILITY OR POTW FACILITY is a wastewater treatment or reclamation plant owned or operated by

a public entity, including all operations within the boundaries of the wastewater and sludge treatment plant.

(17) RATED BRAKE HORSEPOWER (bhp) is the rating specified by the manufacturer, without regard to any derating, and listed on the engine nameplate.

(18) RATING OF A TURBINE is the continuous MW (megawatt) rating or mechanical equivalent by a manufacturer for a turbine without including the increase in the turbine shaft output and/or the decrease in turbine fuel consumption by the addition of energy recovered from exhaust heat.

(19) RICH-BURN ENGINE is an engine designed to operate near stoichiometric conditions.

(20) SELECTIVE CATALYTIC REDUCTION (SCR) is a post-combustion control that reduces NOx with catalyst and a reducing agent.

(21) SHUTDOWN is the time period that begins when an operator reduces load and which ends in a period of zero fuel flow.

(22) SIMPLE CYCLE TURBINE is a turbine that does not recover heat from the combustion turbine exhaust gases to heat water or generate steam.

(23) STARTUP is the time period that begins when a unit combusts fuel after a period of zero fuel flow and which ends when the unit reaches stable operating conditions.

(24) THERM is 100,000 Btu.

(25) TUNING is adjusting, optimizing, rebalancing, or other similar operations to a unit or an associated control device. Tuning does not include normal operations to meet load fluctuations.

(26) TURBINE is any internal combustion equipment that burns liquid and/or gaseous fuel to create hot gas that expands to move a rotor assembly, with vanes or blades, to do work.

(27) UNIT is a boiler, turbine, or engine subject to this rule.

(d) Emission Limits

(1) On and after the compliance date specified in Table 1, an owner or operator shall not operate a unit in a manner that discharges NOx, CO, or VOC into the atmosphere in excess of the limits specified in Table 1, excluding start-up and shutdown periods as specified pursuant to paragraph (d)(5). Compliance with the emission limits in Table 1 shall be demonstrated with all applicable compliance tests as required by this rule.

TABLE 1 **CONCENTRATION LIMITS**			
DIGESTER GAS AND DUAL FUEL BOILERS AND PROCESS HEATERS			
EQUIPMENT CATEGORY	NOx (ppm)[1]	CO (ppm)[1]	COMPLIANCE DATE
Rated heat input capacity > 2 MMBtu/hr and firing 90% digester gas or more[2]	15	400	On or before [*Date of Adoption*]
Rated heat input capacity > 2 MMBtu/hr and firing 100% natural gas	9		On or before [*Date of Adoption*]
Rated heat input capacity ≤ 2 MMBtu/hr	30		On or before [*Date of Adoption*]
TURBINES			
EQUIPMENT CATEGORY	NOx (ppm)[3]	CO (ppm)[3]	COMPLIANCE DATE
Rating ≥ 0.3 MW and firing 60% digester gas[4] or more	18.8	130	On or before [*Date of Adoption*]
Simple cycle with rating ≥ 0.3 MW and firing 100% natural gas	2.5		On or before [*Date of Adoption*]
Combined cycle with rating ≥ 0.3 MW and firing 100% natural gas	2		On or before [*Date of Adoption*]
Digester gas or dual fuel with r~~R~~ating < 0.3 MW	9		On or before [*Date of Adoption*]
DIGESTER GAS AND DUAL FUEL ENGINES			
EQUIPMENT CATEGORY	NOx (ppm)[5]	CO (ppm)[5]	VOC (ppm)[6]	COMPLIANCE DATE
Engines > 50 bhp	11	250	30	On or before [*Date of Adoption*]

[1] All parts per million (ppm) emission limits are referenced at 3% volume stack gas oxygen on a dry basis and averaged over 15 minutes.
[2] Percent digester gas is based on the flowrates and higher heating values of the fuels.
[3] All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis and averaged over 1 hour.
[4] Percent digester gas is based on volume averaged over a 24 hour period.
[5] All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis and averaged over 15 minutes.
[6] Parts per million (ppm) emission limit referenced at 15% volume stack gas oxygen on a dry basis, measured as carbon, and averaged over the sampling time required by the test method.

(2) An owner or operator of a dual fuel boiler simultaneously firing digester gas and more than 10 percent but less than 100 percent natural gas, based on the flowrates and higher heating values of the fuels used, shall comply with the natural gas emission limit in Table 1 or the weighted emission limit calculated by Equation 1. The owner or operator of a boiler using the weighted emission limit shall obtain flowrates and higher heating values by the following methods:

(A) Measure the flow of each fuel used with a non-resettable totalizing fuel flow meter as approved by the Executive Officer, at the time of compliance determination.

(B) Measure the higher heating value of digester gas using a monitoring procedure approved by South Coast AQMD. The digester gas sample used to obtain the higher heating value shall be collected no earlier than 30 days before compliance is determined.

$$\text{Weighted Limit} = \frac{(CL_A \times Q_A \times V_A) + (CL_B \times Q_B \times V_B)}{(Q_A \times V_A) + (Q_B \times V_B)} \qquad \text{(Equation 1)}$$

Where:

CL_A = compliance limit in Table 1 when firing 90% digester gas or more

Q_A = higher heating value of digester gas in Btu per standard cubic foot (scf)

V_A = flowrate of digester gas in scf per unit of time

CL_B = compliance limit in Table 1 when firing 100% natural gas

Q_B = higher heating value of natural gas in Btu per scf

V_B = flowrate of natural gas in scf per unit of time

(3) An owner or operator of a dual fuel turbine simultaneously firing digester gas and more than 40 percent but less than 100 percent natural gas, based on volume averaged over 24 hours, shall comply with the weighted emission limit calculated by Equation 2. The owner or operator of a turbine using the weighted emission limit shall obtain flowrates and higher heating values by the following methods:

(A) Measure the flow of each fuel used with a non-resettable totalizing fuel flow meter as approved by the Executive Officer, at the time of compliance determination.

(B) Measure the higher heating value of the digester gas using a monitoring procedure approved by South Coast AQMD. The digester gas sample used to obtain the higher heating value shall be collected no earlier than 30 days before compliance is determined..

$$\text{Weighted limit} = \frac{\left((CL_A + 18.1) \times Q_A \times V_A\right) + (CL_B \times Q_B \times V_B)}{(Q_A \times V_A) + (Q_B \times V_B)} \quad \text{(Equation 2)}$$

Where:

CL_A = compliance limit in Table 1 when firing 60% digester gas or more

Q_A = higher heating value of digester gas in Btu per scf

V_A = flowrate of digester gas in scf per unit of time

CL_B = compliance limit in Table 1 when firing 100% natural gas

Q_B = higher heating value of natural gas in Btu per scf

V_B = flowrate of natural gas in scf per unit of time

(4) Averaging Times for Units with CEMS

(A) An owner or operator of a boiler shall meet the applicable emission limits specified in Table 1 or paragraph (d)(2), averaged over a fixed interval of 1 clock hour.

(B) An owner or operator of a turbine shall meet the applicable emission limits specified in Table 1 or paragraph (d)(3), averaged over a rolling period of 1 hour.

(C) An owner or operator of an engine shall meet the applicable emission limits specified in Table 1 averaged over one of the following interval periods:

(i) A fixed interval of 1 hour;

(ii) A fixed interval of 24 hours when meeting the emission limits at or below 11 ppmvd for NOx and 250 ppmvd for CO (if CO is

selected for averaging), each corrected to 15% oxygen, with the emission limits and averaging time specified in the permit to operate for the engine on or before November 1, 2019; or

(iii) A fixed interval of 48 hours when meeting the emission limits at or below 9.9 ppmvd for NOx and 225 ppmvd for CO (if CO is selected for averaging), each corrected to 15% oxygen, with emission limits and averaging time specified in the permit to operate for the engine.

(5) Startup and Shutdown

An owner or operator of a unit shall meet the following startup and shutdown requirements for that unit, if NOx, CO, or VOC is discharged into the atmosphere in excess of the limits specified in Table 1, paragraph (d)(2), or paragraph (d)(3):

(A) Startup of a boiler shall not exceed the time period necessary for proper operation of the boiler or for temperatures to be reached for the proper operation of the emission control equipment. Startup or shutdown shall not exceed 6 hours.

(B) An owner or operator of a boiler ≥ 5 MMBtu/hr shall submit to the Executive Officer by January 1 of each year, a ~~schedule~~ plan of scheduled startup and shutdown events for that year.

(i) The number of scheduled startups/shutdowns for a boiler ≥ 5 – 40 MMBtu/hr shall not exceed 10 per month.

(ii) The number of scheduled startups/shutdowns for a boiler > 40 MMBtu/hr shall not exceed 10 per year.

(C) An owner or operator of a unit subject to subparagraph (d)(5)(B) shall submit prior notification of scheduled shutdowns and scheduled startups following scheduled shutdowns in a timely manner and form as specified by the Executive Officer. Shutdowns and startups shall~~must~~ be scheduled in pairs with scheduled dates for each. Notification of scheduled startups and shutdowns is required only if an exemption from the emission limit is required. This notification shall contain the following information:

(i) Dates and times of the scheduled startup and shutdown and its duration; and

(ii) Any other process variables that are appropriate as determined by the Executive Officer.

(D) Startup of a turbine shall not exceed the time at which control equipment is properly operating. Startup or shutdown shall not exceed 2 hours for turbines with SCR and shall not exceed 3 hours for turbines without SCR.

(E) For engines:

(i) Startup shall not exceed the time period necessary for operating temperatures to be reached for the proper operation of the emission control equipment, or the tuning of the engine and/or emission control equipment. Startup or shutdown shall not exceed 30 minutes, unless the Executive Officer approves in writing a longer period, not to exceed 2 hours, and that period is specified by permit conditions;

(ii) Startup after an engine overhaul or major repair requiring removal of a cylinder head or for the installation or the replacement of catalytic emission control equipment shall not last longer than 4 operating hours.

(6) An owner or operator of any turbine shall not burn liquid fuel.

(e) Source Testing

An owner or operator of a unit shall meet the following source test requirements:

(1) An owner or operator of a unit shall conduct source tests for the following equipment and applicable pollutants in accordance with the schedule in Table 2.

TABLE 2
SOURCE TESTING SCHEDULE

Equipment Category	Frequency	Pollutant	Elapsed Time Prior to Conducting Source Test[1]
Boilers ≥ 10 MMBtu/hr	Every 3 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due	NOx, CO	At least 250 operating hours or at least 30 calendar days
Boilers < 10 MMBtu/hr and > 2 MMBtu/hr	Every 5 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due		
Turbines with output capacity rating ≥ 2.9 MW	Every year from the date the previous source test was required, no later than the last day of the calendar month that the test is due		At least 40 operating hours or at least 7 calendar days
Turbines with output capacity rating < 2.9 MW	Every 3 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due or every 8,760 operating hours, whichever occurs later		
Engines	Every 2 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due, or every 8,760 operating hours, whichever occurs first[2]	NOx, CO, and VOC reported as carbon	

[1] Elapsed time subsequent to any tuning or servicing, unless tuning or servicing is due to an unscheduled repair.

[2] Frequency may be reduced once every 3 years if the engine has operated less than 2,000 hours since the last source test. If the engine has not been operated before the date a source test is due, the source test shall be conducted by the end of 7 consecutive days or 15 cumulative days of resumed operation. An owner or operator of the engine shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines.

(2) An owner or operator of any unit previously not required to conduct an initial source test shall conduct a source test within 12 months from [*Date of Adoption*].

(3) An owner or operator shall submit a source test protocol for approval no later than 60 days prior to a scheduled source test date and conduct the source test within 90 days after a written approval of the source test protocol by the Executive Officer is electronically distributed.

(A) An owner or operator of a unit subject to a previously approved source test protocol shall submit a subsequent protocol if the unit has been altered in a manner that requires a permit alteration, if emission limits for the unit have changed since the previous source test, or if requested by the Executive Officer.

(4) An owner or operator shall include in the protocol the name, address and phone number of the unit operator and the South Coast AQMD-approved source testing contractor that will conduct the test(s), the application and permit number(s), a copy of the current valid approved permit, emission limits, a description of the unit(s) to be tested, the test methods and procedures to be used, the number of tests to be conducted and under what loads.

(A) For engines, an owner or operator shall also include in the protocol the required minimum sampling time for the VOC test, based on the analytical detection limit and expected VOC levels. A description of the parameters to be measured in accordance with the Inspection & Monitoring (I&M) plan requirements of this rule shall also be included in the protocol.

(5) No later than 30 days prior to conducting a source test, an owner or operator shall notify the Executive Officer of the scheduled source test date. If a scheduled source test is delayed, an owner or operator shall notify the Executive Officer within 24 hours from the time that an owner or operator knew of the delay. An owner or operator shall provide at least 7 days prior notice of the rescheduled date of the source test or arrange a rescheduled date with the Executive Officer by mutual agreement.

(6) An owner or operator shall conduct the source testing using a South Coast AQMD approved contractor under the Laboratory Approval Program (LAP) according to the procedures in Table 3.

TABLE 3 SOURCE TESTING METHODS	
Pollutant	**Test Methods**
NOx	South Coast AQMD Test Methods 100.1 or 7.1
CO	South Coast AQMD Test Methods 100.1 or 10.1, or EPA Test Method 10
CO_2 and O_2	South Coast AQMD Test Methods 3.1 or 100.1
VOC	South Coast AQMD Test Methods 25.1 or 25.3, excluding ethane and methane

(7) An owner or operator shall provide source testing facilities as follows:

(A) Sampling ports adequate for the applicable test methods. This includes constructing the air pollution control system and stack or duct such that pollutant concentrations can be accurately determined by applicable test methods;

(B) Safe sampling platform(s), scaffolding or mechanical lifts, including safe access, that comply with California General Safety Orders; and

(C) Utilities for sampling and testing equipment.

(8) For boilers and turbines, the LAP contractor conducting the source test shall make emissions determinations in the as-found operating conditions and shall conduct the source test for at least 15 minutes. No compliance determination shall be made during startup, shutdown, or under breakdown conditions.

(9) For engines, the LAP contractor shall conduct source testing for at least 30 minutes during normal operation (actual duty cycle). This test shall not be conducted under a steady-state condition unless it is the normal operation. In addition, the LAP contractor shall conduct source testing for NOx and CO emissions for at least 15 minutes at: an engine's actual peak load, or the maximum load that can be practically achieved during the test; and at actual minimum load, excluding idle, or the minimum load that can be practically achieved during the test. These additional two tests are not required if the permit limits the engine to operating at one defined load, ±10 percent. The LAP contractor shall not conduct any pre-tests for compliance. If an emission exceedance is found during any of the three phases of the test, that phase shall be completed and reported. An operator shall correct the exceedance, and the source test shall be immediately resumed.

(10) An owner or operator shall submit all source test reports, including a description of the unit tested, to the Executive Officer within 60 days of completion.

(11) An owner or operator may use a relative accuracy test audit (RATAs) required by Rules 218 and 218.1, any applicable South Coast AQMD rule for CEMS certification, operation, monitoring, reporting, and notification, 40 CFR Part 75 Subpart E, or 40 CFR Part 60 Appendix B Specification 2, in lieu of a source test for those pollutants monitored by a CEMS and for all operating loads required by the source test, provided that the RATA is conducted within the same calendar year the source test is required.

(f) CEMS

An owner or operator of a unit that meets the criterion in Table 4 shall install, operate, and maintain in calibration a CEMS, or an equivalent verification system, that complies with Rules 218 and 218.1, or any applicable South Coast AQMD rule for CEMS certification, operation, monitoring, reporting, and notification.

TABLE 4
UNITS REQUIRING CEMS

Equipment Type	Threshold	Pollutant(s)
Boilers	Rated heat input capacity > 40 MMBtu/hr and an annual heat input > 200 x 10^9 Btu per year	NOx
Turbines	Output capacity rating ≥ 2.9 MW	NOx
Engines	Capacity rating ≥ 1000 bhp and operating more than 2 million bhp-hr per calendar year	NOx, CO
	Combined capacity rating ≥ 1500 bhp and a combined fuel usage of > 16 x 10^9 Btu per year, for engines at the same location[1]	

[1] Effective October 1, 2007, engines located within 75 feet of another engine (measured from engine block to engine block) are considered to be at the same location.

(1) An owner or operator of a turbine required to install a CEMS shall also install equipment that measures and records the following:

(A) Flowrate of fuel gases and the ratio of water or steam to fuel added to the combustion chamber or to the exhaust for the reduction of NOx emissions, as applicable;

(B) Elapsed time of operation; and

(C) Turbine output in MW.

(2) An owner or operator of an engine shall meet the following requirements:

(A) A CO CEMS shall not be required for lean-burn engines.

(B) The following engines shall not be counted towards the combined rating of 1500 bhp or greater and combined fuel usage of more than 16 x 10^9 Btu per year (higher heating value) of engines at the same location:

(i) Engines rated at less than 500 bhp;

(ii) Standby engines that are limited by permit conditions to only operate when other primary engines are not operable;

(iii) Engines that are limited by and in compliance with permit conditions to operate less than 1000 hours per year or a fuel usage of less than 8 x 10^9 Btu per year (higher heating value of all fuels used);

(iv) Engines with an output capacity rating ≥1000 bhp and operating more than 2 million bhp-hr per calendar year required to have a CEMS; and

(v) Engines in compliance with permit conditions that limit the simultaneous use of the engines at the same location in a manner to limit the combined rating of all engines in simultaneous operation to less than 1500 bhp.

(C) In lieu of complying with the CEMS requirements of this subdivision, an owner or operator of an engine 1000 bhp or greater and less than 1200 bhp, or engines at the same location with a combined output capacity rating of 1500 bhp or greater and a combined fuel usage of > 16 x 10^9 Btu per year (higher heating value), may alternatively comply with the I&M plan requirements, pursuant to subdivision (g), provided an owner or operator conducts diagnostic emission checks at least weekly or every 150 operating hours, whichever occurs later.

(i) If the engine is found to exceed an applicable NOx or CO limit by a source test or a South Coast AQMD test using a portable analyzer on 3 or more combined occasions in any 12-month period, an owner or operator shall comply with the CEMS requirements of this subdivision and shall submit a CEMS application to the Executive Officer within 6 months of the third

exceedance and obtain final approval of the CEMS within 1 year from the initial approval.

(D) An owner or operator of any engine initially exempt from CEMS by the low-use criterion in Table 4 that later exceeds that criterion, shall install CEMS on that engine. The owner or operator shall submit an application for CEMS within 6 months after the conclusion of the first 12-month period for which the engine(s) exceed the criterion, and shall obtain final approval for the CEMS within 1 year from the initial approval.

(E) An owner or operator may take an existing NOx CEMS out of service for up to two weeks (cumulative) in order to modify the CEMS to add CO monitoring.

(F) Notwithstanding the requirements of Rules 218, 218.1, or any applicable South Coast AQMD rule for CEMS certification, operation, monitoring, reporting, and notification, an owner or operator of an engine required to install a CEMS may:

(i) Store data electronically without a strip chart recorder, but there shall be redundant data storage capability for at least 15 days of data. An operator shall demonstrate that both sets of data are equivalent.

(ii) Conduct relative accuracy testing, as required by Rule 218.1, any applicable South Coast AQMD rule for CEMS certification, operation, monitoring, reporting, and notification, or 40 CFR Part 75 Subpart E, on the same schedule for source testing, as specified in Table 2, instead of annually. The minimum sampling time for each test is 15 minutes.

(G) An owner or operator of a new engine shall not install an engine farther than 75 feet from another engine unless the owner or operator demonstrates to the Executive Officer that operational needs or space limitations require it.

(H) An owner or operator of any new engine issued a permit to construct after [*Date of Adoption*] shall comply with the applicable CEMS requirements of this subdivision when engine operation commences.

(g) Inspection and Monitoring (I&M) Plans

An owner or operator of an engine shall comply with the following requirements for submitting I&M plans:

(1) An owner or operator of an engine without a NOx and CO CEMS shall submit to the Executive Officer an I&M plan for approval. One plan application is required for each facility that does not have a NOx and CO CEMS for each engine. If an engine has a NOx CEMS and does not have a CO CEMS, it is subject to this subdivision as it pertains to CO only. The I&M plan shall include all items listed in Attachment 1. An owner or operator may request an alternative item(s) in Attachment 1 that is determined by the Executive Officer to be equivalent in meeting the same objectives.

(A) Upon written approval by the Executive Officer, an owner or operator shall implement the I&M plan as approved.

(B) An owner or operator shall submit an I&M plan for approval to the Executive Officer for a plan revision before any change in I&M plan operations can be implemented. The operator shall apply for a plan revision prior to any change in emission limits or control equipment.

(C) An owner or operator of any new engine issued a permit to construct after [*Date of Adoption*] shall comply with the applicable I&M plan requirements of this subdivision when engine operation commences. If applicable, an owner or operator shall provide the required information in this subdivision to the Executive Officer prior to the issuance of the permit to construct so that the I&M procedures can be included in the permit.

(h) Diagnostic Emission Checks for Boilers and Engines

An owner or operator shall perform diagnostic emissions checks of NOx and CO emissions for pollutants not monitored by a CEMS, with a portable NOx, CO, and oxygen analyzer that is calibrated, maintained and operated in accordance with manufacturers specifications and recommendations and the South Coast AQMD Combustion Gas Periodic Monitoring Protocol for the Periodic Monitoring of Nitrogen Oxides, Carbon Monoxide, and Oxygen from Combustion Sources Subject to Rules 1110.2, 1146 and 1146.1. The portable analyzer diagnostic emission checks shall only be conducted by a person who has completed an appropriate South Coast AQMD-approved training program in the operation of portable analyzers and has received a certification issued by South Coast AQMD.

(1) Boilers

(A) For boilers greater than or equal to 5 MMBtu/hr, an owner or operator shall perform diagnostic emission checks at least monthly or every 750 boiler operating hours, whichever occurs later. If a boiler is in compliance for 3 consecutive diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the boiler may be checked quarterly or every 2,000 boiler operating hours, whichever occurs later, until the resulting diagnostic emission check exceeds the applicable limit.

(B) For boilers less than 5 MMBtu/hr and greater than 2 MMBtu/hr, an owner or operator shall perform checks at least quarterly or every 2,000 boiler operating hours, whichever occurs later. If a boiler is in compliance for 4 consecutive required diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the boiler may be checked semi-annually or every 4,000 unit operating hours, whichever occurs later, until the diagnostic emission check exceeds the applicable limit.

(C) A diagnostic emission check that finds the emissions in excess of those allowed by this rule or a permit condition shall not constitute a violation of this rule if an owner or operator corrects the problem and demonstrates compliance with another emission check within 72 hours from the time an owner or operator knew of excess emissions, or reasonably should have known, or shutdown the boiler by the end of an operating cycle, whichever is sooner. Any diagnostic emission check conducted by South Coast AQMD staff that finds emissions in excess of those allowed by this rule or a permit condition is a violation.

(2) Engines

An owner or operator shall perform diagnostic emission checks at least weekly or every 150 hours, whichever occurs later. No engine or control system, maintenance or tuning, may be conducted within 72 hours prior to the diagnostic emission check, unless it is an unscheduled, required repair.

(A) If an engine is in compliance for 3 consecutive diagnostic emission checks, without any adjustments to the oxygen sensor set points, then the engine may be checked monthly or every 750 engine operating hours, whichever occurs later, until there is a noncompliant diagnostic emission check or, for rich-burn engines with a catalytic control device

that simultaneously reduces emissions of NOx, CO, and VOC, until the oxygen sensor is replaced. When making adjustments to the oxygen sensor set points that are not within 72 hours prior to the diagnostic emission check, returning to a more frequent diagnostic emission check schedule is not required if the engine is in compliance with the applicable emission limits prior to and after the set point adjustments.

(B) For lean-burn engines that have a NOx CEMS, and that are subject to a CO limit more stringent than 2000 ppmvd, an owner or operator shall perform a CO diagnostic emission check at least quarterly, or every 2,000 engine operating hours, whichever occurs later.

(C) For lean-burn engines that have a NOx CEMS and that are not subject to a CO limit more stringent than 2000 ppmvd, diagnostic emission checks are not required.

(D) A diagnostic emission check that finds the emissions in excess of those allowed by this rule or a permit condition shall meet the requirements in subparagraph (k)(1)(A).

(i) Recordkeeping

An owner or operator of a boiler > 2 MMBtu/hr, turbine, or engine, shall keep and maintain all data logs, monitoring records, including CEMS data, source test reports, diagnostic emission checks, maintenance, service and tuning records, and any other information required by this rule, on-site for 5 years. Records shall be made available to the Executive Officer upon request.

(1) Boilers

(A) The owner or operator of a boiler ≥ 5 MMBtu/hr shall maintain and keep records of startup and shutdown events.

(B) The owner or operator of a boiler ≥ 5 MMBtu/hr with CEMS shall keep records of startup and shutdown events that include hour-by-hour fuel gas firing rates, flue gas temperatures, NOx emissions, and any process variables that are appropriate as determined by the Executive Officer, during startup and shutdown periods.

(2) Turbines

(A) An owner or operator shall maintain an operating log that includes total hours of operation, type of fuel used, fuel consumption (cubic feet of gas), cumulative hours of operation to date for the calendar year, and the actual startup and shutdown times on a daily basis.

(B) For emission control systems used to comply with this rule, an owner or operator shall maintain daily records of system operation and maintenance that demonstrates continuous operation and compliance of an emission control device during periods of emission producing activities.

(3) An owner or operator of any engine shall maintain a monthly operating log that includes total hours of operation, type of fuel used, fuel consumption (cubic feet of gas), and cumulative hours of operation since the last source test.

(4) An owner or operator of a unit required to conduct a source test, pursuant to Table 2, shall maintain records of any tuning or servicing of the unit and hours of operation subsequent to any tuning or servicing, until a source test is conducted.

(j) Other Requirements for Boilers

(1) An owner or operator shall not lower the rated heat input capacity of a boiler to less than or equal to 2 MMBtu/hr. The lowered rated heat input capacity shall be based on manufacturer's identification or rating plate or permit condition.

(2) An owner or operator of a boiler less than or equal to 2 MMBtu/hr shall perform maintenance in accordance with the manufacturer's schedule and specifications as identified in a manual and other written materials supplied by the manufacturer or distributor. The owner or operator shall maintain on site a copy of the manufacturer's and/or distributor's written instructions and retain a record of the maintenance activity for a period of 3 years.

(k) Other Requirements for Engines

(1) Requirements for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range.

(A) For any diagnostic emission check or breakdown that results in emissions in excess of those allowed by this rule or a permit condition, an owner or operator shall correct the problem as soon as possible and demonstrate compliance with another diagnostic emission check, or shutdown an engine by the end of an operating cycle, or within 24 hours from the time the owner or operator knew of the breakdown or excess emissions, or reasonably should have known, whichever is sooner.

(B) For excess emissions due to breakdowns that result in NOx or CO emissions greater than the concentrations specified in Table 5, an owner or operator shall not be considered in violation of this rule if the operator demonstrates the all of the following: (1) compliance with subparagraph (k)(1)(A), (2) compliance with the reporting requirements of paragraph (k)(4), and (3) the engine with excess emissions has no more than 3 incidences of breakdowns with emissions exceeding Table 5 limits in the calendar quarter.

TABLE 5
EXCESS EMISSION CONCENTRATION THRESHOLDS FOR BREAKDOWNS

Equipment Category	NOx (ppmvd)[1]	CO (ppmvd)[1]
Lean-Burn Engines	45	250
Rich-Burn Engines	150	2000

[1] Corrected to 15% oxygen.

(C) Any emission check conducted by South Coast AQMD staff that finds excess emissions will be treated as a violation.

(D) For other problems, such as parameters out-of-range, an owner or operator shall correct the problem and demonstrate compliance with another diagnostic emission check within 48 hours of the owner or operator first knowing of the problem.

(2) An owner or operator shall maintain an operational non-resettable totalizing time meter to determine the engine elapsed operating time.

(3) An owner or operator of a spark-ignited engine without a Rule 218-approved CEMS shall maintain the air-to-fuel ratio controller and oxygen sensor and feedback control system, or other equivalent technology approved by the Executive Officer, CARB, and EPA.

(4) Reporting Requirements

(A) An owner or operator shall report to the Executive Officer, by telephone (1-800-CUT-SMOG or 1-800-288-7664) or other South Coast AQMD-approved method, any breakdown resulting in emissions in excess of rule or permit emission limits within 1 hour of such noncompliance or within 1 hour of the time the owner or operator knew or reasonably should have known of its occurrence. Such report shall identify the

time, specific location, equipment involved, responsible party to contact for further information, and to the extent known, the causes of the noncompliance, and the estimated time for repairs. In the case of emergencies that prevent a person from reporting all required information within the 1-hour limit, the Executive Officer may extend the time for the reporting of required information provided the owner or operator has notified the Executive Officer of the noncompliance within the 1-hour limit.

(B) Within 7 calendar days after the reported breakdown has been corrected, but no later than 30 calendar days from the initial date of the breakdown, unless an extension has been approved in writing by the Executive Officer, an owner or operator shall submit a written breakdown report to the Executive Officer which includes:

(i) An identification of the equipment involved in causing, or suspected of having caused, or having been affected by the breakdown;

(ii) The duration of the breakdown;

(iii) The date of correction and information demonstrating that compliance is achieved;

(iv) An identification of the types of excess emissions, if any, resulting from the breakdown;

(v) A quantification of the excess emissions, if any, resulting from the breakdown and the basis used to quantify the emissions;

(vi) Information substantiating whether the breakdown resulted from operator error, neglect or improper operation or maintenance procedures;

(vii) Information substantiating that steps were immediately taken to correct the condition causing the breakdown, and to minimize the emissions, if any, resulting from the breakdown;

(viii) A description of the corrective measures undertaken and/or to be undertaken to avoid such a breakdown in the future; and

(ix) Pictures of any equipment which failed, if available.

(C) Within 15 days of the end of each calendar quarter, an owner or operator shall submit to the Executive Officer a report that lists each occurrence of a breakdown, fault, malfunction, alarm, engine or control system operating parameter out of the acceptable range established by an I&M plan or permit condition, or a diagnostic emission check that finds excess emissions. Such report shall be in a South Coast AQMD-approved format, and for each incident shall identify the time of the incident, the time the operator learned of the incident, specific location, equipment involved, responsible party to contact for further information, to the extent known the causes of the event, the time and description of corrective actions, including shutting an engine down, and the results of all portable analyzer NOx and CO emissions checks done before or after the corrective actions. An owner or operator shall also report if no incidents occurred.

(l) Schedule for Permit Revisions

(1) No later than the date a facility's next Title V permit renewal application is due, an owner or operator of a Title V facility shall submit applications for each existing unit subject to this rule, and applications for I&M plans, if applicable.

(2) An owner or operator of a non-Title V facility shall:

(A) Submit an application for each existing boiler > 2 MMBtu/hr subject to this rule on or before January 1, 2023.

(B) Submit an application for each existing boiler ≤ 2 MMBtu/hr subject to this rule on or before July 1, 2023.

(C) Submit an application for each existing engine subject to this rule and an I&M plan application for each facility with an existing engine subject to this rule on or before January 1, 2024.

(D) Submit an application for each existing turbine subject to this rule on or before July 1, 2024.

(m) Exemptions

(1) The emission limits in Table 1 or paragraph (d)(2) of this rule do not apply to any boiler 5 MMBtu/hr or greater in operation prior to September 5, 2008 with an annual heat input of less than or equal to 90,000 therms per year. An owner or operator of such boiler shall not operate the boiler in a manner that exceeds NOx emissions of 30 ppm corrected to three percent oxygen on a dry basis. In

lieu of complying with the applicable emission limits specified in Table 1 or paragraph (d)(2), the owner or operator shall:.

(A) Tune the unit(s) at least twice per year, (at intervals from four to eight months apart) in accordance with the procedure described in Attachment 2 or the unit manufacturer's specified tune-up procedure. If a different tune-up procedure from that described in Attachment 2 is used then a copy of this procedure shall be kept on site. The owner or operator of any unit(s) selecting the tune-up option shall maintain records for a rolling 24-month period verifying that the required tune-ups have been performed. If the unit does not operate throughout a continuous 6-month period within a 12-month period, only one tune-up is required for the 12-month period that includes the entire period of non-operation. For this case, the tune-up shall be conducted within 30 days of startup. No tune-up is required during a rolling 12-month period for any unit that is not operated during that rolling 12-month period; this unit may be test fired to verify availability of the units for its intended use but once the test firing is completed the unit shall be shutdown. Records of test firings shall be maintained for a rolling 24-month period, and shall be made accessible to an authorized South Coast AQMD representative upon request.

(B) Any boiler subject to the requirements specified in paragraph (m)(1) that exceeds 90,000 therms of annual heat input from all fuels used shall constitute a violation of this rule. In addition, the owner or operator shall:

(i) Within four months after exceeding 90,000 therms of annual heat input, submit required applications for permits to construct and operate; and

(ii) Within 18 months after exceeding 90,000 therms of annual heat input, demonstrate and maintain compliance with all applicable requirements of this rule.

(2) An owner or operator of any turbine $\geq$ 0.3 MW claiming any of the following exemptions shall provide verification of meeting the applicable criteria. All records shall be kept on-site for 5 years and made available to South Coast AQMD staff upon request.

(A) The provisions of this rule shall not apply to turbines operated exclusively for firefighting and/or flood control.

(B) A turbine that operates only as a power source for a facility when the primary power source has been rendered inoperable, except it may not be used for power interruption pursuant to an interruptible power supply agreement, shall not be subject to the provisions of this rule, provided that an owner or operator:

(i) Installs and maintains in proper operation a non-resettable engine hour meter;

(ii) Maintains an operating log that includes, on a daily basis, the total hours of operation, type and quantity of fuel used, cumulative hours of operation to date for the calendar year, and the actual startup and shutdown times; and

(iii) Demonstrates a usage of less than 200 hours of operation per calendar year.

(C) If the hour-per-year limit in clause (m)(2)(B)(iii) is exceeded, the exemption shall be automatically and permanently withdrawn, and the owner or operator shall:

(i) Notify the Executive Officer within 7 days of the date the hour-per-year limit is exceeded; and

(ii) Within 30 days after the date the hour-per-year limit is exceeded, submit a permit application for modification to equipment to meet the applicable compliance limit within 24 months of the date the hour-per-year limit is exceeded. Included with this permit application, an owner or operator shall submit an emission control plan including a schedule of increments of progress for the installation of the required control equipment. This plan shall be subject to the review and approval of the Executive Officer.

(3) This rule does not apply to any boiler, turbine < 0.3 MW, or engine that is not permitted to fire digester gas or digester gas and another fuel. An owner or operator of a boiler or engine permitted to fire exclusively non-digester gas fuels shall comply with the following rules:

(A) For boilers, Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters, Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters, and Rule 1146.2 – Emission of Oxides

of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters; and

(B) For engines, Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines.

(4) This rule does not apply to emergency standby engines, engines used for fire-fighting and flood control, and any other emergency engines approved by the Executive Officer, which have permit conditions that limit operation to 200 hours or less per year as determined by an elapsed operating time meter, provided that an owner or operator:

(A) Installs and maintains in proper operation a non-resettable engine hour meter; and

(B) Maintains an operating log that includes cumulative hours of operation to date for the calendar year.

(5) This rule does not apply to:

(A) Laboratory engines used in research and testing purposes;

(B) Engines operated for purposes of performance verification and testing of engines;

(C) Auxiliary engines used to power other engines or gas turbines during start-ups;

(D) Portable engines that are registered under the state registration program pursuant to Title 13, Article 5 of the CCR;

(6) This rule does not apply to any turbine < 0.3 MW that was in operation prior to May 3, 2013.

(7) The emission limits in Table 1 or paragraph (d)(2) do not apply to any existing boiler ≤ 2 MMBtu/hr without a NOx concentration limitation specified in the permit.

(8) The emission limits in Table 1 or paragraph (d)(3) do not apply to the initial commissioning of a new engine or turbine for the period specified by permit conditions.

(A) The commissioning of a new engine shall not exceed 150 operating hours.

(B) The commissioning of a new turbine shall not exceed 150 operating hours, unless the Executive Officer approves in writing a longer time period and that time period is specified in the permit to operate.

(9) The natural gas emission limits in Table 1 do not apply to boilers ≤ 2 MMBtu/hr that are demonstrated to use less than 9,000 therms of natural gas during every

calendar year. Compliance with the exemption limit shall be demonstrated by a calculation based on the annual fuel consumption recorded by an in line fuel meter or the annual operating hours recorded by a timer and using one of the following methods.

(A) Annual therm usage recorded by fuel meter and corrected to standard pressure; or

(B) Amount of fuel (i.e., in thousand cubic feet of gas corrected to standard pressure) converted to therm using the higher heating value of the fuel; or

(C) Annual therm usage calculated by multiplying the number of hours fuel is burned by the rated heat input capacity of the unit converted to therms.

(10) This rule shall not apply to engines owned and operated by San Bernardino City Municipal Water Department that are subject to the variance issued by the South Coast Air Quality Management District Hearing Board on December 20, 2018 during the term of that variance. The engines shall remain subject to Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines and the variance for its duration.

ATTACHMENT 1

An I&M plan submitted to the Executive Officer for approval and implementation shall include:

A. Identification of engine and control equipment operating parameters necessary to maintain pollutant concentrations within the rule and permit limits. This shall include, but not be limited to:

1. Procedures for using a portable NOx, CO and oxygen analyzer to establish the set points of the air-to-fuel ratio controller (AFRC) at 25%, 60%and 95% load (or fuel flow rate), ± 5%, or the minimum, midpoint and maximum loads that actually occur during normal operation, ± 5%, or at any one load within the ± 10% range that an engine permit is limited to in accordance with (h)(2)(C)(ii) of the rule;
2. Procedures for verifying that the AFRC is controlling the engine to the set point during the daily monitoring required by subdivision D of this attachment;
3. Procedures for reestablishing all AFRC set points with a portable NOx, CO and oxygen analyzer whenever a set point must be readjusted, within 24 hours of an oxygen sensor replacement, and, for rich-burn engines with a catalytic control device that simultaneously reduces emissions of NOx, CO, and VOC, between 100 and 150 engine operating hours after an oxygen sensor replacement;
4. For engines with catalysts, the maximum allowed exhaust temperature at the catalyst inlet, based on catalyst manufacturer specifications;
5. For lean-burn engines with SCR, the minimum exhaust temperature at the catalyst inlet required for reactant flow (ammonia or urea), and procedures for using portable NOx and oxygen analyzer to establish the acceptable range of reactant flow rate, as a function of load.

Parameter monitoring is not required for diesel engines without exhaust gas recirculation and catalytic exhaust control devices.

B. Procedures for alerting the operator to emission control malfunctions. Engine control systems, such as air-to-fuel ratio controllers, shall have a malfunction indicator light and audible alarm.

C. Procedures for diagnostic emission checks conducted by a portable NOx, CO, and oxygen analyzer per the requirements of clause (h)(2)(D)(ii) of the rule.

D. Procedures for at least daily monitoring, inspection and recordkeeping of:

1. engine load or fuel flow rate;
2. the set point, maximums and acceptable ranges of the parameters identified by subdivision A of this attachment, and the actual values of the same parameters;
3. the engine elapsed time meter operating hours;
4. the operating hours since the last diagnostic emission check required by clause (h)(2)(D)(ii) of the rule;
5. for rich-burn engines with three-way catalysts, the difference of the exhaust temperatures (ΔT) at the inlet and outlet of the catalyst (changes in the ΔT can indicate changes in the effectiveness of the catalyst);
6. engine control system and AFRC system faults or alarms that affect emissions.

The daily monitoring and recordkeeping may be done in person by the operator, or by remote monitoring.

E. Procedures for responding to, diagnosing and correcting breakdowns, faults, malfunctions, alarms, diagnostic emission checks finding emissions in excess of rule or permit limits, and parameters out-of-range, per the requirements of clause (h)(2)(D)(iii) of the rule.

F. Procedures and schedules for preventative and corrective maintenance.

G. Procedures for reporting noncompliance to the Executive Officer in accordance with subparagraph (h)(2)(H) of the rule.

H. Procedures and format for the recordkeeping of monitoring and other actions required by the plan.

ATTACHMENT 2

A. Equipment Tuning Procedure[1] for Forced-Draft Boilers, Steam Generators, and Process Heaters.

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant regulations and requirements.

Should a different tuning procedure be used, a copy of this procedure should be kept with the unit records for two years and made available to the South Coast AQMD personnel on request.

1. Operate the unit at the firing rate most typical of normal operation. If the unit experiences significant load variations during normal operation, operate it at its average firing rate.
2. At this firing rate, record stack gas temperature, oxygen concentration, and CO concentration (for gases fuels) or smoke-spot number[2] (for liquid fuels), and observe flame conditions after unit operation stabilizes at the firing rate selected. If the excess oxygen in the stack gas at the lower end of the range of typical minimum values[3], and if CO emissions are low and there is not smoke, the unit is probably operating at near optimum efficiency - at this particular firing rate.
3. Increase combustion air flow to the furnace until stack gas oxygen levels increase by one to two percent over the level measured in Step 2. As in Step 2, record the stack gas temperature, CO concentration (for gaseous fuels) or smoke-spot number (for liquid fuels), and observed flame conditions for these higher oxygen levels after boiler operation stabilizes.

---

[1] This tuning procedure is based on a tune-up procedure developed by KVB, Inc. for the United States EPA

[2] The smoke-spot number can be determined with ASTM Test Method D-2156 or with the Bacharach method. ASTM Test Method D-2156 is included in a tuneup kit that can be purchased from the Bacharach Company.

[3] Typical minimum oxygen levels for boilers at high firing rates are:

1. For natural gas: 0.5% - 3%
2. For liquid fuels: 2% - 4%

However, complete the remaining portion of this procedure to determine whether still lower oxygen levels are practical.

4. Decrease combustion air flow until the stack gas oxygen concentration is at the level measured in Step 2. From this level gradually reduce the combustion air flow, in small increments. After each increment, record the stack gas temperature, oxygen concentration, CO concentration (for gaseous fuels) and smoke-spot number (for liquid fuels). Also observe the flame and record any changes in its condition. Also observe the flame and record any changes in its condition.
5. Continue to reduce combustion air flow stepwise, until one of these limits reached:
    a. Unacceptable flame conditions – such as flame impingement on furnace walls or burner parts, excessive flame carryover, or flame instability.
    b. Stack gas CO concentrations greater than 400 ppm
    c. Smoking at the stack
    d. Equipment-related limitations – such as low windbox/furnace pressure differential, built in air-flow limits, etc.
6. Develop an O_2/CO curve (for gaseous fuels) or O_2/smoke curve (for liquid fuels) similar to those shown in Figures 1 and 2 using the excess oxygen and CO or smoke-spot number data obtained at each combustion air flow setting.

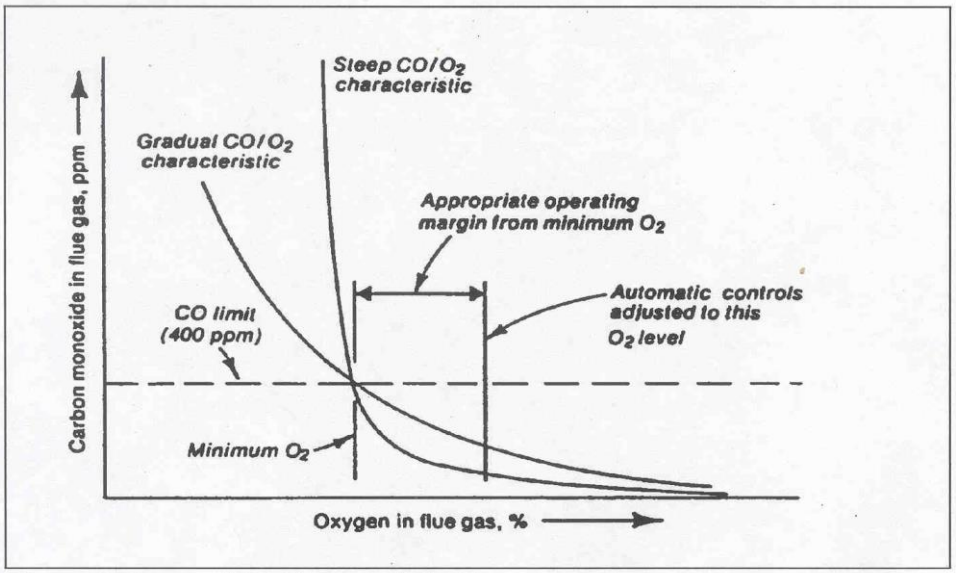


Figure 1 Oxygen/CO Characteristic Curve

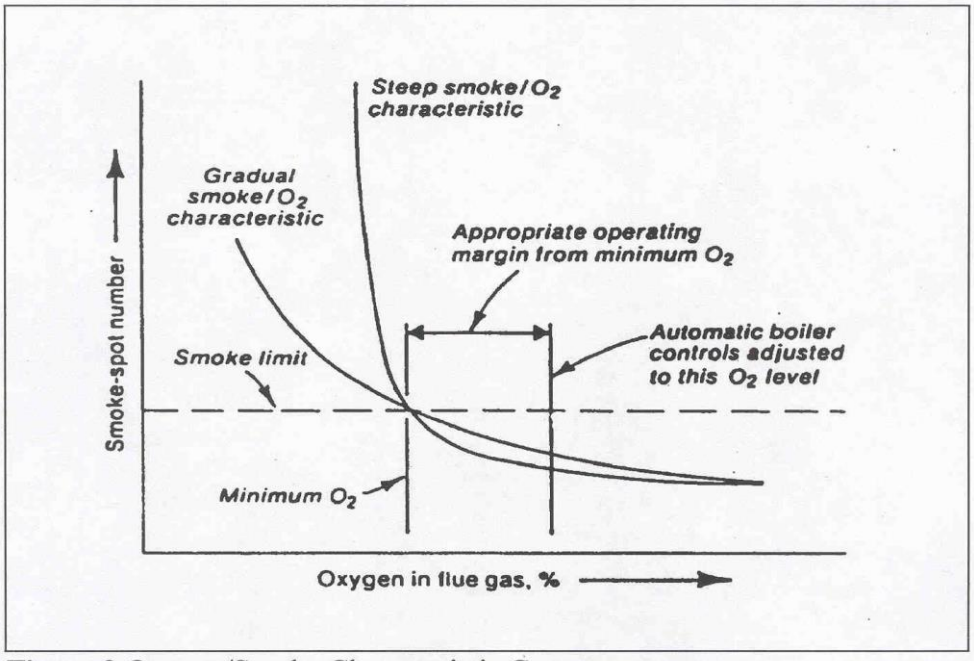


Figure 2 Oxygen/Smoke Characteristic Curve

7. From the curves prepared in Step 6, find the stack gas oxygen levels where the CO emissions or smoke-spot number equal the following values:

Fuel	Measurement	Value
Gaseous	CO Emissions	400 ppm
#1 and #2 oils	smoke-spot number	number 1
#4 oil	smoke-spot number	number 2
#5 oil	smoke-spot number	number 3
Other oils	smoke-spot number	number 4

The above coniditions are referred to as the CO or smoke thresholds, or as the minimum excess oxygen level.

Compare this minimum value of excess oxygen to the expected value provided by the combustion unit manufacturer. If the minimum level found is substanitally higher than the value provided by the combustion unit manufacturer, burner adjustments can probably be made to improve fuel and air mixing, thereby allowing operation with less air.

8. Add 0.5 to 2.0 percent O_2 to the minimum excess oxygen level found in Step 7 and reset burner controls to operate automatically at this higher stack gas oxygen level. This margin above the minimum oxygen level accounts for fuel variations,

variations in atmospheric conditions, load changes, and nonrepeatability or play in automatic controls.

9. If the load of the combustion unit varies significantly during normal operation, repeat Steps 1-8 for firing rates that represent the upper and lower limits of the range of the load. Because control adjustments at one firing rate may affect conditions at other firing rates, it may not be possible to establish the optimum excess oxygen level at all firing rates. If this is the case, choose the burner control settings that give best performance over the range of firing rates. If one firing rate predominates, settings should optimize conditions at that rate.
10. Verify that the new settings can accommodate the sudden load changes that may occur in daily operation without adverse effects. Do this by increasing and decreasing load rapidly while observing the flame and stack. If any of the conditions in Step 5 result, reset the combustion controls to provide a slightly higher level of excess oxygen at the affected firing rates. Next, verify these new settings in a similar fashion. Then make sure that the final control settings are recorded at steady-state operating conditions for future reference.
11. When the above checks and adjustments have been made, record data and attach combustion analysis data to boiler, steam generator, or heater records indicating name and signature of person, title, and the date the tune up was performed

B. Equipment Tuning Procedure for natural Draft-Fired Boilers, Steam Generators, and Process Heaters.

Nothing in this Equipment Tuning Procedure shall be construed to require any act or omission that would result in unsafe conditions or would be in violation of any regulation or requirement established by Factory Mutual, Industrial Risk Insurers, National Fire Prevention Association, the California Department of Industrial Relations (Occupational Safety and Health Division), the Federal Occupational Safety and Health Administration, or other relevant codes, regulations and equipment manufacturers specifications and operating manuals.

Should a different tuning procedure be used, a copy of this procedure should be kept with the unit records for two years and made available to the South Coast AQMD personnel on request.

1. **PRELIMINARY ANALYSIS**
   a. CHECK THE OPERATING PRESSURE OR TEMPERATURE.
      Operate the boiler, steam generator, or heater at the lowest acceptable

pressure or temperature that will satisfy the load demand. This will minimize heat and radiation losses. Determine the pressure or temperature that will be used as a basis for comparative combustion analysis before and after tuneup.

b. CHECK OPERATING HOURS.

Plan the workload so that the boiler, steam generator, or process heater operates only the minimum hours and days necessary to perform the work required. Fewer operating hours will reduce fuel use and emissions. For units requiring a tuneup to comply with the rule, a totalizing non-resettable fuel meter will be required for each fuel used and for each boiler, steam generator, and heater to prove fuel consumption is less than the heat input limit in therms per year specified in the rule.

c. CHECK AIR SUPPLY.

Sufficient fresh air supply is essential to ensure optimum combustion and the area of air supply openings must be in compliance with applicable codes and regulations. Air openings must be kept wide open when the burner is firing and clear from restriction to flow.

d. CHECK VENT

Proper venting is essential to assure efficient combustion. Insufficient draft or overdraft promotes hazards and inefficient burning. Check to be sure that vent is in good condition, sized properly and with no obstructions.

e. COMBUSTION ANALYSIS

Perform an "as is" combustion analysis (CO, O_2, etc.) with a warmed up unit at high and low fire, if possible. In addition to data obtained from combustion analysis, also record the following:

i. Inlet fuel pressure at burner (at high & low fire)

ii. Draft at inlet to draft hood or barometer damper

1) Draft hood: high, medium, and low

2) Barometric Damper: high, medium, and low

iii. Steam pressure, water temperature, or process fluid pressure or temperature entering and leaving the boiler, steam generator, or process heater.

iv. Unit rate if meter is available.

With above conditions recorded, make the following checks and corrective actions as necessary:

2. **CHECKS & CORRECTIONS**

a. CHECK BURNER CONDITION.
Dirty burners or burner orifices will cause boiler, steam generator, or process heater output rate and thermal efficiency to decrease. Clean burners and burner orifices thoroughly. Also, ensure that fuel filters and moisture traps are in place, clean, and operating properly, to prevent plugging of gas orifices. Confirm proper location and orientation of burner diffuser spuds, gas canes, etc. Look for any burned-ff or missing burner parts, and replace as needed.

b. CHECK FOR CLEAN BOILER, STEAM GENERATOR, OR PROCESS HEATER TUBES & HEAT TRANSFER SURFACES.
External and internal build-up of sediment an scale on the heating surfaces creates an insulating effect that quickly reduces unit efficiency. Excessive fuel cost will result if the unit is not kept clean. Clean tube surfaces, remove scale and soot, assure proper process fluid flow and flue gas flow.

c. CHECK WATER TREATMENT & BLOWDOWN PROGRAM.
Soft water and the proper water or process fluid treatment must be uniformly used to minimize scale and corrosion. Timely flushing and periodic blowdown must be employed to eliminate sediment and scale build-up on a boiler, steam generator or process heater.

d. CHECK FOR STEAM, HOT WATER OR PROCESSFLUID LEAKS.
Repair all leaks immediately since even small high-pressure leaks quickly lead to considerable fuel, water and steam losses. Be sure there are no leaks through the blow-off, drains, safety valve, by-pass lines or at the feed pump, if used.

3. **SAFETY CHECKS**

a. Test primary and secondary low water level controls.

b. Check operating and limit pressure and temperature controls.

c. Check pilot safety shut off operation.

d. Check safety valve pressure and capacity to meet boiler, steam generator or process heater requirements.

e. Check limit safety control and spill switch.

4. **ADJUSTMENTS**

While taking combustion readings with a warmed up boiler, steam generator, or process heater at high fire perform checks and adjustments as follows:

a. Adjust unit to fire at rate; record fuel manifold pressure.

b. Adjust draft and/or fuel pressure to obtain acceptable, clean combustion at both high, medium and low fire. Carbon Monoxide CO value should always be below 400 parts per million (PPM) at 3% O_2. If CO is high make necessary adjustments.

Check to ensure boiler, steam generator, or process heater light offs are smooth and safe. A reduced fuel pressure test at both high and low fire should be conducted in accordance with the manufacturer's instructions and maintenance manuals.

c. Check and adjust operation of modulation controller. Ensure proper, efficient and clean combustion through range of firing rates.

When above adjustments and corrections have been made, record all data.

5. **FINAL TEST**

Perform a final combustion analysis with a warmed up boiler, steam generator, or process heater at high, medium and low fire, whenever possible. In addition to data from combustion analysis, also check and record:

a. Fuel pressure at burner (High, Medium, and Low).

b. Draft above draft hood or barometric damper (High, Medium, and Low).

c. Steam pressure or water temperature entering and leaving boiler, steam generator, or process heater.

d. Unit rate if meter is available.

When the above checks and adjustments have been made, record data and attach combustion analysis data to boiler, steam generator, or process heater records indicating name and signature of person, title, company name, company address and date the tuneup was performed.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report
Proposed Rule 1179.1 – ~~NOx~~ Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

October 2020

Deputy Executive Officer
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
Planning, Rule Development, and Area Sources
Michael Morris

Author:	Melissa Gamoning	–	Air Quality Specialist
Co-Author:	Isabelle Shine	–	Air Quality Specialist
	Brian Vlasich	–	Air Quality Specialist
Contributors:	John Anderson	–	Air Quality Analysis & Compliance Supervisor
	Shah Dabirian	–	Program Supervisor
	Monica Fernandez-Neild	–	Senior Air Quality Engineer
	Glenn Kasai	–	Senior Air Quality Engineer
	Kendra Reif	–	Air Quality Specialist
	Dipankar Sarkar	–	Program Supervisor
	Angela Shibata	–	Supervising Air Quality Engineer
	Bill Welch	–	Senior Air Quality Engineer
	Mike Wickson	–	Senior Air Quality Engineer
	Lisa Wong	–	Air Quality Specialist
Reviewed By:	Karin Manwaring	–	Senior Deputy District Counsel
	Kevin Orellana	–	Program Supervisor
	William Wong	–	Principal Deputy District Counsel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

GOVERNING BOARD

Chairman: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT
Council Member, Wildomar
Cities of Riverside County

MEMBERS:

KATHRYN BARGER
Supervisor, Fifth District
County of Los Angeles

LISA BARTLETT
Supervisor, Fifth District
County of Orange

JOE BUSCAINO
Council Member, 15th District
City of Los Angeles Representative

MICHAEL A. CACCIOTTI
Council Member, South Pasadena
Cities of Los Angeles County/Eastern Region

VANESSA DELGADO
Senate Rules Committee Appointee

GIDEON KRACOV
Governor's Appointee

LARRY MCCALLON
Mayor, Highland
Cities of San Bernardino County

JUDITH MITCHELL
Council Member, Rolling Hills Estates
Cities of Los Angeles County/Western Region

V. MANUEL PEREZ
Supervisor, Fourth District
County of Riverside

CARLOS RODRIGUEZ
Council Member, Yorba Linda
Cities of Orange County

JANICE RUTHERFORD
Supervisor, Second District
County of San Bernardino

EXECUTIVE OFFICER:

WAYNE NASTRI

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Publicly owned treatment works (POTWs) are facilities that treat municipal wastewater. A POTW is defined as a wastewater treatment or reclamation plant, either owned or operated by a public entity, including all operations within the boundaries of the wastewater and sludge treatment plant. POTWs treat sewage water with a multi-stage process, which includes anaerobic digestion where organic solids are broken down by microorganisms, before discharging water from the facility. This process produces a byproduct called digester gas, a form of biogas. Digester gas differs from other process gases because of the specific contaminants found in wastewater. Digester gas is used to fuel combustion equipment that provides heat or power for processes within the POTW.

During the rulemaking for the December 2018 amendments for Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146), Rule 1146.1 - Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146.1), and Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters (Rule 1146.2), the South Coast AQMD received comments describing the unique challenges faced by POTWs associated with digester gas and how POTWs provide essential public services. Staff recommended to separate provisions for combustion equipment at POTWs (and at landfills, which face similar challenges and will be subject to a separate rulemaking). Proposed Rule 1179.1 - ~~NOx~~ Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities (PR 1179.1) was developed to establish Best Available Retrofit Control Technology (BARCT) requirements for combustion equipment located at POTWs using digester gas and contain provisions applicable to POTWs in one rule.

A total of 86 biogas fueled boilers, turbines, and engines, at 30 facilities will be affected by PR 1179.1. Oxides of nitrogen (NOx), carbon monoxide (CO), and volatile organic compound (VOC) limitations are contained in PR 1179.1 for applicable equipment categories. Emission limits for boilers and engines are the same as existing limits that POTWs are currently required to meet under existing source-specific rules. Turbines are currently exempt from Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines which is the source-specific rule that establishes NOx and CO emission limits for turbines. As a result~~However~~, turbines greater than or equal to 0.3 MW will be~~are the only equipment category~~ required by PR 1179.1 to meet lower NOx emission limits. ~~Boilers, turbines less than 0.3 MW, and engines will be subject to NOx emission limitations that are the same as those contained in current applicable source-specific rules or current equipment permits.~~ The proposed NOx emission limit of 18.8 ppm at 15 percent oxygen on a dry basis for turbines greater than or equal to 0.3 MW will reduce NOx emissions by 0.05 tpd[1]. Turbines less than 0.3 MW will be required to meet the proposed emission limit of 9 ppm at the time of adoption which is consistent with current permit limits. The cost-effectiveness for turbines to meet 18.8 ppm at rule adoption is $48,600 per ton of NOx reduced[2]. Facilities would also be required to revise equipment permits to reflect the applicability of PR 1179.1. Including

[1] Reductions calculated are based on current permitted concentration emission levels and proposed emission limit.
[2] Reductions calculated as part of the cost-effectiveness determination are based on current concentration emission levels of the turbines as demonstrated in recent source tests.

the costs for permit revisions, the total cost-effectiveness to implement PR 1179.1 is approximately $50,000 per ton of NOx reduced.

PR 1179.1 was developed through a public process. Five Working Group meetings were held on: May 2, 2019, August 13, 2019, November 6, 2019, February 12, 2020, and June 4, 2020. Working Group meetings include affected businesses, environmental and community representatives, public agencies, consultants, and other interested parties. The purpose of the Working Group meetings is to discuss details of proposed amendments and to listen to concerns and issues with the objective to build consensus and resolve issues.

In addition, a Public Workshop was held on July 22, 2020. The purpose of the Public Workshop is to present the proposed rule language to the general public and to stakeholders, as well as to solicit comments.

CHAPTER 1: BACKGROUND

BACKGROUND

Publicly owned treatment works (POTWs) treat municipal wastewater. A POTW is defined as a wastewater treatment or reclamation plant, either owned or operated by a public entity, including all operations within the boundaries of the wastewater and sludge treatment plant. POTWs treat sewage water with a multi-stage process before discharging water from the facility. The treatment process involves anaerobic digestion where organic solids are broken down by microorganisms. This process produces a byproduct called digester gas, a form of biogas. Digester gas differs from other process gases because of the specific contaminants found in wastewater. Digester gas is used to fuel combustion equipment that provides heat or power for processes within the POTW. If a facility produces excess digester gas or does not have equipment that can utilize produced digester gas, the facility is forced to flare the digester gas. Flaring excess gas is recognized as an important aspect of maintaining safety but it is preferred for facilities to implement projects that beneficially use digester gas, such as combustion equipment or fuel cells.

During the rulemaking for the December 2018 amendments for Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146), Rule 1146.1 - Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146.1), and Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters (Rule 1146.2), the South Coast AQMD received comments describing the unique challenges faced by POTWs associated with digester gas and how POTWs provide essential public services. As a result, staff recommended to separate provisions for combustion equipment at POTWs and landfills, as landfills have similar challenges associated with digester gas as POTWs. Proposed Rule 1179.1 - ~~NOx~~ Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities (PR 1179.1) was developed to establish Best Available Retrofit Control Technology (BARCT) requirements for combustion equipment located at POTWs and to contain provisions specific to equipment located at POTWs in one rule. Staff identified characteristics of POTWs that required consideration throughout the rule development. These unique characteristics include the composition of the digester gas, the use of digester gas, the potential impacts of statewide legislation including Senate Bill (SB) 1383, and the challenges unique to public entities, including financial constraints and the public planning process.

Digester Gas

Digester gas at POTWs is primarily produced from solid organic waste in wastewater but can also be produced from food waste. Digester gas produced by the digestion of solid organic waste found in wastewater has a lower Btu content (higher heating value) than that of natural gas. Btu content has been reported in the range of 550-650 Btu/scf for digester gas produced by facilities in the South Coast AQMD, whereas natural gas has a higher heating value of approximately 1050 Btu/scf. Another significant difference between digester gas and natural gas or other conventional fuels is the presence of siloxanes and high levels of undesirable compounds such as hydrogen sulfide (H_2S).

The presence of siloxanes in gas streams can affect combustion processes if not properly maintained. When siloxane compounds are combusted, silicon dioxide is formed. This glass-like

compound forms deposits on components of combustion equipment, increasing maintenance, and if not maintained, can damage combustion equipment. Siloxane presence in digester gas streams can also damage post-combustion equipment, specifically, selective catalytic reduction (SCR) units. SCR catalyst functionality is severely hindered by siloxanes. Siloxanes can deactivate the catalyst of the SCR, causing the SCR to be ineffective for reducing NOx. To minimize~~resolve~~ this problem, facilities use gas cleaning technology to remove siloxanes before combustion. However, inadequate cleaning of the digester gas can foul~~could cause the facility to change out~~ the SCR catalyst~~ more frequently~~, increasing operating and maintenance costs.

SB 1383

SB 1383 - Short-Lived Climate Pollutants; Methane Emissions: Dairy and Livestock; Organic Waste: Landfills was approved on September 19, 2016, and is intended to regulate greenhouse gas emissions by requiring food waste to be diverted from landfills and processed elsewhere. POTWs offer an alternative to landfills for accepting food waste. Acceptance of food waste at POTWs varies, with some POTWs currently accepting food waste and possibly increasing acceptance, some that are currently not accepting food waste that have plans to begin accepting food waste, and some that currently do not and do not have plans to accept food waste in the future. POTWs have commented as part of the work for Rule 1118.1 for non-refinery flares that SB1383 is anticipated to~~may~~ increase~~ use of~~ digester gas generation at POTWs. Although digester gas generation ~~it~~ is expected to increase, the impact of large-scale food waste processing at POTWs remains unclear.

Financial Challenges and the Public Planning Process

POTWs experience challenges that private industries do not experience. POTW projects are subject to a structured procurement process. New projects require approval from governing bodies which may be by city council, board of directors, or board of county supervisors, for example. Securing the financial means for a project to comply with regulations may be more difficult for an essential public service than for private industry. POTWs are public service providers and do not manufacture products for sale. To recover costs of implementing a control project, POTWs may need to increase utility rates for the consumer. Increased costs for a public utility may be difficult for POTWs to impose.

REGULATORY HISTORY

Combustion equipment located at POTWs are currently regulated under the following source-specific rules. NOx and CO emissions from boilers, process heaters and steam generators are regulated under Rules 1146, 1146.1, and 1146.2. This series of rules includes emission limits for all fuels, including digester gas. Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134) applied to turbines that were in operation before 1989. The six turbines located at POTWs were not in operation before 1989. Rule 1134 was amended on April 5, 2019 and excluded turbines located at POTWs considering Proposed Rule 1179.1 was in development. Rule 1134 contains emission limits for all fuels, but does not apply to equipment located at POTWs or landfills. NOx, VOC, and CO emissions from engines are regulated under Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (Rule 1110.2). Rule 1110.2 contains

emission limits for all gaseous and liquid fuels, including digester gas. Table 1-1~~2~~ lists the combustion equipment located at POTWs and applicable rules.

TABLE 1-1
RULES APPLICABLE TO COMBUSTION EQUIPMENT AT POTWS

Equipment	South Coast AQMD Rule	General Provisions
Boilers > 2 MMBtu/hr	Rules 1146 and 1146.1 (NOx and CO)	Natural gas and digester gas emission limits, source testing frequency, CEMS, monitoring, recording, recordkeeping
Boilers ≤ 2 MMBtu/hr	Rules 1146.2 (natural gas only) (NOx) No requirements for boilers ≤ 2 MMBtu/hr using digester gas	Emission limitations for manufactured equipment fired with natural gas, monitoring, recording, recordkeeping
Emergency internal combustion engines	Rule 1470 – Requirements for Stationary Diesel-Fueled Internal Combustion Engines and Other Compression Ignition Engines (Diesel PM)	Operation limitations, emissions standards, fuel and fuel additive requirements, monitoring, recordkeeping, and reporting requirements
Non-emergency internal combustion engines	Rule 1110.2 (NOx, VOC, and CO)	Natural gas and digester gas emission limits, source testing frequency, source testing protocols, CEMS, monitoring, recording, recordkeeping, I&M plan requirements
Non-refinery flares	Rule 1118.1 (NOx, VOC)	Flare gas, including digester gas, emission limits, source testing requirements, monitoring, recording and recordkeeping
Miscellaneous combustion equipment	Rule 1147 (NOx)	Natural gas and digester gas emission limits, source testing requirements, monitoring, recording and recordkeeping
Turbines ≥ 0.3 MW	Currently no source specific rule for turbines ≥ 0.3 MW at POTWs	N/A
Turbines < 0.3 MW	Currently no source specific rule for turbines < 0.3 MW	N/A

AFFECTED FACILITIES AND EQUIPMENT

Based on South Coast AQMD's permit database, there are 30 POTW facilities with equipment subject to PR 1179.1. PR 1179.1 was developed to address digester gas fired combustion

equipment located at POTWs that were not assessed in recently amended source-specific rules. Table 1-2 contains the equipment affected by PR 1179.1.

TABLE 1-2
AFFECTED EQUIPMENT

Equipment Type	Number of Units
Boilers > 2 MMBtu/hr	
Digester gas	7
Dual fuel	26
Boilers ≤ 2 MMBtu/hr	
Digester gas	6
Dual fuel	10
Turbines ≥ 0.3 MW	
Dual fuel	6
Turbines < 0.3 MW	
Digester gas	5
Dual fuel	5
Engines	
Dual fuel	21

Digester gas turbines and digester gas boilers were not assessed in the April 2019 amendments to Rule 1134 (turbines) or the December 2018 amendments to Rules 1146, 1146.2, and 1146.2 (boilers). Rule 1134 does not apply to any turbine located at a POTW and currently turbines located at POTWs are not subject to any rule. Provisions for turbines located at a POTW will be contained in PR 1179.1. All combustion equipment permitted to fire only non-digester gas fuels will remain subject to source-specific rules, with the exception of turbines greater than or equal to 0.3 MW. Equipment at POTWs not affected by PR 1179.1, include emergency engines, flares, miscellaneous equipment, and most natural gas fired equipment (excluding turbines ≥ 0.3 MW). Emergency engines are limited to 200 operating hours per year regardless of fuel. Flares located at POTWs were assessed as part of the January 4, 2019 amendments to Rule 1118.1 – Control of Emissions from Non-Refinery Flares (Rule 1118.1). Flares located at POTWs will remain subject to Rule 1118.1. One digester gas dryer was identified and is currently subject to Rule 1147 – NOx Reductions from Miscellaneous Sources (Rule 1147). Rule 1147 is scheduled to be amended after PR 1179.1 and will contain provisions for digester gas and natural gas fired miscellaneous equipment located at POTWs.

Applicability to Engines at POTWs

Initially during the rule development process, staff was proposing to keep engines subject to Rule 1110.2 since the November 2019 amendments confirmed no changes to the NOx, VOC, and CO limits established in the 2012 amendments. During the initial working group meetings, some stakeholders expressed their preference to include engines in PR 1179.1 in order to have one rule that would address all combustion equipment at POTWs. In subsequent working group meetings, staff informed stakeholders that permit revisions and updated Inspection and Monitoring (I&M)

plans would be needed to reflect PR 1179.1 provision references and presented the associated permit revision fees that facilities would incur.

The costs associated with engine permit revisions are higher compared to other combustion equipment because rule references are more detailed in engine permits and engine permits require Inspection and Maintenance (I&M) plans. Since facilities would incur additional permitting costs if engines requirements in Rule 1110.2 were to be moved to PR 1179.1, staff surveyed all the POTWs with engines to confirm if facilities support including engines in PR 1179.1, despite incurring associated fees.

Based on the survey, seven of the eight POTWs with non-emergency internal combustion engines support including biogas engines in Rule 1179.1 with the understanding of the additional permitting fees. As a result, staff proposes to include only biogas engines in the applicability of PR 1179.1 and natural gas engines will remain applicable to Rule 1110.2. Some stakeholders requested consideration of waiving these fees. However, permitting fees are established in Regulation ~~X~~III and the request would require a separate rule amendment.

PUBLIC PROCESS

The development of PR 1179.1 was conducted through a public process. Five Working Group meetings were held on: May 2, 2019, August 13, 2019, November 6, 2019, February 12, 2020, and June 4, 2020. Working Group meetings include representatives from affected agencies, environmental and community representatives, affected facilities, industry groups, and other interested parties. The purpose of the working group meetings is to discuss rule concepts and listen to public comments concerning the rule, with the objective to build consensus and address key issues.

A Public Workshop was held on July 22, 2020. The purpose of the Public Workshop is to present the proposed rule to the general public and to stakeholders.

Staff has also conducted multiple site visits as part of this rulemaking process and has met with individual facility operators. In addition, staff has met several times with the affected stakeholders via remote communication to review the proposed rule language and to address outstanding issues.

CHAPTER 2: BARCT ASSESSMENT

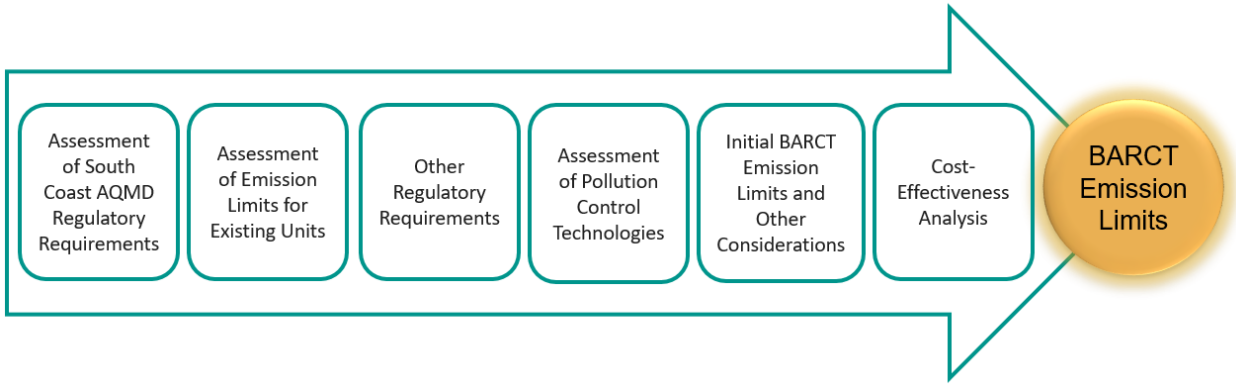
INTRODUCTION

The purpose of a Best Available Retrofit Control Technology (BARCT) assessment is to identify any potential emission reductions from specific equipment or industries and establish an emission limit that is consistent with state law. Under California Health and Safety Code § 40406, BARCT is defined as:

> "… an emission limitation that is based on the maximum degree of reduction achievable, taking into account environmental, energy, and economic impacts by each class or category of source."

BARCT assessments are performed periodically for equipment categories to determine if current emission limits are representative of BARCT emission limits. The BARCT assessment process identifies current regulatory requirements for equipment categories established by South Coast AQMD and other air districts. Permit limits and source test data are analyzed to identify the emission levels being achieved with existing technology. Current and emerging technologies are assessed to determine the feasibility of achieving lower NOx emission levels. An initial BARCT emission limit is proposed based the BARCT assessment. Costs are gathered and analyzed to determine the cost for a unit to meet the proposed initial NOx emission limit. A cost-effectiveness calculation is made that considers the cost to meet the initial proposed NOx limit and the reductions that would occur from implementing technology that could meet the proposed limit. A final BARCT emission limit is established that is based on the BARCT assessment, including the cost-effectiveness analysis.

Figure 2-1 – BARCT Assessment Process



BARCT assessments were conducted only for digester gas fired boilers and turbines as part of rulemaking for PR 1179.1 because digester gas engines underwent a BARCT analysis under Rule 1110.2 and most of those engines[1] had effective dates beginning in January 1, 2017. Therefore, a BARCT assessment for digester gas engines was not conducted for this rulemaking. Similarly, natural gas turbines underwent a BARCT analysis in 2019 and a BARCT assessment for those turbines was not conducted during this rulemaking.

[1] Variances were granted for three facilities that provided extra time to comply with the emission limits in Rule 1110.2 or implement an alternative digester gas beneficial use project.

BARCT ANALYSIS APPROACH

Boilers ≤ 2 MMBtu/hr

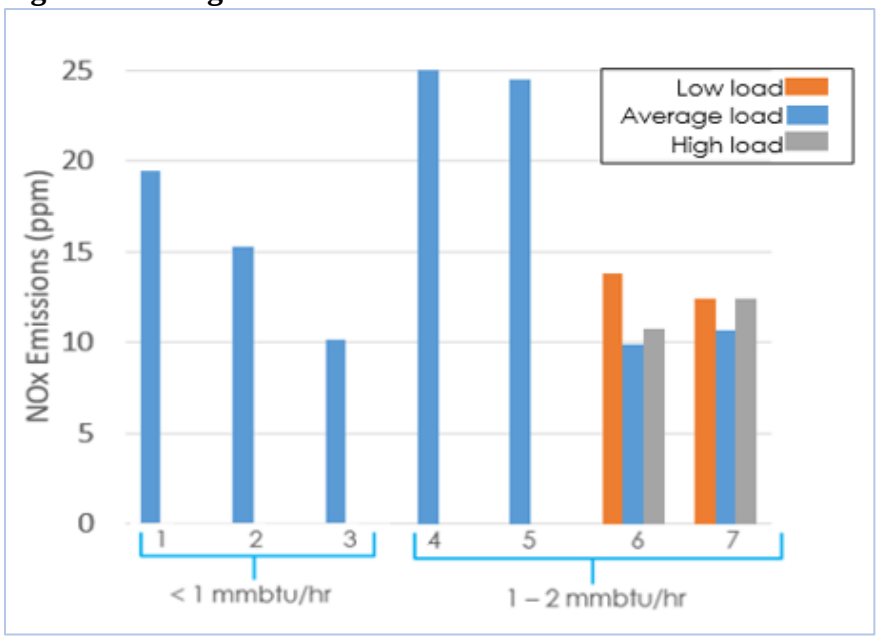
Assessment of South Coast AQMD Regulatory Requirements

There are 16 boilers ≤ 2 MMBtu/hr fired on digester gas within South Coast AQMD jurisdiction (6 digester gas, 10 dual fuel). The majority of these units are subject to individual permit limits. The permit limit for most of these units is 30 ppm at 3 percent oxygen on a dry basis with the exception of 2 boilers with a permit limit of 6 lbs/day and 2 boilers without a permit limit. South Coast AQMD has no rule requirement for boilers ≤ 2 MMBtu/hr that fire digester gas. Rule 1146.2 prohibits manufacturing for use or offering for sale for use burners ≤ 2 MMBtu/hr fired with natural gas that emit more than 30 ppm of NOx at 3 percent oxygen on a dry basis. Although natural gas units covered by Rule 1146.2 are exempt from permitting requirements, all digester gas units have South Coast AQMD permits.

Assessment of Emission Limits for Existing Equipment

Source tests were obtained for 7 of the 16 boilers and the results ranged from 10.2 ppm to 25.0 ppm at 3 percent oxygen on a dry basis. Units ≤ 1 MMBtu/hr all had source test results of less than 20 ppm at 3 percent oxygen on a dry basis. Figure 2-2 shows the source test results obtained for boilers ≤ 2 MMBtu/hr.

Figure 2-2 – Digester Gas Boiler Source Test Results



**All emission limits in parts per million (ppm) are referenced at 3 percent oxygen on a dry basis*

Other Regulatory Requirements

San Joaquin Valley Air Pollution Control District (SJVAPCD) and Sacramento Metropolitan Air Quality Management District (SMAQMD) have similar requirements that prohibit the distribution or installation of any burner not meeting the rule requirement; however, SJVAPCD and SMAQMD restrictions are not limited to natural gas only fired units. SJVAPCD's Rule 4308 limits NOx

emissions from burners > 0.4 MMBtu/hr and less than 2.0 MMBtu/hr to 30 ppm at 3 percent oxygen on a dry basis, ≥ 0.075 and less than 0.4 MMBtu/hr to 77 ppm at 3 percent oxygen on a dry basis. SMAQMD's Rule 411 limits units > 1 MMBtu/hr and less than 5 MMBtu/hr to 30 ppm at 3 percent oxygen on a dry basis, and units 0.4 MMBtu/hr and ≤ 1 MMBtu/hr to 20 ppm at 3 percent oxygen on a dry basis.

Assessment of Pollution Control Technologies

Staff discussed with one supplier the availability of 12 ppm at 3 percent oxygen on a dry basis low NOx burners for boilers ≤ 2 MMBtu/hr. The supplier stated that 12 ppm at 3 percent oxygen on a dry basis burners are available in sizes ≥ 1 MMBtu/hr and that the 12 ppm NOx emission level can be guaranteed. Staff did not receive information from suppliers regarding achievable emission levels for boilers < 1 MMBtu/hr. A supplier informed staff that retrofitting low NOx burners for boilers < 1 MMBtu/hr could be challenging due to the limiting dimensions of a small boiler and could not guarantee 12 ppm at 3 percent oxygen on a dry basis for boilers < 1 MMBtu/hr. Source tests indicate that existing burners for boilers < 1 MMBtu/hr are meeting 20 ppm at 3 percent oxygen on a dry basis.

Initial BARCT Emission Limits and Other Considerations

Based on the information from one supplier and source test data, staff finds that a NOx emission limit of 12 ppm at 3 percent oxygen on a dry basis for boilers 1 – 2 MMBtu/hr and 20 ppm at 3 percent oxygen on a dry basis for boilers < 1 MMBtu/hr is feasible. The total emission reductions for boilers ≤ 2 MMBtu/hr would be 0.0005 tpd. Because of the small emission reductions combined with concerns expressed by facilities about meeting lower limits, staff is proposing a 30 ppm at 3 percent oxygen on a dry basis emission limit on all boilers ≤ 2 MMBtu/hr. All boilers ≤ 2 MMBtu/hr surveyed with the exception of four units described above are already permitted at 30 ppm at 3 percent oxygen on a dry basis.

TABLE 2-1
INITIAL NOX EMISSION LIMITS FOR DIGESTER GAS OR DUAL FUEL BOILERS ≤ 2 MMBTU/HR

Equipment Type	Limit at Rule Adoption
Boilers ≤ 2 MMBtu/hr firing digester gas, digester gas and another fuel, or other fuel	30 ppm*

**All emission limits in parts per million (ppm) are referenced at 3 percent oxygen on a dry basis.*

Cost-Effectiveness Analysis

For boilers currently permitted at 30 ppm at 3 percent oxygen on a dry basis, a cost-effectiveness analysis was not conducted for these units that will meet the proposed emission limit upon rule adoption. No costs were considered for boilers without a permitted NOx concentration limit to meet 30 ppm upon unit replacement, since replacing burner units is a normal part of business operations and would not incur additional costs.

BARCT Emission Limits

Staff proposes that units without permitted NOx concentration limits will be subject to the emission limit upon a burner or boiler replacement. The following table provides the proposed BARCT emission limits for boilers ≤ 2 MMBtu/hr.

TABLE 2-2
PROPOSED BARCT EMISSION LIMITS FOR DIGESTER GAS OR DUAL FUEL BOILERS ≤ 2 MMBTU/HR

Equipment Type	Limit at Rule Adoption*	Limit Upon Burner or Boiler Replacement*
Boilers ≤ 2 MMBtu/hr firing digester gas, digester gas and another fuel, or other fuel	Permit Limit	30 ppm

**All emission limits in parts per million (ppm) are referenced at 3 percent oxygen on a dry basis.*

Boilers > 2 MMBtu/hr

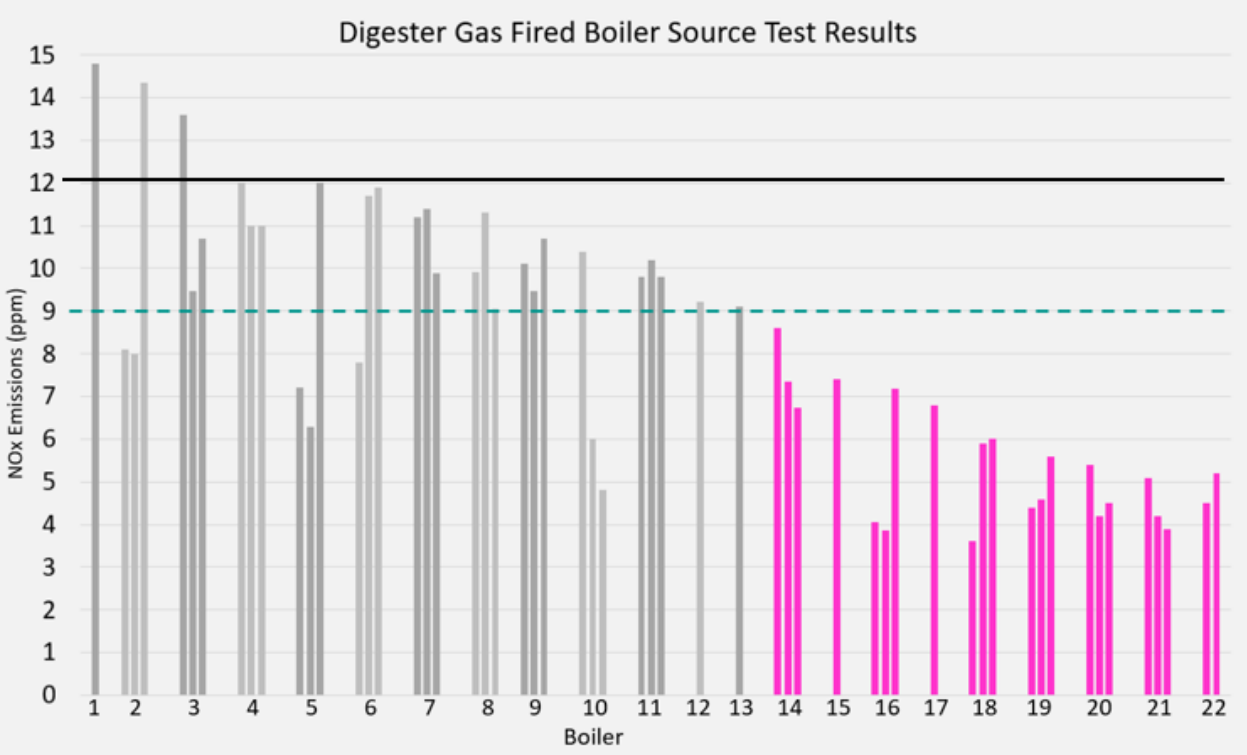
Assessment of South Coast AQMD Regulatory Requirements

South Coast AQMD's Rules 1146 and 1146.1 require boilers > 2 MMBtu/hr meet 15 ppm at 3 percent oxygen on a dry basis when firing digester gas and 9 ppm at 3 percent oxygen on a dry basis when firing natural gas. Rules 1146 and 1146.1 were recently amended in December 2018 and a BARCT assessment was conducted for natural gas boilers. The amendments require certain natural gas boilers to meet 7 ppm at 3 percent oxygen on a dry basis, however, natural gas boilers located at municipal sanitation service facilities are subject to 9 ppm at 3 percent oxygen on a dry basis. Co-fired boilers remained subject to a weighted average emission limit when firing more than an approved percentage of natural gas.

Assessment of Emission Limits for Existing Units

Source test results for boilers >2 MMBtu/hr in South Coast AQMD jurisdiction firing 100 percent digester gas indicate that 9 ppm at 3 percent oxygen on a dry basis is achievable. Source tests were obtained for 22 out of 33 boilers permitted to fire digester gas. Twenty-six boilers are dual fuel and have the ability to separately fire digester gas and natural gas, and 7 are digester gas fired only. Source tests contained results for boilers firing low, mid, and high loads with the exception of 5 boilers firing mid load and one boiler firing low and average loads. All boilers in Figure 2-3 meet the 15 ppm at 3 percent oxygen on a dry basis emission limit. Nine boilers source tested below 9 ppm at 3 percent oxygen on a dry basis at all loads (highlighted). Results are displayed in order of low, mid, and high load in Figure 2-3.

Figure 2-3 – Digester Gas Fired Boiler Source Test Results



**All emission results in parts per million (ppm) are referenced at 3 percent oxygen, on a dry basis.*

Periodic monitoring is required by Rules 1146 and 1146.1. Periodic monitoring results were also analyzed to determine if source tests are representative of normal boiler performance. Complete sets of monthly monitoring data were obtained for six boilers. Staff determined that source results were representative of average emission levels. For example, two boilers that source tested below 9 ppm at 3 percent oxygen on a dry basis had periodic monitoring test results below 9 ppm at 3 percent oxygen on a dry basis in more than 90 percent of the tests. One boiler exceeded 9 ppm at 3 percent oxygen on a dry basis twice over the course of five years. Another boiler exceeded 9 ppm at 3 percent oxygen on a dry basis three times in five years.

Other Regulatory Requirements

Two districts have emission limits more stringent than South Coast AQMD for digester gas boilers. SJVAPCD currently has a permitted boiler that fires digester gas. The boiler complies with SJVAPCD's Rule 4320 limit of 9 ppm at 3 percent oxygen on a dry basis. The boiler is a dual fuel and 16.7 MMBtu/hr. The boiler recently source tested at 7.9 ppm at 3 percent oxygen on a dry basis while firing 100 percent digester gas. Stakeholders commented that SJVAPD's allowed tuning practices prior to source testing may allow for lower emission results and/or rule limits. South Coast AQMD requires that a boiler must operate at least 250 hours or 30 days subsequent to tuning or servicing. Staff at SJVAPCD informed South Coast AQMD that a boiler must be operating at least 2 hours subsequent to tuning. Staff was unable to locate a protocol that specifies the requirements for source testing. Nevertheless, even with different source test protocols, results for digester gas fired boilers using South Coast AQMD protocols confirm BARCT at NOx emissions levels < 9 ppm at 3 percent oxygen on a dry basis.

SMAQMD's Rule 411 requires that boilers > 20 MMBtu/hr meet 9 ppm at 3 percent oxygen on a dry basis, boilers ≥ 5-20 MMBtu/hr meet 15 ppm at 3 percent oxygen on a dry basis, and boilers ≥ 1 – 5 meet 30 ppm at 3 percent oxygen on a dry basis. The limits apply to boilers that fire any fuel which is a gas at standard conditions. Rule 411 does not specify a limit for digester gas. Units ≥ 5 MMBtu/hr that fire landfill gas have a limit of 15 ppm at 3 percent oxygen on a dry basis. SJVAPCD's Rule 4320 specifies limits for boilers ≥ 2 – 5 MMBtu/hr that fire gaseous fuel, where "gaseous fuel" is defined as any fuel that is a fuel at which is a gas at standard conditions. The limits are 12 ppm (atmospheric) and 9 ppm (non-atmospheric), at 3 percent oxygen on a dry basis. Boilers > 5 MMBtu/hr that fire more than 50 percent by volume PUC quality gas are subject to an emission limit of 9 ppm at 3 percent oxygen on a dry basis.

Assessment of Pollution Control Technologies

Thermal NOx is the largest contributor to NOx emissions from boilers and is formed by high flame temperatures. Different control technologies exist that reduce NOx emissions from boilers. Low NOx burners and flue gas recirculation reduce the formation of thermal NOx at the combustion zone and SCR removes NOx post-combustion. Low NOx burners control the air-fuel mixture during combustion and modify the shape of the flame or number of flames to reduce NOx formation and maintain efficiency. Flue gas recirculation is a method of NOx control that returns hot flue gas to the combustion air stream to lower flame temperature. Low NOx burners are currently used on all boilers that fire digester gas in South Coast AQMD. Some boilers utilize flue gas recirculation systems alone or with an oxygen trim system. SCR is not necessary to meet the current limit of 15 ppm and no facilities are using SCR to limit NOx emissions on boilers.

One stakeholder commented that their boilers experience flame-out due to siloxane build up. This facility has opted to treat the gas prior to combustion to resolve the issue. Stakeholders also commented on the instability of NOx emission levels while firing digester gas with low-NOx burners. One facility commented that holes are created in their mesh burner screens, possibly due to digester gas combustion hot spots.

Staff discussed the issues brought forth by stakeholders with three burner suppliers. Suppliers stated that unstable NOx emissions can result from fluctuations in the higher heating value (HHV) of the digester gas, weather changes, load changes, and contaminants.

Staff was informed that oxygen trim systems are beneficial in managing fluctuations in HHV and can tolerate fluctuations of ±100 Btu/scf. Fluctuations of ±50 Btu/scf in HHV should not cause unstable NOx emissions. Changes in weather such as temperature swings and humidity swings can lead to emissions instability and would require more frequent tuning. Weather changes can result in 3 ppm – 4 ppm, at 3 percent oxygen on a dry basis swings in NOx emissions and the recommended tuning frequency is every 3 – 6 six months depending on the target NOx emission levels. Load swings are managed with the turndown ratio of the burner. A typical low NOx burner has a turndown ratio of 4:1. A burner with a small turndown ratio offers less flexibility to manage load swings.

Contaminants can damage burner screens that may result in unstable NOx emissions. Corrosive contaminants such as H_2S can affect screens and siloxanes can clog screens leading to hotspots that may cause holes to form in the screen. If gas is untreated prior to combustion, burners need to be cleaned every 3 – 6 months depending on the level of contaminants. To avoid damage to burner screens, gas should be adequately treated to remove contaminants prior to combustion. Ambient temperature is another factor that may contribute to holes forming in burner screens as holes may form from air expansion. Oxygen trim systems can be used to manage the amount of air in the fuel to avoid complications with air expansion. Woven screens are another option for managing fluctuations in air volume.

One supplier stated that achieving emission levels of 7 ppm – 9 ppm, at 3 percent oxygen on a dry basis is possible with proper tuning and possibly an oxygen trim system or flue gas recirculation system that optimizes the air-to-fuel ratio. However, this supplier could not guarantee emission levels at 9 ppm at 3 percent oxygen on a dry basis due to the varying HHV in digester gas.

Initial BARCT Emission Limits and Other Considerations

Staff proposed a NOx emission limit of 12 ppm at 3 percent oxygen on a dry basis for boilers greater than 2 MMBtu/hr. Earlier in the rule development process, staff proposed an initial NOx emission limit of 9 ppm at 3 percent oxygen on a dry basis based on discussions with suppliers and emission test results. Staff reached out to stakeholders and followed up with suppliers regarding the proposed NOx emission limit. Stakeholders expressed their concern about meeting 9 ppm at 3 percent oxygen on a dry basis consistently and stated that 9 ppm at 3 percent oxygen on a dry basis is achievable, but it would require operators to tune the boiler more frequently, impacting resources at the facilities.

Two other suppliers guaranteed NOx emission levels of <12 ppm at 3 percent oxygen on a dry basis for burner replacements. One of the suppliers stated that 9 ppm at 3 percent oxygen on a dry basis burners would be available in the next few years. Stakeholders expressed their reluctance to rely on supplier guarantees. However, in staff's analysis of source test results for boilers > 2 MMBtu/hr, 19 out of 22 boilers (Figure 2-3) met 12 ppm at 3 percent oxygen on a dry basis for all loads required by the source tests. Staff examined the performance of the burners manufactured by the suppliers that guaranteed 12 ppm at 3 percent oxygen on a dry basis. The source test results showed that these specific burners met 12 ppm. Staff concluded that burners that cannot not meet 12 ppm could meet the proposed emission limit if replaced with burners that are shown and guaranteed to meet 12 ppm at 3 percent oxygen on a dry basis.~~The suppliers claiming a guarantee of 12 ppm at 3 percent oxygen on a dry basis do not manufacture the burners that source tested above 12 ppm at 3 percent oxygen on a dry basis.~~ Based on the information from emission tests results and the emission levels that suppliers will guarantee for new burners, staff proposed an emission limit of 12 ppm at 3 percent oxygen on a dry basis.

Cost-Effectiveness Analysis

Staff conducted a cost-effectiveness analysis to retrofit boilers with burners that can meet 12 ppm at 3 percent oxygen on a dry basis. The average cost-effectiveness to meet 12 ppm at 3 percent oxygen on a dry basis is > $50,000 per ton of NOx reduced when achieved by requiring facilities

to replace burners before the time that the facility would regularly replace the equipment because emission reductions are relatively low.

BARCT Emission Limits
Staff is proposing the current NOx emission limit of 15 ppm at 3 percent oxygen on a dry basis for boilers < 2 MMBtu/hr. Replacements and new units will be required to meet BACT emission levels. The following table provides the proposed BARCT emission limits for boilers > 2 MMBtu/hr.

TABLE 2-34
PROPOSED BARCT EMISSION LIMITS FOR BOILERS > 2 MMBTU/HR

Equipment Type	Limit at Rule Adoption*	Limit Upon Burner or Boiler Replacement
Boilers > 2 MMBtu/hr firing at least 90% firing digester gas	15 ppm	BACT Emission Level

**All emission limits in parts per million (ppm) are referenced at 3 percent oxygen on a dry basis.*

Turbines < 0.3 MW
There are 10 turbines < 0.3 MW located at two POTW facilities within South Coast AQMD jurisdiction. Five are exempt from permitting and do not have emission limits. The other five are not yet commissioned and have been permitted at 9 ppm at 15 percent oxygen on a dry basis.

Assessment of South Coast AQMD Regulatory Requirements
There is currently no South Coast AQMD rule that establishes a NOx limit for turbines < 0.3 MW ~~at South Coast AQMD~~. Rule 219 allows microturbines, defined as ≤ 3.5 MMBtu/hr (total output < 2 MW) and certified at the time of manufacturer with the State of California or in operation prior to May 3, 2013, to be exempt from permitting provided that a filing pursuant to Rule 222 is submitted ~~and the microturbines were in operation prior to May 3, 2013 or the microturbines were certified by the state of California at the time of manufacture~~. A turbine < 0.3 MW could be considered a microturbine, provided it was certified at the time of manufacturer with the State of California or in operation prior to May 3, 2013. Staff is amending Rule 1147 – NOx Reductions from Miscellaneous Sources that will establish provisions for natural gas fired turbines < 0.3 MW~~microturbines~~ in addition to this proposed rule.

Assessment of Emission Limits for Existing Units
The five turbines currently operating are not subject to an~~s~~ emission limit. One source test was obtained for one turbine. The turbine source tested at 1.25 ppm at 15 percent oxygen on a dry basis with 100 percent digester gas.

Other Regulatory Requirements
Staff did not identify NOx emission limits for turbines < 0.3 MW in another air district's rules. The State of California has issued requirements for ~~micro~~turbines, including turbines < 0.3 MW, that are exempt from any District requirements. Such ~~micro~~turbines must comply with CARB's Distributed Generation regulations standards, which are near 2 ppm at 15 percent oxygen on a dry

basis or NOx (0.07 lbs/MW-hr), and must be certified, if manufactured after January 1, 2013. However, existing unpermitted units are certified and subject to previous CARB Executive Orders of 9 ppm at 15 percent oxygen on a dry basis NOx after January 1, 2008 and before January 1, 2013 (date of manufacture).

Assessment of Pollution Control Technologies

Turbines < 0.3 MW~~Microturbines~~ use a lean pre-mix to limit NOx emissions without post combustion control technology such as SCR. SCR is not suitable for these ~~micro~~turbines because of the low exhaust temperature and SCR's requirement for high exhaust temperature to activate catalysts. One ~~microturbine~~ supplier guarantees 9 ppm at 15 percent oxygen on a dry basis for their ~~micro~~turbines < 0.3 MW that fire digester gas or a blend of digester gas and natural gas. The supplier stated that 9 ppm at 15 percent oxygen on a dry basis can be met over a range of loads, but high load is suggested to consistently meet emission levels. Proper gas treatment and maintenance is imperative to meet the target emission levels.

Initial BARCT Emission Limits and Other Considerations

Staff is proposing a NOx emission limit of 9 ppm at 15 percent oxygen on a dry basis based on supplier discussions and current permitted levels for all turbines < 0.3 MW with the exception of turbines that are permit exempt and were in operation prior to May 3, 2013. There is insufficient source test information to determine if the existing turbines that are permit exempt can meet 9 ppm at 15 percent oxygen on a dry basis.

TABLE 2-~~4~~5
INITIAL NOX EMISSION LIMITS FOR DIGESTER GAS OR DUAL FUEL TURBINES < 0.3 MW

Equipment Type	Limit at Rule Adoption*
Turbines < 0.3 MW in operation prior to May 3, 2013 firing digester gas, digester gas and natural gas, or natural gas	N/A
Turbines < 0.3 MW firing digester gas, digester gas and another fuel, or other fuel	9 ppm

**All emission limits in parts per million (ppm) are referenced at 15 percent oxygen on a dry basis.*

Cost-Effectiveness Analysis

Five of the 10 existing turbines < 0.3 MW are permitted at the proposed initial NOx limit and no cost-effectiveness analysis was conducted. The other five turbines will not be affected by the proposed emission limit until unit replacement. No incremental costs are assumed to replace units with units that can meet 9 ppm at 15 percent oxygen on a dry basis. A cost-effectiveness analysis was not conducted for units that will meet the emission limit upon replacement.

BARCT Emission Limits

The following table provides the proposed BARCT emission limits for turbines < 0.3 MW that fire digester gas or a digester gas and another fuel~~blend~~.

TABLE 2-5~~6~~
PROPOSED BARCT EMISSION LIMITS FOR DIGESTER GAS OR DUAL FUEL TURBINES < 0.3 MW

Equipment Type	Limit at Rule Adoption*	Limit Upon Turbine Replacement*
Turbines < 0.3 MW in operation prior to May 3, 2013 firing digester gas, digester gas and natural gas, or natural gas	N/A	N/A
Turbines < 0.3 MW firing digester gas, digester gas and another fuel, or other fuel	9 ppm	9 ppm

**All emission limits in parts per million (ppm) are referenced at 15 percent oxygen on a dry basis.*

Turbines ≥ 0.3 MW

Based on the South Coast AQMD's permit database, there are six combined cycle turbines located at two POTWs that fire either digester gas only or a digester gas blend. One facility has three 11.35 MW turbines that fire a blend of digester gas and natural gas (60 percent digester gas, 40 percent natural gas). These turbines currently use SCR and the digester gas is treated to remove siloxanes prior to combustion. The other facility has three 9.9 MW turbines that fire digester gas but are permitted to blend up to 40 percent natural gas. This facility does not have SCR and has a less aggressive~~does not treat the~~ digester gas treatment process~~prior to combustion~~.

Assessment of South Coast AQMD Regulatory Requirements

South Coast AQMD has no rule for turbines located at a POTW. South Coast AQMD Rule 1134 which applies to stationary gas turbines, 0.3 MW and larger, excludes turbines located at POTW facilities.

Assessment of Emission Limits for Existing Units

The turbines are subject to South Coast AQMD permit limits. The turbines have NOx concentration limits of 18.8 ppm and 25 ppm, at 15 percent oxygen on a dry basis. Table 2-6~~VIII~~ summarizes the unit sizes, type of emission controls, and permitted NOx concentration limit, at each facility.

TABLE 2-6~~7~~
CURRENT PERMIT LIMITS FOR DIGESTER GAS TURBINES

Facility	Number of Units	Unit Size (MW)	Emission Controls	Permit Limit (ppmv at 15% O2)
1	3	9.9	Water injection only	25
2	3	11.35	SCR	18.8

**All emission limits in parts per million (ppm) are referenced at 15 percent oxygen on a dry basis.*

Staff analyzed recent source test results available for the turbines. Two of the three turbines permitted at 18.8 ppm source tested at 14.7 ppm and 15.9 ppm, at 15 percent oxygen on a dry basis, when firing digester gas and 13 ppm and 14.3 ppm, at 15 percent oxygen on a dry basis,

when firing a 60/40 blend of digester gas/natural gas. Source test results for the third turbine were unavailable. The three turbines permitted at 25 ppm source tested between 20.7 ppm – 21.3 ppm, at 15 percent oxygen on a dry basis.

SJVAPCD has permitted two turbines located at a POTW that fired a blend of digester gas (~70 percent) and natural gas (~30 percent) at 5 ppm at 15 percent oxygen on a dry basis. The operator of the facility informed staff that the facility was using water injection to meet a previous 25 ppm at 15 percent oxygen on a dry basis NOx rule limit. The facility discontinued water injection and implemented gas treatment and SCR to meet the new 5 ppm at 15 percent oxygen on a dry basis rule limit. Source test results were obtained prior to the decommissioning of the turbines. Seven source tests from the last five years of operation were obtained for the turbines. The results ranged from 2.5 ppm – 3.9 ppm, at 15 percent oxygen on a dry basis. The turbines were in operation from 2004 – 2016.

Other Regulatory Requirements
Staff identified NOx emission limits for digester gas turbines in other air districts' rules. Requirements at SMAQMD and SJVAPCD for digester gas turbines are as stringent or more stringent than South Coast AQMD's permit limits.

SJVAPCD's Rule 4703 requires combined cycle turbines > 10 MW to meet a NOx limit of 3 ppm or 5 ppm, at 15 percent oxygen on a dry basis, depending on the implementation schedule. The emission limits apply to turbines using gas fuel that includes digester gas. Units meeting 3 ppm at 15 percent oxygen on a dry basis had a longer compliance timeframe. Turbines between 3 MW – 10 MW that operate 877 hours per year or more are subject to a NOx concentration limit of 5 ppm at 15 percent oxygen on a dry basis.

SMAQMD's Rule 413 requires turbines ≥ 10 MW with SCR that operate 877 hours per year or more to meet 9 ppm at 15% oxygen on a dry basis for turbines that use gaseous fuel that includes any fuel that is a gas at standard conditions. Turbines ≥ 2.9 – < 10 MW are subject to a 25 ppm at 15 percent oxygen on a dry basis NOx concentration limit. Four turbines are permitted by SMAQMD that fire a blend of digester gas and natural gas and are permitted at 2.5 ppm and 2.0 ppm, at 15% oxygen on a dry basis. However, these turbines used a blend of only 2 percent digester gas. SCR is used for NOx control on the turbines permitted at 2.5 ppm and SCR along with a dry low NOx combustion system is used for the turbines permitted at 2.0 ppm. Staff concluded that the turbines permitted by SMAQMD do not provide a comparison to the turbines in South Coast AQMD for achievable NOx emission levels from digester gas turbines because a) the dry low NOx combustion systems used to meet 2 ppm are not compatible with ~~turbines that use~~ fuel blend<u>s</u> with a lower Wobbe index (not to pipeline quality gas specifications)<u>, for some turbines</u>; and, b) the percentage of digester gas in the fuel blend is much lower than the percentages used in the fuel for the turbines at South Coast AQMD.

Assessment of Pollution Control Technologies
Staff assessed the feasibility of certain control technologies to meet specific NOx emission levels. Implemented control technologies were evaluated by performance data and discussions with

facility operators and equipment suppliers. Staff visited POTW sites to learn from equipment operators about their experiences with combustion and control equipment.

Water or Steam Injection

Water or steam injection is a common control system built into turbines that reduces thermal NOx formation by lowering the combustion zone temperature. Water injection requires demineralized water that is more costly and less convenient than utility water. Storage sites and delivery are required for use of demineralized water. Utilizing water injection can be undesirable due to the potential for imprecise water application that can lead to hotspots, causing NOx formation, increased fuel usage and increased carbon monoxide (CO) emissions, along with the deterioration of turbine parts from water abrasion. The facility with turbines permitted at 25 ppm at 15 percent oxygen on a dry basis informed staff that their turbines can meet 18.8 ppm at 15 percent oxygen on a dry basis with increased water injection.

Dry Low Emissions (DLE)

Dry low emission (DLE) or lean pre-mixed technology is a combustion system that does not use water or steam to reduce thermal NOx. DLE systems have a mechanism to pre-mix the air and fuel to create a lean mixture that allows combustion at a lower temperature. Lean pre-mixed combustion systems minimize local hotspots that produce elevated combustion temperatures, forming thermal NOx. One turbine supplier informed staff that its DLE systems are not compatible with digester gas due to the low Wobbe index of digester gas. The DLE system for this particular turbine is limited to fuels with a Wobbe index number range of 1100-1340, whereas the Wobbe index range of digester gas is much lower, at approximately 600. Although increasing the amount of natural gas in the fuel blend would increase the Wobbe index number, a 60/40 blend of digester gas/natural gas would not be compatible with the dry low NOx combustion system. Furthermore, DLE combustion systems are an intrinsic part of a turbine's design and not considered available for retrofit on existing turbines.

Selective Catalytic Reduction (SCR)

SCR is a primary post-combustion technology for NOx reduction and is capable of reducing 90-95 percent of post combustion NOx. SCR reduces NOx to nitrogen and water through a reaction with ammonia and oxygen. Catalyst is used for the reaction and is negatively affected by siloxane contamination in biogas. Siloxane containing biogas requires gas treatment to maintain SCR effectiveness. SCR is a post-combustion NOx control technology and may be used in combination with combustion alteration NOx control technologies, such as dry low NOx combustion systems and low NOx burners. SCR requires on-site storage of ammonia or urea and the technology carries the potential of creating unwanted stack ammonia emissions (ammonia slip) from unreacted ammonia. Catalysts are available that reduce ammonia slip emissions but were not evaluated as part of the SCR technology assessment. A limiting factor for SCR applications is the technology's requirement for high operating temperature. Exhaust gas temperatures typically need to be between 400F – 800F. SCR is not suitable for combustion equipment with low exhaust temperatures. SCR is used on a variety of equipment including turbines, engines, and boilers, but must be accompanied with an adequate fuel gas treatment system (FGTS). One equipment supplier stated that siloxane levels need to be as low as 25 ppb to guarantee SCR performance for any length of time. The gas treatment systems currently used at POTWs and landfills have been designed to remove siloxanes

to levels between 75 ppb – 500 ppb. Despite this, these gas treatment systems are currently used in conjunction with SCR. Removal of siloxanes prior to combustion is necessary for proper SCR performance. Inadequate siloxane removal can quickly deactivate the SCR catalyst and require more frequent catalyst replacements.

Within South Coast AQMD, SCR is currently used at a POTW with three digester gas turbines equipped with SCR, which were permitted in 2017. Those turbine's uncontrolled NOx emissions of 213 ppm at 15 percent oxygen on a dry basis can be reduced to 18.75 ppm at 15 percent oxygen on a dry basis with SCR and the SCR could provide 91.2 percent NOx reduction. The use of SCR at this facility requires a FGTS to remove siloxanes and H_2S contaminants that the facility implemented with the project. Two turbines have source tested at 15.9 ppm and 14.7 ppm, at 15 percent oxygen on a dry basis, when firing 100 percent digester gas. A source result for the third turbine was unavailable. It is expected that turbines equipped with SCR firing digester gas can achieve reductions consistent with the reductions that this POTW is achieving with SCR on the turbines.

SCR was also used at a POTW within SJVAPCD. SCR was used on two turbines that had inlet NOx emission levels of 25 ppm at 15 percent oxygen on a dry basis at minimum. The turbines source tested as low as 2.5 ppm at 15 percent oxygen on a dry basis, indicating that the SCRs were capable of achieving 90 percent NOx reduction when operated with digester gas turbines.

Fuel Gas Treatment Systems

FGTS remove undesired compounds from non-conventional fuels, such as digester gas. Digester gas produced at wastewater treatment plants contain siloxane and H_2S contaminants. It is imperative that digester gas is treated for proper combustion and post-combustion equipment function. While some equipment is less impaired by siloxanes and other contaminants, some level of gas treatment is usually required for a combustion process that uses digester gas. There are three prominent FGTS types that utilize different techniques for removing contaminants – consumable media type, regenerative media type and a chiller/adsorption type. A FGTS may consists of one or a more removal system types.

The effectiveness of contaminant adsorption depends on the media type and the contaminants in the gas stream. The three most common types of media that are used in the South Coast AQMD at landfills and POTWs are activated carbon, molecular sieve, and silica gel. Each media type has its advantages. Activated carbon is a versatile adsorbent that is highly porous and is suitable to adsorb organic molecules. A molecular sieve has pores of uniform size and is capable of performing selective removal of contaminants at low concentrations. Silica gel is a shapeless and porous adsorbent that has a greater capacity than activated carbon to adsorb siloxanes and has a high affinity for water that aids in moisture removal.

Consumable media type systems are commonly used with activated carbon. This type of removal system requires saturated media to be changed out. Spent media is disposed and new media is reintroduced. Installment and maintenance costs are typically less than regenerative and chiller media systems because the equipment is less complex than consumable media systems, but more frequent media removal and disposal can result in significant operating costs to the facility.

Regenerative media systems are commonly used with media such as molecular sieve, silica gel, clay and zeolite. These systems consist of at least two media canisters. One batch of media processes gas while the other regenerates by purging with hot air. Regenerative media types require smaller canisters and less media in comparison to consumable media systems. Regenerative media function can be enhanced by applying polymeric resins. Polymeric~~s~~ resins can increase service life, increase adsorbent capacity, and remove contaminants quicker and at a lower temperature when regenerating.
Chiller/adsorption or refrigeration systems remove contaminants by reducing the temperature of the digester gas to condense out moisture and contaminants. These systems have been used in combination with consumable media systems at landfills. The consumable media system serves as a polishing stage to remove trace amounts of siloxanes or other contaminants. Wastewater treatment and landfill facilities have reported 50 percent removal efficiency of siloxanes and 32 percent long-term removal efficiency of siloxanes, with refrigeration. Bench-scale studies have shown 95 percent removal of siloxanes with advanced refrigeration.[1]

Within South Coast AQMD, five POTW facilities use FGTS systems and treat gas prior to combustion in twelve digester gas engines that are equipped with SCR for post-combustion control. One facility uses a FGTS prior to combustion in three turbines. At other POTWs, FGTS systems are also used to treat digester gas prior to entering a fuel cell. If low siloxane levels are not maintained, media replacement will be more frequent, raising operating costs associated with fuel gas treatment systems.

New Turbines

Newer gas turbines are capable of low NOx emission levels, between 4 ppm – 25 ppm when firing natural gas without SCR. Achievable NOx emission levels while firing digester gas vary and depend on the constituents of the digester gas. DLE systems, in some turbines, are incompatible with digester gas due to the low Wobbe index number for digester gas.~~, but t~~There is one commercially available turbine ≥ 0.3 MW that incorporates a DLE system compatible with biogas and a recuperator. The manufacturer of this turbine guarantees 15 ppm at 15 percent oxygen on a dry basis for landfill gas and 25 ppm at 15 percent oxygen on a dry basis for digester gas. The widespread application of this turbine is limited due to its maximum output rating of 4.6 MW and low exhaust temperature, making it unsuitable for high pressure heat recovery steam generation.

Two other turbine manufacturers have estimated emission levels of 15 ppm and 25 ppm when firing digester gas for larger sized turbines, in the 10 MW range. One of the turbine suppliers stated that they can guarantee emissions levels of 15 ppm and 25 ppm, at 15 percent oxygen on a dry basis, depending on the model, for turbines without SCR fueled with digester gas.

Within landfills and POTWs in California, eleven turbines operate without SCR and are fueled with either landfill gas or digester gas. These are the only known turbines in operation within California with a DLE system that is~~are~~ compatible with biogas. Ten of these turbines are located at landfills and one is located at a POTW. Digester gas is treated ~~is~~ prior to combustion in the

[1]Jeffrey Pierce & Ed Wheless. "Siloxanes in Landfill and Digester Gas Update", *27th Annual SWANA LFG Symposium*, March 2004.

turbines and SCR is not utilized. All turbines located at the landfills source tested between 3.1 ppm – 7.6 ppm, at 15 percent oxygen on a dry basis. Some of the turbines are permitted at 12.5 ppm at 15 percent oxygen on a dry basis, while others are permitted at 25 ppm at 15 percent oxygen on a dry basis.

Staff obtained additional information from a POTW that operates an identical turbine to the turbines operated at landfills not using SCR. The turbine located at the POTW achieved NOx emission levels consistent with the landfill turbines. The operator of the POTW facility provided monthly emission tests results for years 2018 and 2019. Results ranged from 3.7 ppm – 8.1 ppm, at 15 percent oxygen on a dry basis (2018) and 4.4 ppm – 7.7 ppm, at 15 percent oxygen on a dry basis (2019). The operator informed staff that typical emission levels for the turbine range between 4 ppm – 6 ppm, at 15 percent oxygen on a dry basis.

Initial BARCT NOx Emission Limits and Other Considerations

Staff proposed initial NOx emission limits of 18.8 ppm, 12.5 ppm, and 5 ppm, at 15 percent oxygen on a dry basis. The proposed NOx emission limit of 18.8 ppm at 15 percent oxygen on a dry basis is based on the facility's claim that they can meet 18.8 ppm at 15 percent oxygen on a dry basis with increased water injection. The proposed NOx emission limit of 12.5 ppm is based on the lowest permitted limit for biogas fired turbines without SCR. The proposed NOx emission limit of 5 ppm at 15 percent oxygen on a dry basis emission limit is based on the achievable emission level with SCR.

Earlier in the rule development, staff proposed an emission limit of 2.5 ppm at 15 percent oxygen on a dry basis for turbines not equipped with SCR. The proposed NOx emission limit was based on SCR's ability to reduce NOx by 90 percent. Ninety percent removal efficiency was determined by actual operations at two POTWs and supported by three suppliers. Staff determined that new turbines with uncontrolled emission levels of 25 ppm at 15 percent oxygen on a dry basis equipped with SCR with 90 percent NOx removal efficiency can meet 2.5 ppm at 15 percent oxygen on a dry basis. Stakeholders commented that an emission limit of 2.5 ppm at 15 percent oxygen on a dry basis would result in the shutdown of existing beneficial use projects and deter facilities from implementing new beneficial use projects. Stakeholders also stated that gas treatment technology is not reliable due to the uncertainties involved with biogas contaminants and that meeting an emission limit of 2.5 ppm at 15 percent oxygen on a dry basis consistently has the potential to be extremely difficult to achieve or maintain.

Staff acknowledges that biogas content is unique to each facility and that gas treatment systems may need to be specifically designed to treat a facility's digester gas. However, many POTW facilities across the United States currently rely on gas treatment systems for combustion and post-combustion control operation. Within South Coast AQMD, five facilities use digester gas treatment with 12 engines with SCR and one POTW uses gas treatment with three turbines with SCR. Staff's assessment of current technology and applications suggest that gas treatment, along with SCR can reduce NOx emissions from combustion equipment. However, requiring an emission limit of 2.5 ppm at 15 percent oxygen on a dry basis on a turbine with uncontrolled emissions of 25 ppm at 15 percent oxygen on a dry basis requires the SCR to perform with 90 percent efficiency. Although staff's technology assessment for SCR determined that SCR can

remove NOx with 90 percent efficiency, staff increased the emission limit of 2.5 ppm to 5 ppm, at 15 percent oxygen on a dry basis, to allow a compliance margin for digester gas turbines. A new turbine with uncontrolled emission levels of 15 ppm at 15 percent oxygen on a dry basis would require the SCR to function at 67 percent efficiency and a new turbine with uncontrolled emissions of 25 ppm at 15 percent oxygen on a dry basis would require the SCR to function at 80 percent efficiency.

Staff also proposed an initial NOx emission limit for turbines without SCR to allow facilities an alternative to using SCR on digester gas fired turbines. Staff proposed an initial NOx emission limit of 12.5 ppm at 15 percent oxygen on a dry basis based on permitted limits and emissions analyses for biogas turbines without SCR.

Stakeholders expressed their concern about using a landfill turbine's performance as a comparison for a turbine's performance at a POTW. Staff followed up with the manufacturer of the turbine that achieves emission levels below 12.5 ppm, shown with source tests and CEMS data, to discuss the turbine's ability to meet a NOx emission limit of 12.5 ppm at 15 percent oxygen on a dry basis. The supplier stated that a 12.5 ppm NOx emission level could not be guaranteed for digester gas. The guaranteed emission level for this turbine is 25 ppm at 15 percent oxygen on a dry basis. The supplier also informed staff that the POTW operating their turbine had emission levels higher than 12.5 ppm at 15 percent oxygen on a dry basis in its first year of operation. Given the additional information on this turbine type, staff is not proposing a separate emission level for turbines without SCR.

TABLE 2-~~7~~8
INITIAL NOX EMISSION LIMITS FOR DIGESTER GAS AND DUAL FUEL TURBINES ≥ 0.3 MW

Equipment Type	Limit at Rule Adoption*	Limit effective on future compliance date*
Turbines ≥ 0.3 MW firing at least 60% percent digester gas	18.8 ppm	5 ppm

**All emission limits in parts per million (ppm) are referenced at 15 percent oxygen on a dry basis.*

Cost-Effectiveness Analysis

Staff conducted cost-effectiveness analyses based on the initial NOx limits. The cost-effectiveness to meet 18.8 ppm at 15 percent oxygen on a dry basis is $48,600 per ton of NOx reduced, to be achieved by increased water injection. The average cost-effectiveness to meet 5 ppm at 15% oxygen on a dry basis is >$50,000 per ton of NOx reduced.

BARCT Emission Limits

Staff is proposing an emission limit of 18.8 ppm at 15 percent oxygen on a dry basis. The following table provides the proposed BARCT emission limits for turbines that fire digester gas or a digester gas blend with up to 40 percent natural gas.

TABLE 2-~~8~~9
PROPOSED BARCT EMISSION LIMITS FOR DIGESTER GAS AND DUAL FUEL TURBINES ≥ 0.3 MW

Equipment Type	Limit at Rule Adoption*	Limit Upon Turbine Replacement
Turbines ≥ 0.3 MW firing at least 60% percent digester gas	18.8 ppm	BACT Emission Level

**All emission limits in parts per million (ppm) are referenced at 15 percent oxygen on a dry basis.*

SUMMARY OF BARCT EMISSION LIMITS

Table 2-9~~XI~~ contains a summary of proposed BARCT emission limits effective upon rule adoption and proposed BARCT emission limits effective upon equipment replacement. The facility with turbines permitted at 25 ppm at 15 percent oxygen on a dry basis would be required to meet 18.8 ppm at 15 percent oxygen on a dry basis on or before rule adoption.

TABLE 2-~~9~~10
EMISSION LIMITS AND COMPLIANCE SCHEDULE

Equipment Type	Limit at Rule Adoption*	Limit Upon Unit Replacement
Boilers ≤ 2 MMBtu/hr firing digester gas, digester gas and another fuel, or other fuel	30 ppm*	30 ppm*
Boilers ≤ 2 MMBtu/hr without permitted NOx concentration limits, firing digester gas, digester gas and another fuel, or other fuel	Permit Limit	30 ppm*
Boilers > 2 MMBtu/hr firing at least 90% digester gas	15 ppm*	BACT Limit
Turbines < 0.3 MW in operation after May 3, 2013 firing digester gas, digester gas and another fuel, or other fuel	9 ppm^	9 ppm^
Turbines ≥ 0.3 MW firing at least 60% digester gas	18.8 ppm^	BACT Limit

**All emission limits in parts per million (ppm) are referenced at 3 percent oxygen on a dry basis.*
^All emission limits in parts per million (ppm) are referenced at 15 percent oxygen on a dry basis.

CHAPTER 3: PROPOSED RULE 1179.1

INTRODUCTION

PROPOSED RULE STRUCTURE

PROPOSED RULE 1179.1

a) Purpose
b) Applicability
c) Definitions
d) Emission Limits
e) Source Testing
f) CEMS
g) I&M Plans
h) Diagnostic Emission Checks for Boilers and Engines
i) Recordkeeping
j) Other Requirements for Boilers
k) Other Requirements for Engines
l) Schedule for Permit Revisions
m) Exemptions
Attachment 1) I&M Plan Elements
Attachment 2) Boiler Tuning Procedure

INTRODUCTION

The following information describes the structure of PR 1179.1 and explains the provisions incorporated from other source-specific rules. New provisions and any modifications to existing provisions that were incorporated are also explained.

PROPOSED RULE STRUCTURE

PR 1179.1 will contain the following subdivisions that will contain all the requirements for the applicable equipment:

a) Purpose
b) Applicability
c) Definitions
d) Emission Limits
e) Source Testing
f) CEMS
g) I&M Plans
h) Diagnostic Emission Checks for Boilers and Engines
i) Recordkeeping
j) Other Requirements for Boilers
k) Other Requirements for Engines
l) Schedule for Permit Revisions
m) Exemptions
Attachment 1) I&M Plan Elements
Attachment 2) Boiler Tuning Procedure

PROPOSED RULE 1179.1

Subdivision (a) – Purpose

The purpose of the rule is to limit emissions from combustion equipment located at a POTW. The regulated pollutants subject to PR 1179.1 include NOx, CO, and VOC for engines; and NOx and CO for boilers and turbines.

Subdivision (b) – Applicability

This rule applies to boilers, turbines < 0.3 MW, and engines, located at a POTW that are permitted to fire digester gas, including dual fuel units that are permitted to fire digester gas and another fuel. PR 1179.1 also applies to all turbines ≥ 0.3 MW located at a POTW, regardless of the fuels the unit is permitted to fire, since Rule 1134 requirements (which regulates turbines) specifically excludes turbines located at POTW facilities.

Subdivision (c) – Definitions

Definitions in PR 1179.1 that applied in other source-specific rules are incorporated to define equipment, fuels, and other rule terms. New or modified definitions added to PR 1179.1 are:

- *DIGESTER GAS is gas that is produced by anaerobic decomposition of organic material.*

This definition was added to describe a type of fuel used in equipment that PR 1179.1 applies to. The definition includes fuel derived from anerobic digestion of all organic waste, including sewage and food, that is used for fuel for combustion equipment located at a POTW.

- *DIGESTER GAS UNIT is any combustion equipment subject to this rule permitted to fire digester gas exclusively.*

  This definition was added to describe a type of unit that is applicable to PR 1179.1.

- *DUAL FUEL UNIT is any combustion equipment subject to this rule permitted to fire digester gas and another fuel.*

  This definition was added to describe a type of unit that is applicable to PR 1179.1.

- *ENGINE is any internal combustion equipment that is spark- or compression ignited and burns liquid and/or gaseous fuel to create heat that move pistons to do work.*

  This definition was added to describe a type of equipment applicable to PR 1179.1.

- *SHUTDOWN is the time period that begins when an operator reduces load and which ends in a period of zero fuel flow.*

  This definition is from Rule 1134 and was modified to apply to all equipment types subject to PR 1179.1.

- *STARTUP is the time period that begins when a unit combusts fuel after a period of zero fuel flow and which ends when the unit reaches stable operating conditions.*

  This definition is from Rule 1134 and was modified to apply to all equipment types subject to PR 1179.1.

- *TURBINE is any internal combustion equipment that burns liquid and/or gaseous fuel to create hot gas that expands to move a rotor assembly, with vanes or blades, to do work.*

  This definition was added to describe a type of equipment PR 1179.1 applies to.

- *UNIT is a boiler, turbine, or engine subject to this rule.*

  This definition is added for clarity when referencing equipment subject to the requirements of PR 1179.1.

Subdivision (d) – Emission Limits

This subdivision establishes the NOx and other criteria pollutant emission limits for boilers, turbines, and engines.

Paragraph (d)(1) includes ~~a~~ Table 1, which contains the emission requirements for NOx, CO, and VOC for all the equipment subject to PR 1179.1. These emission requirements would not apply during periods of startup and shutdown, as further explained in paragraph (d)(5) – Startup and Shutdown.

Table 1 Concentration Limits for Boilers (at 3% O_2)

DIGESTER GAS AND DUAL FUEL BOILERS AND PROCESS HEATERS			
EQUIPMENT CATEGORY	NOx (ppm)[1]	CO (ppm)[1]	COMPLIANCE DATE
Rated heat input capacity > 2 MMBtu/hr and firing 90% digester gas or more[2]	15	400	On or before [*Date of Adoption*]
Rated heat input capacity > 2 MMBtu/hr and firing 100% natural gas	9		On or before [*Date of Adoption*]
Rated heat input capacity ≤ 2 MMBtu/hr	30		On or before [*Date of Adoption*]

[1] All parts per million (ppm) emission limits are referenced at 3% volume stack gas oxygen on a dry basis and averaged over 15 minutes.
[2] Percent digester gas is based on the flowrates and higher heating values of the fuels.

The NOx and CO concentration limits are listed for units fired on 90 percent digester gas or more, based on higher heating values and flowrates of the fuels used, and 100 percent natural gas, along with the implementation schedule.

All following provisions of this rule that apply to boilers would also apply to process heaters.

Boilers > 2 MMBtu/hr:

- Units that currently meet the Rule 1146/1146.1 limits of 15 ppm NOx at 3 percent oxygen on a dry basis can continue to comply with this limit
- All units will continue to meet the same current CO limit of 400 ppm from Rules 1146/1146.1

Any boiler that fires less than 90 percent digester gas would be required to use a weighted emission limit determined by Equation 1, in paragraph (d)(2). Since it is not expected that facilities would fire digester gas with a fuel other than natural gas, the weighted emission limit only applies to boilers that fire digester gas and natural gas simultaneously.

Boilers ≤ 2 MMBtu/hr:

- Units that currently have a permitted NOx limit of 30 ppm at 3 percent oxygen on a dry basis would continue to meet 30 ppm at 3 percent oxygen on a dry basis
- Units without a permitted NOx concentration limit would be exempt from emission limits in Table 1 and paragraph (d)(2), as specified in paragraph (m)(7) of this rule, and would meet 30 ppm at 3 percent oxygen on a dry basis upon burner or boiler replacement, regardless of fuel fired.
- Units will continue to meet a CO concentration limit of 400 ppm at 3 percent oxygen on a dry basis, which is the same current limit for natural gas units covered under Rule 1146.2

Table 1 Concentration Limits for Turbines (at 15% O_2)

The NOx and CO concentration limits are listed for units fired on 60 percent digester gas or more and 100 percent natural gas, along with the implementation schedule.

TURBINES			
EQUIPMENT CATEGORY	NOx (ppm)[3]	CO (ppm)[3]	COMPLIANCE DATE
Rating ≥ 0.3 MW and firing 60% digester gas[4] or more	18.8	130	On or before [*Date of Adoption*]
Simple cycle with rating ≥ 0.3 MW and firing 100% natural gas	2.5		On or before [*Date of Adoption*]
Combined cycle with rating ≥ 0.3 MW and firing 100% natural gas	2		On or before [*Date of Adoption*]
Digester gas or dual fuel with r~~R~~ating < 0.3 MW ~~and firing digester gas, digester gas with another fuel, or natural gas~~	9		On or before [*Date of Adoption*]

[3] All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis and averaged over 1 hour.

[4] Percent digester gas is based on volume averaged over a 24 hour period.

Turbines greater than or equal to 0.3 MW

- Units are required to meet 18.8 ppm NOx at 15 percent oxygen on a dry basis on or before the date of adoption of PR 1179.1

The above requirements are for turbines that fire 60 percent or more digester gas. Sixty percent was chosen because it reflects the current permit thresholds for the minimum use of digester gas for both of the affected facilities, and is based on volume averaged over a 24 hour period. Any unit that fires 100 percent natural gas would be required to meet the same BARCT emissions levels established in Rule 1134. Rule 1134 requires simple cycle turbines to meet 2.5 ppm at 15 percent

oxygen on a dry basis and combined cycle turbines to meet 2 ppm at 15 percent oxygen on a dry basis. There are no units firing 100 percent natural gas at a POTW, currently.

Any turbine that fires less than 60 percent digester gas would be required to use a weighted emission limit determined by Equation 2, in paragraph (d)(3). Since it is not expected that facilities would fire digester gas with a fuel other than natural gas, the weighted emission limit only applies to turbines that fire digester gas and natural gas simultaneously.

The CO emission limit for all turbines is based on that contained in the affected facility permits. If a permit contains a more stringent CO limit than what the rule contains, it must comply with the more stringent limit

Turbines less than 0.3 MW

These digester gas or dual fuel turbines~~, more commonly referred to as microturbines,~~ will be subject to the requirements of PR 1179.1 when firing digester gas, digester gas and another fuel, or the other fuel only. Units that were installed before January 1, 2013 that are permit exempt and not subject to a NOx limit would meet 9 ppm upon turbine replacement. Units would also be subject to the 130 ppm CO concentration limit. Turbines less than 0.3 MW permitted to fire only non-digester gas fuels are~~is~~ not subject to this rule.

Table 1 Concentration Limits for Engines (at 15% O_2)

Digester gas engines or dual fuel engines that are fired on digester gas, digester gas and another fuel, or the other fuel only, are subject to a NOx limit of 11 ppm at 15 percent oxygen on a dry basis, a CO limit of 250 ppm at 15 percent oxygen on a dry basis, and a VOC limit of 30 ppm at 15 percent oxygen on a dry basis. These are the same requirements as those contained in Rule 1110.2. Engines located at a POTW permitted to fire only non-digester gas fuels such as natural gas would continue to comply with all requirements contained in Rule 1110.2 and would not be subject to PR 1179.1.

DIGESTER GAS AND DUAL FUEL ENGINES				
EQUIPMENT CATEGORY	NOx (ppm)[5]	CO (ppm)[5]	VOC (ppm)[6]	COMPLIANCE DATE
Engines > 50 bhp	11	250	30	On or before [*Date of Adoption*]

[5] All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis and averaged over 15 minutes.

[6] Parts per million (ppm) emission limit referenced at 15% volume stack gas oxygen on a dry basis, measured as carbon, and averaged over the sampling time required by the test method.

Emission limits for boilers that fire digester gas simultaneously with natural gas – Paragraph (d)(2)

Boilers that fire digester gas and natural gas simultaneously are subject to the digester gas NOx emission limit when firing 90 percent or more digester gas and 10 percent or less natural gas. If the natural gas percentage threshold is exceeded, then the unit must comply with a weighted average limit, taking into account the compliance limits of both fuels as well as their individual heat inputs and flowrates. Equation 1 in PR 1179.1 is the same equation that is currently contained in Equations 1146-1 and 1146.1-1 of the December 7, 2018 amended versions of Rules 1146 and 1146.1. Flowrate and units were added for clarity in determining the heat input value as required in Rules 1146 and 1146.1, Equations 1146-1 and 1146.1-1, respectively. Owners and operators of these units must comply with either the weighted emission limit or with the natural gas NOx limit.~~.~~ The digester gas higher heating value used in the equation must be obtained using an approved procedure by the South Coast AQMD. Approved South Coast AQMD procedures include submitting digester gas samples for laboratory analyses and using portable monitoring devices. A representative sample of the facility's digester gas would be allowed as long as this same gas is sent to the subject boiler. The flowrates of the fuels used must be obtained using an approved non-resettable totalizing fuel flow meter. The flowrate must be obtained at the time compliance is determined and the digester gas sample used to obtain the higher heating value must be collected no earlier than 30 days before compliance is determined, to ensure there is accurate representation of the digester gas.

$$\text{Weighted Limit} = \frac{(CL_A \, x \, Q_A \, x \, V_A) \, + \, (CL_B \, x \, Q_B \, x \, V_B)}{(Q_A \, x \, V_A) + (Q_B \, x \, V_B)} \quad \text{(Equation 1)}$$

Where:

CL_A = compliance limit in Table 1 when firing 90% digester gas or more

Q_A = higher heating value of digester gas in Btu per standard cubic foot (scf)

V_A = flowrate of digester gas in scf per unit of time

CL_B = compliance limit in Table 1 when firing 100% natural gas

Q_B = higher heating value of natural gas in Btu per scf

V_B = flowrate of natural gas in scf per unit of time

Emission limits for turbines ≥ 0.3 MW that fire less than 60 percent digester gas simultaneously with natural gas – Paragraph (d)(3)

Turbines ≥ 0.3 MW that fire more than 40 percent natural gas and less than 100 percent natural gas are subject to a weighted emission limit calculated by Equation 2. The digester gas higher heating value used in the equation must be obtained using an approved procedure by the South Coast AQMD. Approved South Coast AQMD procedures include submitting digester gas samples for laboratory analyses and using portable monitoring devices. A representative sample of the facility's digester gas would be allowed as long as this same gas is sent to the subject turbine. The flowrates of the fuels used must be obtained using an approved non-resettable totalizing fuel flow meter. The flowrate must be obtained at the time compliance is determined and the digester gas sample used to obtain the higher heating value must be collected no earlier than 30 days before compliance is determined, to ensure there is accurate representation of the digester gas.

$$\text{Weighted limit} = \frac{((CL_A + 18.1) \times Q_A \times V_A) + (CL_B \times Q_B \times V_B)}{(Q_A \times V_A) + (Q_B \times V_B)} \qquad \text{(Equation 2)}$$

Where:

CL_A = compliance limit in Table 1 when firing 60% digester gas or more

Q_A = higher heating value of digester gas in Btu per scf

V_A = flowrate of digester gas in scf per unit of time

CL_B = compliance limit in Table 1 when firing 100% natural gas

Q_B = higher heating value of natural gas in Btu per scf

V_B = flowrate of natural gas in scf per unit of time

Equation 2 adds a correction factor of 18.1 to account for the allowance of up to 40 percent natural gas to be fired when complying with 18.8 ppm at 15 percent oxygen on a dry basis.

Averaging Times for Units with CEMS – Paragraph (d)(4)

PR 1179.1 provides averaging time requirements for boilers, turbines, and engines with CEMS. The proposed averaging times are as follows:

- Boilers: Fixed interval of 1 clock hour for NOx and CO
- Turbines: Rolling period of 1 hour
- Engines (same as current Rule 1110.2 requirements):
    - Fixed interval of 1 hour
    - Fixed interval of 24 hours when at or below 11 ppm at 15 percent oxygen on a dry basis NOx and 250 ppm at 15 percent oxygen on a dry basis CO (contained in permit to operate before November 1, 2019)
    - Fixed interval of 48 hours when at or below 9.9 ppm at 15 percent oxygen on a dry basis NOx and 225 ppm CO at 15 percent oxygen on a dry basis (contained in permit to operate)

Startup and Shutdown – Paragraph (d)(5)

Startup and shutdown requirements are provided in PR 1179.1 for boilers, turbines, and engines and are as follows:

- Boilers without SCR: Not longer than is necessary for the proper operation of the boiler for startup and not longer than 6 hours for startup or shutdown (same as current Rule 1146 requirements)
- Boilers with SCR: Not longer than is necessary to reach minimum catalyst operating temperature for startup and not longer than 6 hours for startup or shutdown
- Boilers ≥ 5 – 40 MMBtu/hr cannot exceed 10 scheduled startup/shutdown events per month
- Boilers > 40 MMBtu/hr cannot exceed 10 scheduled startup/shutdown events per year

Maximum scheduled startup and shutdown requirements reflect current requirements in Rule 429. Boilers currently subject to Rule 1146 are required to comply with Rule 429. Since digester gas

and dual fuel boilers would no longer be subject to Rule 1146, Rule 429 requirements were included in PR 1179.1. Facilities are required to submit a startup and shutdown schedule by January 1 of each year to the Executive Officer and notify the Executive Officer prior to each scheduled startup and shutdown event with the dates, times, and duration of the scheduled startup and shutdown and of any other process variables requested by the Executive Officer. Scheduled startup and shutdown events include, but are not limited to, those planned for maintenance, service, and tuning, and do not include startups or shutdowns triggered by a demand response system.

- Turbines without SCR: Startup cannot exceed the time at which control equipment is properly operating and cannot exceed 3 hours. Control equipment includes any mechanism that reduces NOx emissions for the purpose of meeting the emission limits of Table 1 or paragraph (d)(3), such as water injection or dry low emission systems.
- Turbines with SCR: Not longer than is necessary for the SCR to properly operate and not longer than 2 hours.
- Engines (same as current Rule 1110.2 requirements):
    - Not longer than 30 minutes unless a longer time period, less than 2 hours, is specified in the permit
    - Not longer than 4 operating hours for major repairs or installation of catalytic control equipment (as explained in the staff report for the November 2019 amendments to Rule 1110.2)

Facilities are required to comply with the startup and shutdown requirements of PR 1179.1 upon adoption, as well as startup and shutdown requirements contained in a unit permit. In cases where permit requirements are more stringent than those in PR 1179.1, in order to comply with other rule or regulation requirements, the facility shall comply with the more stringent requirement.

Prohibition of liquid fuel – Paragraph (d)(6)

PR 1179.1 contains a prohibition on the use of any liquid fuel, such a diesel, for the operation of any turbine at a POTW. This provision would not apply to emergency use turbines as described in the proposed exemptions under subdivision (m).

Subdivision (e) – Source Testing

For units and for pollutants not subject to CEMS, PR 1179.1 provides a source testing schedule in Table 2.

TABLE 2
SOURCE TESTING SCHEDULE

Equipment Category	Frequency	Pollutant	Elapsed Time Prior to Conducting Source Test[1]
Boilers ≥ 10 MMBtu/hr	Every 3 years from the date the previous source test was required,	NOx, CO	At least 250 operating hours

	no later than the last day of the calendar month that the test is due		or at least 30 calendar days
Boilers < 10 MMBtu/hr and > 2 MMBtu/hr	Every 5 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due		
Turbines with output capacity rating ≥ 2.9 MW	Every year from the date the previous source test was required, no later than the last day of the calendar month that the test is due		At least 40 operating hours or at least 7 calendar days
Turbines with output capacity rating < 2.9 MW	Every 3 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due or every 8,760 operating hours, whichever occurs later		
Engines	Every 2 years from the date the previous source test was required, no later than the last day of the calendar month that the test is due, or every 8,760 operating hours, whichever occurs first[2]	NOx, CO, and VOC reported as carbon	

[1] Elapsed time subsequent to any tuning or servicing, unless tuning or servicing is due to an unscheduled repair.

[2] Frequency may be reduced once every 3 years if the engine has operated less than 2,000 hours since the last source test. If the engine has not been operated before the date a source test is due, the source test shall be conducted by the end of 7 consecutive days or 15 cumulative days of resumed operation. An owner or operator of the engine shall keep sufficient operating records to demonstrate that it meets the requirements for extension of the source testing deadlines.

The boiler requirements are the same as those contained in Rules 1146/1146.1, while the turbine requirements reflect those contained in Rule 1134. The source testing requirements would apply to all turbines, including those less than 0.3 MW. Lastly, the engine requirements reflect the same requirements currently contained in Rule 1110.2.

Other source testing requirements, which come from existing source testing requirements from other source-specific rules, such as Rule 1110.2, are contained in PR 1179.1 and apply to all the applicable equipment types. All equipment types would be required to source test no later than the last day of the calendar month that the source test is due.

Initial Source Testing - Paragraph (e)(2)

The owner or operator of any unit required to source test by Table 2, that has not conducted an initial source test for that unit, would be required to conduct a source test within 12 months from the adoption of PR 1179.1.

Source Test Protocol Submittal and Scheduling - Paragraph (e)(3)

PR 1179.1 provides 60 days before a scheduled source test date for the owner or operator to submit a source test protocol for approval. A new requirement is included in subparagraph (e)(3)(A) that requires a new submittal of a source testing protocol if any modification to the equipment results in a change to the permit, if any emission limits have changed, or at the request of the Executive Officer. A new submittal may be required, for example, if the prior source testing protocol is outdated. The owner or operator is allowed 90 days from the date the approval of the source test protocol was electronically distributed to conduct the source test.

Source Test Protocol Requirements - Paragraph (e)(4)

Contains requirements for the information required for submitting a protocol, in addition to further requirements pertaining to engines under subparagraph (e)(4)(A), which are consistent with current Rule 1110.2 requirements.

Source Test Date Notification - Paragraph (e)(5)

Contains requirements for notification of a scheduled source test.

Approved Contractor and Test Methods - Paragraph (e)(6):

Contains requirements for source testing that is to be conducted by a South Coast AQMD-approved contractor. A listing of source testing methods is contained in Table 3.

TABLE 3
SOURCE TESTING METHODS

Pollutant	Test Methods
NOx	South Coast AQMD Test Methods 100.1 or 7.1
CO	South Coast AQMD Test Methods 100.1 or 10.1, or EPA Test Method 10
CO_2 and O_2	South Coast AQMD Test Method 3.1 or 100.1
VOC	South Coast AQMD Test Methods 25.1 or 25.3, excluding ethane and methane

Source Testing Facilities – Paragraph (e)(7)

Contains requirements for physical accommodations that allow for a source test to be conducted.

Operating Conditions During Source Testing for Boilers and Turbines - Paragraph (e)(8)

Contains requirements on conducting source tests for boilers and turbines in the as-found operating condition, and that no testing should be completed during periods of startup, shutdown, or under breakdown conditions. Also requires a minimum sampling time for boilers and turbines of 15 minutes.

Operating Conditions During Source Testing for Engines - Paragraph (e)(9)

Contains specific operating load (actual duty cycle) requirements for the source testing of engines, which are the same requirements as those currently under Rule 1110.2.

Submittal of Completed Source Test - Paragraph (e)(10)

Facilities are required to submit source test reports within 60 days of the completed source test.

Using Relative Accuracy Test Audits (RATAs) In Lieu of a Source Test - Paragraph (e)(11)

Contains an allowance for RATAs to be used in lieu of a source test, provided that the RATA is conducted within the same calendar that the source test is required. It should be noted that Proposed Rules 218.2 and 218.3 are currently under development and may~~will~~ contain enhanced provisions and requirements for units operating with CEMS that will apply to units covered by PR 1179.1.

Subdivision (f) – CEMS

This subdivision contains the requirements for the installation, operation, and maintenance of CEMS equipment. Many of these requirements are also contained in Rule 218 and 218.1, which currently address monitoring requirements and performance specifications. As noted previously, Proposed Rules 218.2 and 218.3 are currently under development and may~~will~~ contain enhanced monitoring and performance specification requirements. Equipment subject to this rule would also be required to comply with Rules 218/218.1 as well as Rule 218.2/218.3, upon adoption. Table 4 in subdivision (f) contains the thresholds for boilers, turbines, and engines for requiring CEMS, consistent with current requirements in Rules 1146, 1134, and 1110.2, respectively.

TABLE 4
UNITS REQUIRING CEMS

Equipment Type	Threshold	Pollutant(s)
Boilers	Rated heat input capacity > 40 MMBtu/hr and an annual heat input > 200 x 10^9 Btu per year	NOx
Turbines	Output capacity rating ≥ 2.9 MW	NOx

Engines	Output capacity rating ≥ 1000 bhp and operating more than 2 million bhp-hr per calendar year	NOx, CO
	Combined output capacity rating ≥1500 bhp and a combined fuel usage of >16 x 10^9 Btu per year, for engines at the same location[1]	

[1] ~~Engines as of~~Effective October 1, 2007, engines located within 75 feet of another engine (measured from engine block to engine block) are considered to be at the same location.

Turbine Parameter Monitoring - Paragraph (f)(1)

Provides parameter monitoring requirements, specific to turbines using CEMS, including flowrate of fuel gases, ratio of water or steam added, if applicable, elapsed time of operation, and turbine output in MW.

CEMS Requirements for Engines - Paragraph (f)(2)

Subparagraphs (f)(2)(A) and (f)(2)(B) contain CEMS requirements for engines, as well as an aggregate threshold requirement for co-located engines, as well as exceptions already applicable to these engines in Rule 1110.2.

Subparagraph (f)(2)(C) contains new requirements introduced into Rule 1110.2 during the November 2019 amendments which allow engines 1,000 bhp and greater and less than 1,200 bhp to conduct weekly diagnostic checks in lieu of installing a CEMS. However, if there are three or more combined emissions exceedances in any 12-month period as shown with a South Coast AQMD test using a portable analyzer or a source test, the owner or operator would be required to install CEMS.

Subparagraph (f)(2)(D) provides requirements for installing CEMS upon exceedance of the threshold.

Subparagraph (f)(2)(E) allows for an existing NOx CEMS to be taken out of service for up to a 2 week time period to add CO CEMS.

Subparagraph (f)(2)(F) provides additional requirements for monitoring and for allowing relative accuracy testing audits (RATAs) to be performed on the same testing schedule for source tests, despite the annual RATA requirements of Rule 218.1.

Subparagraph (f)(2)(G) provides additional clarity for engines installed at the same location. New engines cannot be installed farther than 75 feet away from each other to avoid circumvention of the aggregate engine CEMS threshold.

Subparagraph (f)(2)(H) provides requirements for new engines that are issued a permit to construct to comply with CEMS or I&M plan requirements upon commencement of engine operation.

Subdivision (g) – I&M Plans

This subdivision contains the I&M plan requirements that are consistent with those currently in Rule 1110.2. Owners and operators are required to have an I&M plan approved for their facility that contains the items that are listed in Attachment 1 of PR 1179.1, if the facility has an engine without a NOx and CO CEMS. Attachment 1 contains the same elements as Attachment 1 of Rule 1110.2. Since PR 1179.1 will apply to digester gas fired engines, owners and operators of engines that are covered by both Rule 1110.2 for exclusively natural gas and 1179.1 for digester gas would require one I&M plan for each rule, if applicable.

Subdivision (h) – Diagnostic Emission Checks for Boilers and Engines

This subdivision contains requirements that are consistent with current requirements in Rules 1146/1146.1 and in Rule 1110.2. Diagnostic emission checks are required to be conducted by trained staff in accordance with the Combustion Gas Periodic Monitoring Protocol for boilers and engines subject to Rule 1146, 1146.1, and 1110.2. The minimum sampling time for diagnostic emission checks is 15 minutes.

Diagnostic Checks for Boilers - Paragraph (h)(1)

Provides diagnostic emission check requirements for boilers. Testing frequency is separated by boiler size and allows for the owner or operator to resolve any problems in the event of an emissions exceedance. If the diagnostic emission check frequency has been reduced to quarterly or every 2,000 unit operating hours, whichever occurs later, for boilers greater than or equal to 5 MMBtu/hr, or semi-annually or every 4,000 unit operating hours, whichever occurs later, for boilers great than 2 MMBtu/hr and less than 5 MMBtu/hr, the facility will continue to perform diagnostic emission checks in accordance with that schedule upon rule adoption. Any diagnostic emission check conducted by South Coast AQMD staff that finds an emissions exceedance would be a violation.

Diagnostic Checks for Engines - Paragraph (h)(2)

Provides diagnostic emission check requirements for engines, including testing frequency and additional requirements for lean-burn engine operators. If the diagnostic emission check frequency has been reduced to monthly or every 750 unit operating hours, whichever occurs later, the facility will continue to perform diagnostic emission checks in accordance with that schedule upon rule adoption. As with boilers, any diagnostic emission check conducted by South Coast AQMD staff that finds an emissions exceedance will be a violation.

Subdivision (i) – Recordkeeping

This subdivision harmonizes the recordkeeping requirements for the various types of equipment that will be subject to PR 1179.1. PR 1179.1 would additionally require owners or operators to maintain maintenance, service and tuning records. Subdivision (i) would require records to be retained by facility owners and operators for 5 years. Other source-specific rules contained shorter records retention timeframes (such as 2 years). Accumulation of the records would begin upon date of adoption.

Recordkeeping for Boilers - Paragraph (i)(1)

Subparagraphs (i)(1)(A) and (i)(1)(B) provide recordkeeping requirements consistent with Rule 429 – Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen that boilers subject to Rule 1146 are subject to~~currently complying with~~.

Recordkeeping for Turbines - Paragraph (i)(2)

Provides recordkeeping requirements for operators of turbines. Records of hours of operation, type of fuel used, and startup and shutdown times are required. In addition, this paragraph also requires recordkeeping of emission control system operation and maintenance to verify continuous operation while the turbine is in operation and equipment requirements to verify certain parameters.

Recordkeeping for Engines - Paragraph (i)(3)

Provides the monthly operating log requirements for owners and operators of engines subject to PR 1179.1.

Recordkeeping for Units Required to Conduct Source Test - Paragraph (i)(4)

Requires tuning and servicing records as well as records of the hours of operation of a unit since any tuning or servicing prior to conducting a source test.

Subdivision (j) – Other Requirements for Boilers

This subdivision contains additional requirements specific to boilers and consistent with current requirements from Rules 1146, 1146.1, and 1146.2.

Derating Boilers - Paragraph (j)(1)

Provides a requirement that an owner or operator cannot derate any boiler to less than or equal 2 MMBtu/hr to circumvent permitting and emissions requirements.

Maintenance for Small Boilers - Paragraph (j)(2)

Provides maintenance and recordkeeping requirements for small boilers rated less than or equal to 2 MMBtu/hr.

Subdivision (k) – Other Requirements for Engines

This subdivision contains other requirements that are specific for engines and that are consistent with current requirements of Rule 1110.2 that pertain to reporting, breakdowns, and other equipment requirements.

Engine Breakdowns - Paragraph (k)(1)

Provides the requirements for breakdown conditions or emissions exceedances from diagnostic emission checks. Subparagraph (k)(1)(B) contains excess emission thresholds for breakdowns in

Table 5. These are the same requirements that were adopted during the December 2015 amendments to Rule 1110.2 to limit the number of breakdowns that can occur during any calendar quarter as a way to provide a quantification of excess emissions due to these types of events.

TABLE 5
EXCESS EMISSION CONCENTRATION THRESHOLDS FOR BREAKDOWNS

Equipment Category	NOx (ppmvd)[1]	CO (ppmvd)[1]
Lean-Burn Engines	45	250
Rich-Burn Engines	150	2000

[1] Corrected to 15% oxygen

Totalizing Meters for Engines - Paragraph (k)(2)

Provides requirements for maintaining a non-resettable totalizing time meter for engines.

Air-to-Fuel Ratio Controller for Engines - Paragraph (k)(3)

Provides requirements for maintenance of combustion controls for engines without CEMS.

Breakdown Reporting for Engines - Paragraph (k)(4)

Provides reporting requirements for breakdowns that result in emissions exceedances along with the required documentation for these events. The quarterly reports that are also required for natural gas engines under Rule 1110.2 would also be required for digester gas engines under PR 1179.1. These reports would contain each occurrence of a breakdown, fault, malfunction, alarm, engine or control system parameter out of range, or a diagnostic emission check that results in an emissions exceedance.

Subdivision (l) – Schedule for Permit Revisions

Provides deadlines for permit applications to be submitted for revising equipment permits and I&M plans to reflect PR 1179.1. Facilities would only submit applications for equipment with permits that reference other source specific-rules no longer applicable once PR 1179.1 is adopted. Title V facilities would have until the next Title V permit renewal application is due to submit applications for each piece of equipment subject to PR 1179.1 and an I&M plan per facility, if applicable. Non-Title V facilities would submit applications by the proposed dates, depending on the type of equipment.

- Applications for each existing boiler > 2 MMBtu/hr would be required to be submitted on or before January 1, 2023
- Applications for each existing boiler ≤ 2 MMBtu/hr would be required to be submitted on or before July 1, 2023

- Applications for each existing engine and I&M plans for ~~facility~~ each facility with at least one engine subject to this rule would be required to be submitted on or before January 1, 2024
- Applications for each existing turbine would be required to be submitted on or before July 1, 2024

Subdivision (m) – Exemptions

Low-Use Boilers > 2 MMBtu/hr - Paragraph (m)(1)

Provides low fuel use exemptions for any boilers previously subject to Rule 1146 that were in operation before September 5, 2008 with an annual heat input usage less than or equal to 9.0×10^9 Btu per year (90,000 therms). Owners and operators with such units at POTWs would be exempt from the emission limits in Table 1 or paragraph (d)(2), but shall not operate the boiler in a manner that exceeds 30 ppm, provided the owner or operator follows the tune up procedures in Attachment 2 for that boiler. Any boiler that exceeds the 90,000 therm threshold is required to demonstrate compliance with the 15 ppm emission limit within 18 months of the exceedance.

Special Use Turbines - Paragraph (m)(2)

Provides exemption to turbines that are used only for firefighting or flood control. In addition, an exemption from PR 1179.1 requirements is provided for emergency standby turbines, which are defined here and in Rule 1134. An owner or operator must maintain an hour meter and a log to verify that each emergency standby turbine does not exceed a usage limit of 200 hours per year. If the usage threshold is exceeded, the owner or operator would be required to submit a permit application to meet the applicable compliance limits of PR 1179.1.

Non-Digester Gas Fired Boilers, Turbines < 0.3 MW, and Engines - Paragraph (m)(3)

Provides an exemption for units permitted to fire only non-digester gas fuels. Boilers at POTWs not permitted to fire any amount of digester gas would remain subject to the requirements of the Rule 1146 Series, depending on size (Rules 1146, 1146.1, 1146.2). Engines not permitted to fire any amount of digester gas would remain subject to the requirements of Rule 1110.2. Turbines less than 0.3 MW not permitted to fire any amount of digester gas are not subject to PR 1179.1.

Low-Use Engines - Paragraph (m)(4)

Provides an exemption for engines that operate 200 hours or less per year. The engine usage would need to be verified with the installation of a non-resettable engine hour meter and with the maintenance of an operating log. Staff identified low-use digester gas engines that would be exempt from PR 1179.1.

Exempted Engines - Paragraph (m)(5)

PR 1179.1 would not apply to laboratory engines used in research and testing purposes, engines operated for purposes of performance verification and testing of engines, auxiliary engines used to power other engines or gas turbines during start-ups, or portable engines that are registered under the state registration program pursuant to Title 13, Article 5 of the CCR.

Permit Exempt Turbines < 0.3 MW - Paragraph (m)(6)
Provides an exemption from rule requirements for turbines < 0.3 MW that were in operation before May 3, 2013 and are currently permit exempt.

Boilers Without Permitted NOx Concentration Limits - Paragraph (m)(7)
Provides an exemption for boilers without permitted NOx concentration limits. The boilers would be exempt from the emission limits in Table 1 or paragraph (d)(2). The emission limits in Table 1 and paragraph (d)(2) become effective upon a burner or boiler replacement.

Commissioning Period for Turbines and Engines – Paragraph (m)(8)
Provides an exemption from the emission limits in Table 1 or paragraph (d)(3) for the commissioning of new engines and turbines and specifies the commissioning period for each equipment type. Operators requesting this exemption must have these time periods as permit conditions.

Low-Use Boilers ≤ 2 MMBtu/hr Firing Natural Gas - Paragraph (m)(9)
Provides an exemption from the natural gas emission limits for boilers ≤ 2 MMBtu/hr that use less than 9,000 therms of natural gas, provided the natural gas usage is verified with an in line fuel meter or the annual operating hours are recorded by a timer and using a method described in subparagraphs (m)(9)(A) through (m)(9)(C) to calculate fuel use. These requirements are consistent with those in Rule 1146.2.

Engines Under Variances - Paragraph (m)(10)
Provides an exemption from the rule for five engines operated by San Bernardino Municipal Water Department currently operating under the variance issued by South Coast Air Quality Management District Hearing Board on December 20, 2018 for the term of the variance. Engines operating under this variance are expected to be decommissioned by the agency as part of implementing a Digester Gas Beneficial Use Program. The five engines remain subject to Rule 1110.2, in addition to the conditions of the variance, until the engines are removed from operation.

San Bernardino Municipal Water Department is implementing a fuel cell project that will utilize digester gas currently supplying the engines under the variance. Once the fuel cell project commences operation, the engines will no longer operate. However, if the engines continue to operate after the variance expires, the engines would no longer be exempt from PR 1179.1.

Attachment 1 – I&M Plan Elements

Attachment 1 applies for engines with I&M plans subject to PR 1179.1 subdivision (g). These parameters and procedures are consistent with those contained in Rule 1110.2.

Attachment 2 – Equipment Tuning Procedure for Forced-Draft Boilers, Steam Generators, and Process Heaters

Attachment 2 applies to boilers using the low-use exemption in paragraph (m)(1) and provides the procedure for tuning boilers, required at least twice per year by paragraph (m)(1). These parameters and procedures are consistent with those contained in Rules 1146 and 1146.1.

CHAPTER 4: IMPACT ASSESSMENTS

INTRODUCTION

POTW equipment is currently subject to source specific rules, with the exception of turbines greater than or equal to 0.3 MW. PR1179.1 will contain all applicable provisions from source specific rules that facilities are currently subject to. In addition, PR 1179.1 contains provisions that reflect conditions on facility equipment permits. The emission limit proposed in PR 1179.1 will reduce emissions from three turbines located at one facility.

EMISSION REDUCTIONS

PR 1179.1 will result in emission reductions from turbines ≥ 0.3 MW. Boilers and engines will remain at the current rule limits and/or permit limits, with the exception of four boilers that are not permitted with a NOx concentration limit. ~~Reductions for the boilers without permitted NOx concentration limits were not determined because baseline emissions are not known. The reductions for the boilers without permitted NOx concentration limits are estimated to be negligible.~~ Baseline emissions for turbines were determined using 2019 Annual Emissions Reports (AER).

Emission Reduction Estimate for Turbines

There six turbines located at two POTWs greater than or equal to 0.3 MW that fire either digester gas only or digester gas and another fuel. The emission limit proposed in PR 1179.1 will reduce emissions from three turbines located at one facility. The total baseline emissions for the facility impacted by the proposed emission limit are 149,156 pounds per year or 0.20 tons per day. The three turbines are permitted at 25 ppm at 15 percent oxygen on a dry basis. The baseline emissions for the facility operating the other three turbines are 96,854 pounds or 0.13 tons per day. These turbines are permitted at 18.8 ppm at 15 percent oxygen on a dry basis. The proposed emission limit of 18.8 ppm would only affect the three turbines permitted at 25 ppm. The proposed emission limit would become effective upon rule adoption and the NOx emission reductions that would be achieved are 0.05 tons per day.

COST-EFFECTIVENESS

The California Health & Safety Code (H&SC) Section 40920.6 requires a cost-effectiveness analysis when establishing BARCT requirements. The cost-effectiveness of a control technology is measured in terms of the control cost in dollars per ton of air pollutant reduced. The costs for the control technology includes purchasing, installation, operating, and maintaining the control technology. Emissions reductions were based on the 2019 AER and the most recent source test data for turbines. The 2016 AQMP established a cost-effectiveness threshold of $50,000 per ton of NOx reduced. The cost-effectiveness is estimated based on the present worth value of the control cost, which is calculated according to the capital cost (initial one-time equipment, installation, and startup costs) plus the annual operating cost (recurring expenses over the useful life of the control equipment times a present worth factor). In the cost-effectiveness calculation, staff assumed a uniformed series present worth factor (PWF) at a 4% interest rate and a 25-year equipment life expectancy.

$$PWV = TIC + (PWF \times AC)$$

PWV = present worth value ($)
TIC = total installed cost ($)
AC = annual cost ($)
PWF = uniform series present worth factor (15.622)

Boilers ≤ 2 MMBtu/hr

A cost-effectiveness analysis was conducted for boilers 1-2 MMBtu/hr to meet a NOx concentration limit of 12 ppm at 3 percent oxygen on a dry basis and boilers < 1 MMBtu/hr to meet a NOx concentration limit of 20 ppm at 3 percent oxygen on a dry basis. Staff used costs from the Rule 1146 series cost analysis of low NOx burners for units ≤ 2 MMBtu/hr. The cost for low NOx burner replacements for boilers ≤ 2 MMBtu/hr is $20,000. This cost was used to calculate cost-effectiveness. The cost-effectiveness to replace existing burners on boilers 1-2 MMBtu/hr with a burner that can meet a NOx concentration limit of 12 ppm at 3 percent oxygen on a dry basis is greater than $50,000 per ton of NOx reduced. The cost-effectiveness to replace existing burners on boilers < 1 MMBtu/hr with a burner that can meet a NOx concentration limit of 20 ppm at 3 percent oxygen on a dry basis is greater than $50,000 per ton of NOx reduced.

Boilers > 2 MMBtu/hr

A cost-effectiveness analysis was conducted for boilers to meet 12 ppm at 3 percent oxygen on a dry basis. Staff used costs from the Rule 1146 series cost analysis of low NOx burners for units > 2 MMBtu/hr. Equipment costs ranged from $40,000-$350,000 depending on the size and the installation costs ranged from $25,000-$125,000 depending on size. The average cost for a low NOx burner that can meet a NOx concentration limit of 12 ppm at 3 percent oxygen on a dry basis with installation is $90,300. The average cost-effectiveness to retrofit boilers with a burner that can meet a NOx concentration limit of 12 ppm at 3 percent oxygen on a dry basis is greater than $50,000 per ton of NOx reduced.

Turbines ≥ 0.3 MW

Staff obtained costs for control equipment from a variety of sources that included facilities, suppliers, and cost-estimation tools. The cost for control equipment considers capital costs and annual costs. Capital costs are one-time costs that cover the components required to assemble a project. These costs include, but are not limited to, equipment, installation, permitting, consulting, and testing. Annual costs are any recurring costs required to operate equipment. These costs include operating and maintenance (O&M) costs such as electricity, monitoring, and costs for consumables.

Selective Catalytic Reduction

SCR costs were obtained from facilities, U.S EPA's Air Pollution Cost Estimation Spreadsheet For Selective Catalytic Reduction (SCR), two engineering consultants, one catalyst supplier, and applicable costs from the Rule 1110.2 cost analysis for SCR (2012 Technology Assessment). The costs for SCR considered retrofitting three turbines that currently do not utilize SCR. The design parameters used to obtain SCR cost estimates and costs from various sources are shown in Table 4-1 and Table 4-2.

Table 4-1

SCR DESIGN PARAMETERS

HHV	665 Btu/scf
Inlet NOx	22 ppm
Removal efficiency	90%
Exhaust flowrate	~325,000 lbs/hr
Operating days/year	365
Operating life of catalyst	24,000 hours
Ammonia slip	5 ppm
Inlet temperature	866 F
Electricity	$0.19/kwh - $0.25/kwh

Table 4-2
SCR COST ESTIMATES

Source	Capital Cost	Annual Costs
EPA Cost Manual	$8.3 million	$1.2 million
Supplier A	$8.0 million	$489,5000
Supplier B	2.5 million*	$450,000
Rule 1110.2 staff report (11/19)	$1.4 million - $6.6 million	EPA Cost Manual
Facility A	Unavailable	$38,000 (3 SCRs) new - no catalyst replacement^
Facility B	Unavailable	$48,000 (5 SCRs) new - no catalyst replacement^
Average cost for 3 SCRs	$7.6 million	$458,5000

* Identified as outlier and not included in the average capital cost.

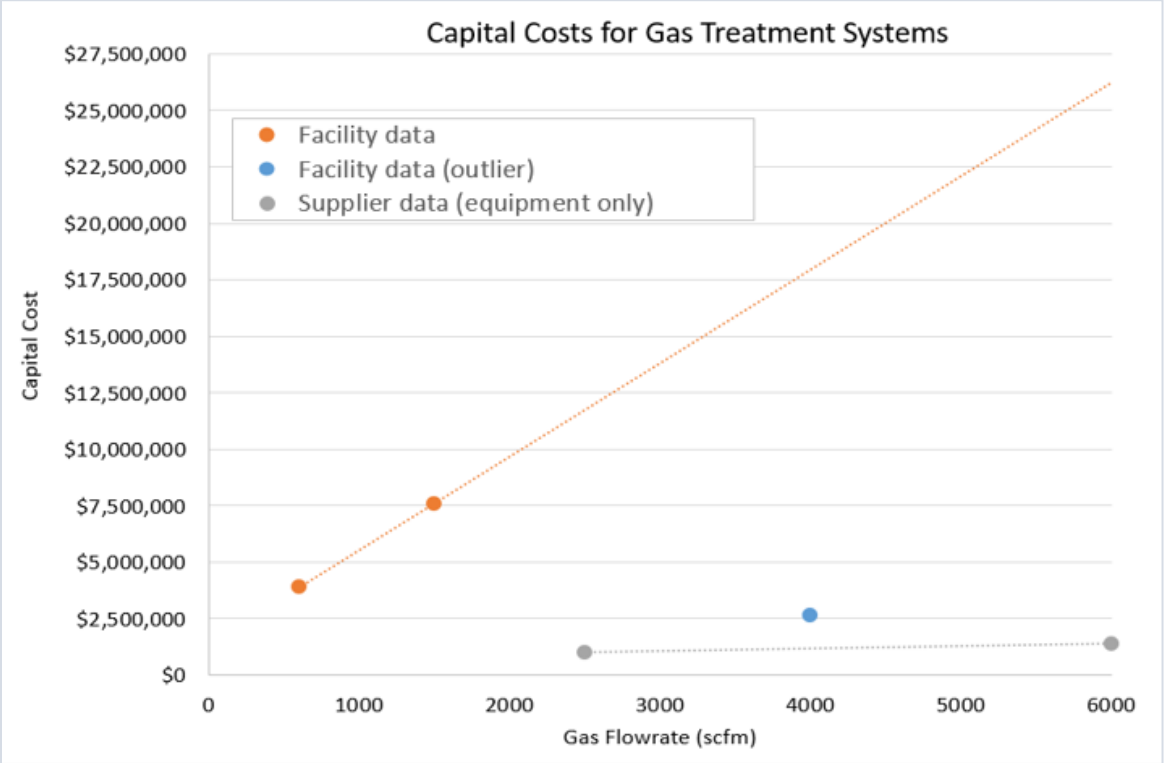
^ Annual costs provided by Facilities A and B did not include cost for catalyst due to new installations that have not required a catalyst replacement. An added annual cost of $33,000 (not shown in table) was added to Facility A's and Facility B's annual costs for catalyst. The added costs were included in the average annual costs.

Gas Treatment

Costs for gas treatment were obtained from POTWs and landfills within California. Costs reflect gas treatment systems designed to remove siloxanes to < 100 ppb from gas streams that have reported inlet siloxane levels of < 15 ppm.

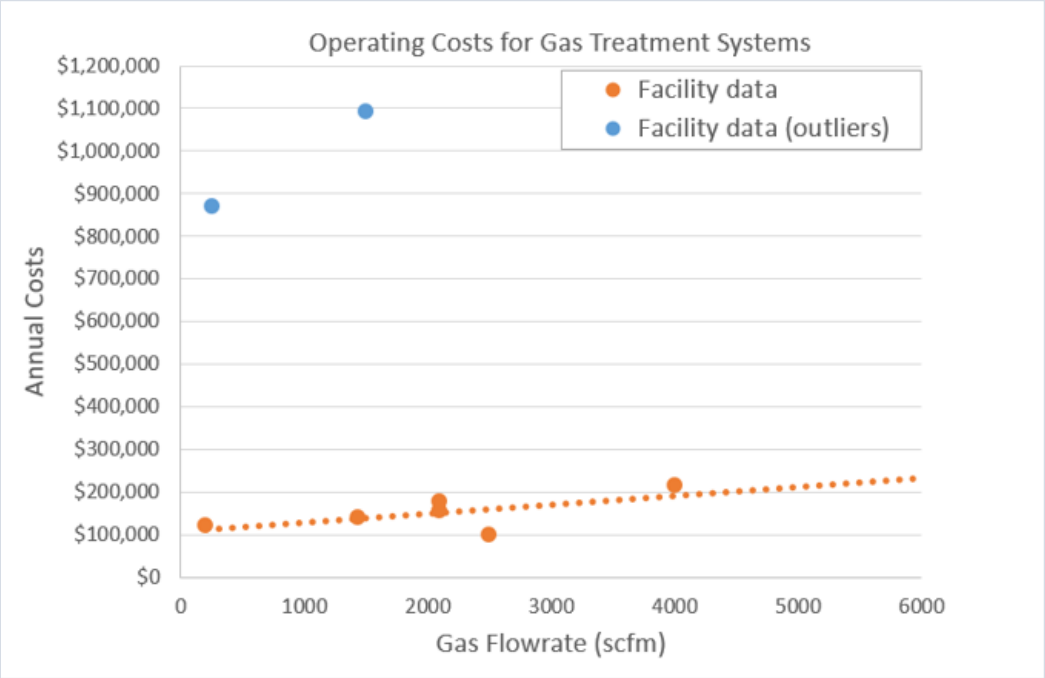
One outlier for cost information was identified and the data was not considered in determining capital costs. One supplier provided two cost estimates for two flowrates. The supplier provided only equipment costs. Figure 4-1 shows the data used to determine a capital cost for a gas treatment system in relation to gas flowrate.

Figure 4-1 – Capital Costs for Gas Treatment Systems



Annual costs for gas treatment systems were provided by eight facilities. The facilities had reported siloxane levels between 4.4 ppm – 15 ppm. One facility treated digester gas to PUC pipeline quality gas. This facility had the highest operating costs of approximately one million dollars with over half the costs attributed to electricity needs. Four other facilities have not considered electricity as a significant cost in the costs they provided for their gas treatment systems. The facility whose cost information reflected a gas treatment system that treats gas to PUC pipeline quality was identified as an outlier. One other facility's data was identified as an outlier. Figure 4-2 shows the data obtained from facilities for annual costs of gas treatment systems in relation to gas flowrate.

Figure 4-2 – Operating Costs for Gas Treatment Systems



The data used to determine cost-effectiveness to meet 5 ppm at 15 percent oxygen on a dry basis was identified for a gas treatment system that requires treatment of 6,000 scfm of digester gas. The capital cost determined was $26,250,000 and the annual O&M costs were $250,000.

New Turbines

Costs were analyzed for new turbines that can meet 5 ppm at 15 percent oxygen on a dry basis with existing SCRs. The facility that currently uses SCR would be required to replace their turbines with inlet~~uncontrolled~~ NOx of 213 ppm at 15 percent oxygen on a dry basis ~~turbines~~ for turbines with inlet~~uncontrolled~~ NOx of 15 ppm at 15 percent oxygen on a dry basis, to meet 5 ppm at 15 percent oxygen on a dry basis. Costs for new turbines that can meet 15 ppm at 15 percent oxygen on a dry basis were obtained from the EPA Catalog of CHP Technologies. The EPA Catalog of CHP Technologies estimates capital costs for new turbines at $1.2 - $1.5 million per megawatt, and annual costs at $0.0092-$0.0093 per kilowatt-hour. The three turbines currently equipped with SCR have a power output capacity of 41.85 MW. The capital cost at $1.5 million/MW is $62,800,000. The annual cost at $0.0093/kwh is $3,400,000. The cost-effectiveness for the turbines with SCR to meet 5 ppm at 15 percent is $253,200, including stranded assets.

Water Injection

Staff obtained costs from one facility and one demineralized water supplier to determine the cost-effectiveness of a turbine NOx concentration limit of 18.8 ppm limit at 15 percent oxygen on a dry basis. The facility stated that up to 8,000 gallons per day, per turbine, of demineralized water is needed to meet a NOx concentration limit of 18.8 ppm at 15 percent oxygen on a dry basis and has stated that a general cost for demineralized water is ten times the cost of potable water. Utility water rates were obtained from LADWP's website that stated a cost of $0.0071 per gallon as the industrial water rate. At ten times the utility water rate ($0.071 per gallon), the annual cost to meet a NOx concentration limit of 18.8 ppm at 15 percent oxygen on a dry basis is $204,400 per turbine.

The demineralized water supplier quoted a cost of $0.0281 per gallon that included ~~the~~ costs for ~~that included~~ exchange ~~costs~~, delivery, and rental fees. The annual cost to meet a NOx concentration limit of 18.8 ppm at 15 percent oxygen on a dry basis is based on the supplier's quote is $82,052 per turbine. ~~An~~The average of the two annual cost estimates is~~of~~ $143,226 per turbine and was used to calculate cost-effectiveness.

The cost-effectiveness was calculated for two~~three~~ emission limits: 18.8 ppm and 5 ppm, at 15 percent oxygen on a dry basis. Table 4-3 summarizes of the cost-effectiveness to require existing turbines to meet each limit.

Table 4-3 – Cost-Effectiveness for Proposed Turbine Emission Limits

Cost-Effectiveness to Meet 18.8 ppm at 15 percent oxygen on a dry basis	
Emission Reductions Over 25 Years[1]	Cost-Effectiveness
138 tons (Facility 1)	$48,600 per ton of NOx reduced
0 tons (Facility 2)	Currently permitted at 18.8 ppm at 15 percent oxygen on a dry basis

[1] Reductions calculated as part of the cost-effectiveness determination are based on current concentration emission levels of the turbines as demonstrated in recent source tests and total 0.015 tpd.

Cost-Effectiveness to Meet 5 ppm at 15 percent oxygen on a dry basis	
Emission Reductions Over 25 Years	Cost-Effectiveness
1492 tons (Facility 1 – turbines without SCR)	$30,200 per ton of NOx reduced
830 tons (Facility 2 – turbines with SCR)	$206,200 per ton of NOx reduced

The cost-effectiveness to meet the proposed NOx BARCT emission limit of 18.8 ppm at 15 percent oxygen on a dry basis is $48,600 per ton of NOx reduced. The average cost-effectiveness to meet the proposed NOx BARCT emission limit of 5 ppm at 15 percent oxygen on a dry basis is $118,200 per ton of NOx reduced.

The proposed emission limits for boilers and turbines are not cost-effective with the exception of the NOx BARCT emission limit of 18.8 ppm at 15 percent oxygen on a dry basis that would apply to turbines. The proposed NOx BARCT emission limit of 18.8 ppm at 15 percent oxygen on a dry basis is proposed to be effective upon the date of adoption. A summary of the cost-effectiveness analysis is in Table 4-4.

Table 4-4 – Cost-Effectiveness Analysis

Category	**TIC ($)**	**AC ($)**	**PWV ($)**	**NOx Reductions tpd**	**CE ($/ton)**
Turbines ≥ 0.3 MW (To meet 18.8 ppm)	N/A	429,800	6.7 MM	0.05	48,600

Permit Revisions

Permits are required to be revised to reflect PR 1179.1 and to remove the references to former source-specific rules that would no longer apply to these sources under Rule 1179.1. Facilities would incur a one-time cost at the time that permit revisions are required, according to the schedule in subdivision (l) of PR 1179.1. The total combined cost for all facility permit revisions is $195,000. Table 4-5 contains the breakdown costs for permit revisions, based on Rule 301 – Permitting and Associated Fees.

Table 4-5 – Permit Revision Costs

Permit Revision Type	Cost (Non-Title V)	Cost (Title V)
Title V permit revision (per facility)	N/A	$1,518.26
Change of Conditions (per engine)	$4319.40	$5,412.63
Administrative Change (per equipment)	$962.75	$1,206.41
I&M Plan (per applicable facility w/engines)	$725.60	$909.25

Total Cost-Effectiveness of PR 1179.1

The cost-effectiveness to implement PR 1179.1 is $50,054 per ton of NOx reduced. Costs include the cost for three turbines at one facility to meet 18.8 ppm and all facilities with equipment permits that reference other source-specific rules, to revise equipment permits to reflect PR 1179.1.

SOCIOECONOMIC ASSESSMENT

California Health & Safety Code §40440.8 requires a socioeconomic impact assessment for proposed and amended rules resulting in significant impacts to air quality or emission limitations. This assessment shall include affected industries, range of probable costs, cost effectiveness of control alternatives, and emission reduction potential.

During the rulemaking for the December 2018 amendments for Rule 1146 Series, staff recommended to separate provisions for combustion equipment at Publicly Owned Treatment Works Facilities (POTWs). Proposed Rule 1179.1 - ~~NOx~~ Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities (PR 1179.1) was developed to establish BARCT requirements for combustion equipment located at POTWs using digester gas.

Proposed Rule 1179.1 would affect 30 POTW facilities with a total of eighty-six biogas fueled boilers, turbines, and engines. These facilities belong to the North American Industrial Classification Codes (NAICS) 2213 (Water, Sewage, and Other Systems) and 5622 (Waste

Treatment and Disposal). Out of these 30 facilities, six are located in Los Angeles County, seven each in Orange and San Bernardino counties, and 10 in Riverside County.

Proposed Rule 1179.1 applies to combustion equipment used at POTWs. Specifically, PR 1179.1 contains emission limits on boilers, turbines, and engines at POTWs. Many of the emissions limits within PR 1179.1 are consistent with limits set in existing source specific rules (e.g., Rule 1146 and 1110.2) or equipment permits, and the boilers, engines, and turbines at POTWs already meet those limits. However, PR 1179.1 will require turbines greater than or equal to 0.3 MW to meet new, lower emission limits.

Of the 86 biogas-fueled boilers, turbines, and engines affected by PR 1179.1, only three turbines at one facility are expected to incur additional compliance costs associated with the PR 1179.1 requirements. Compliance costs for the three turbines above 0.3 MW are expected due to increased water injection and are estimated at $429,600 ($143,200 per turbine) annually.[5] In addition, facilities will incur a one-time cost to reconcile permits and comply with the PR 1179.1 requirements. The total estimated one-time cost for all facility permit revisions is estimated at $195,000,[6] and accounts for both Title V and non-Title V equipment permit revisions. The annualized cost of these permit revisions at four percent real interest rate is estimated at $23,985. As such, the estimated total annual compliance cost from PR 1179.1 is estimated at $453,585.

The proposed NOx emission limit of 18.8 ppm at 15 percent oxygen on a dry basis for turbines greater than or equal to 0.3 MW will reduce NOx emissions by 0.015 tpd. All other equipment will continue to comply with current emission limits. The cost-effectiveness of PR 1179.1, including the permit revisions, is estimated at $50,000 per ton of NOx reduced based on current concentration emission levels of the turbines as demonstrated in recent source tests.

The estimated total annual compliance costs from PR 1179.1 ($453,585) is estimated to be less than one million dollars annually. It has been a standard practice for South Coast AQMD's socioeconomic impact assessments that, when the annual compliance cost is less than one million current U.S. dollars annually, the Regional Economic Models Inc. (REMI)'s Policy Insight Plus Model is not used to simulate jobs and macroeconomic impacts, as is the case here. This is because the resultant impacts would be too small relative to the baseline regional economy to reliably determine any impacts from the modeling analysis.

[5] The cost figure of $143,200 was calculated using an average of two estimates provided by the facility affected by PR 1179.1 limits and a cost estimate provided by a demineralized water supplier.

[6] Title V facilities have a Title V revision cost of $1,518.26 (per facility). Each piece of permitted equipment at Title V facilities requiring a Change of Conditions permit revision will cost $5,412.63. Each piece of permitted equipment at non-Title V facilities requiring a Change of Conditions permit revision will cost $4,319.40. Facilities with permitted equipment requiring an Inspection & Monitoring plan will cost $909.25 per Title V facility and $725.60 per non-Title V facility. All other equipment requires an Administrative Change permit revision at a cost of $1,206.41 per piece of equipment at Title V facilities and $962.75 per piece of equipment at non-Title V facilities.

CALIFORNIA ENVIRONMENTAL QUALITY ACT ASSESSMENT

PR 1179.1 is considered a "project" as defined by the California Environmental Quality Act (CEQA) and the South Coast AQMD is the designated lead agency. Pursuant to South Coast AQMD's Certified Regulatory Program (Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l); codified in South Coast AQMD Rule 110) and CEQA Guidelines Section 15070, the South Coast AQMD has prepared an Environmental Assessment (EA) with less than significant impacts for PR 1179.1, which is a substitute CEQA document, prepared in lieu of a Negative Declaration. A Draft EA was~~has been~~ released for a 30-day public comment and review period from August 12, 2020 to September 11, 2020. ~~If comments are~~One comment letter was submitted~~;~~, the letter~~s~~ and responses to comments were~~will be~~ incorporated into the Final EA which has been~~will be~~ included as an attachment to the Governing Board package. Prior to making a decision on the adoption of PR 1179.1, the South Coast AQMD Governing Board must review and certify the Final EA, including responses to comments, as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PR 1179.1.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Draft Findings
California Health and Safety Code Section (H&SC) 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 1179.1 is needed to establish NOx, CO, and/or VOC emission limits for digester gas and/or natural gas fired boilers, turbines, and engines located at publicly owned treatment works (POTWs) that are representative of BARCT, as well as monitoring, reporting, and recordkeeping requirements.

Authority
The South Coast AQMD obtains its authority to adopt, amend, or repeal rules and regulations pursuant to H&SC Sections 39002, 39616, 40000, 40001, 40440, 40702, 40725 through 40728, 40920.6, and 41508.

Clarity
PR 1179.1 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency
PR 1179.1 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

Non-Duplication
PR 1179.1 will not impose the same requirements as any existing state or federal regulations. The proposed amended rules are necessary and proper to execute the powers and duties granted to, and imposed upon, the South Coast AQMD.

Reference
In amending these rules, the following statutes which the South Coast AQMD hereby implements, interprets or makes specific are referenced: H&SC Sections 39002, 40001, 40702, 40440(a), 40440(b), 40406, and 40725 through 40728.5.

COMPARATIVE ANALYSIS

Under H&SC 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 requirements, existing rules from other air quality management districts and/or air pollution control districts, and existing or proposed SCAQMD rules and air pollution control requirements and guidelines which are applicable to natural gas and/or digester gas fired turbines. See Table 4-6 below.

Table 4-6: PR 1179.1 Comparative Analysis- Turbines

Rule Element	PR 1179.1	BAAQMD Regulation 9 Rule 9	SMAQMD Rule 413	SJVAPCD Rule 4703	40 CFR Part 60 Subpart GG	40 CFR Part 60 Subpart KKKK
Applicability	Located at a POTW facility: Digester gas and dual fuel turbines < 0.3 MW and turbines ≥ 0.3 MW..	Stationary gas turbines with a heat input rating ≥ 5 MMBtu/hr	Stationary gas turbines with ratings equal to or greater than 0.3 megawatt (MW) output, or 3 MMBTU/hr input and operated on gaseous and/or liquid fuel.	Stationary gas turbines with ratings equal to or greater than 0.3 megawatt (MW) or a maximum heat input rating of more than 3,000,000 Btu per hour.	Gas turbines with heat input of ≥ 10 MMBtu/hr that commenced construction, modification or re-construction on or before 2/18/2005	Gas turbines with heat input of ≥ 10 MMBtu/hr that commenced construction, modification or re-construction after 2/18/2005
Requirements	NOx emission limits @ 15% O_2: • ≥ 0.3 MW firing 60% digester gas or more – 18.8 ppm on or before date of adoption • Simple cycle ≥ 0.3 MW firing	General NOx emission limits (@ 15% O_2) for refinery fuel gas, waste gas or LPG: • < 5 MMBtu/hr- Exempt • 5 – 50 MMBtu/hr – 2.53 lbs/MWhr or 50 ppmv • > 50 – 150 MMBtu/hr – 2.34 lbs/MWhr or 50 ppmv	NOx emission limits (@ 15% O_2) for gaseous fuel: • ≥ 0.3 to < 2.9 MW – 42 ppmv • ≥ 2.9 MW (operating < 877 hr/yr) – 42 ppmv • ≥ 2.9 to < 10 MW (operating ≥	NOx emission limits (@ 15% O_2) for gas fuel: • < 3 MW – 9 ppmvd • 3 – 10 MW pipeline gas turbine – 8 ppmvd during steady state and 12 ppmvd during non-steady state	NOx limit @ 15% O_2, where Y = Manufacture's rated heat input and F = NOx emission allowance for fuel-bound nitrogen: • 0.0075* (14.4/Y)+F •0.0150* (14.4/Y)+F	NOx limit @ 15% O_2: • ≤ 50 MMBtu/hr – 42 ppm new, firing natural gas, electric generating • ≤ 50 MMBtu – 100 ppm new, firing natural gas, mechanical drive

	100%natural gas- 2.5 ppm on or before date of adoption • Combined cycle ≥ 0.3 MW firing 100% % natural gas- 2 ppm on or before date of adoption • < 0.3 MW gas- 9 ppm on or before date of adoption CO emission limit @15% O_2: 130 ppm	• > 150 – 250 MMBtu/hr – 0.70 lbs/MWhr or 15 ppmv • > 250 – 500 MMBtu/hr – 0.43 lbs/MWhr or 9 ppmv • > 500 MMBtu/hr – 0.26 lbs/MWhr or 9 ppmv General NOx emission limits (@ 15% O_2) for natural gas: • < 5 MMBtu/hr- Exempt • 5 – 50 MMBtu/hr - 2.12 lbs/MWhr or 42 ppmv • > 50 – 150 MMBtu/hr (no retrofit available) – 1.97 lbs/MWhr or 42 ppmv • > 50 – 150 MMBtu/hr (WI/SI enhancement available) – 1.64 lbs/MWhr or 35 ppmv • > 50 – 150 MMBtu/hr (DLN technology available) – 1.17 lbs/MWhr or 25 ppmv • > 150 – 250 MMBtu/hr – 0.70 lbs/MWhr or 15 ppmv • > 250 – 500 MMBtu/hr – 0.43 lbs/MWhr or 9 ppmv • > 500 MMBtu/hr – 0.15 lbs/MWhr or 5 ppmv Low usage NOx emission limits (@ 15% O_2) for refinery fuel gas, waste gas or LPG: • < 50 MMBtu/hr – exempt • 50 - > 500 MMBtu/hr – N/A	877 hr/yr) – 25 ppmv • ≥ 10 MW (no SCR, operating ≥ 877 hr/yr) – 15 ppmv • ≥ 10 MW (with SCR, operating ≥ 877 hr/yr) – 9 ppmv	• 3 – 10 MW (operating < 877 hrs/yr, not listed above) – 9 ppmvd • 3 – 10 MW (operating ≥ 877 hrs/yr, not listed above) – 5 ppmvd • > 10 MW (simple cycle, operating < 200 hrs/yr, except as provided in Section 5.1.3.3) – 25 ppmvd • > 10 MW (simple cycle, operating >200 but no greater than 877 hrs/yr) – 5 ppmvd CO emission limits @15% O_2: • Units not identified below – 200 ppmv • General Electric Frame 7 – 25 ppmv • General Electric Frame 7 with Quiet Combustors – 52 ppmv • < 2 MW Solar Saturn gas turbine powering centrifugal compressor – 250 ppmv	SO_2 limit @15% O2: • 0.015% by volume	• > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 25 ppm new, firing natural gas • >850 MMBtu/hr – 15 ppm new, modified, or reconstructed, firing natural gas • ≤ 50 MMBtu/hr – 96 ppm new, firing fuels other than natural gas, electric generating • ≤ 50 MMBtu/hr – 150 ppm new, firing fuels other than natural gas, mechanical drive • > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 74 ppm new, firing fuels other than natural gas • >850 MMBtu/hr – 42 ppm new, modified, or reconstructed, firing fuels other than natural gas • ≤ 50 MMBtu/hr – 150 ppm modified or reconstructed • > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 42 ppm modified or reconstructed, firing natural gas

		Low usage NOx emission limits (@ 15% O_2) for natural gas: • < 50 MMBtu/hr – exempt • 50 – 250 MMBtu/hr – 1.97 lbs/MWhr or 42 ppmv • > 250 – 500 MMBtu/hr – 1.17 lbs/MWhr or 25 ppmv • > 500 MMBtu/hr – 0.72 lbs/MWhr or 25 ppmv				• > 50 MMBtu/hr and ≤ 850 MMBtu/hr – 96 ppm modified or reconstructed, firing fuels other than natural gas SO_2 limit: • 110 ng/J • 65 ng/J for turbines burning at least 50% biogas in a calendar month
Reporting	Source testing. CEMS data every six months (Rule 218).	Source testing	None	Source testing	Semi- annual reports of excess emissions and monitor downtime	Semi- annual reports of excess emissions and monitor downtime. Annual performance test results.
Monitoring	A continuous in-stack NOx monitor for turbines with a capacity of 2.9 MW or greater. Periodic source testing for all turbines.	A continuous in-stack NOx monitor for turbines with a heat input rating equal to or greater than 150 MMBtu/hr and operate for more than 4000 hours in any 36-month period. Source test at least once per calendar year, not to exceed 15 months, for turbines that operate more than 400 hours in any 12-month period and is not equipped with a continuous monitor. Source test every two calendar years, not to exceed 25 months, for turbines that operate 400 hours or less in any 12 month period.	Equipment which monitors control system operating parameters, elapsed time of operation, and continuous exhaust gas NOx concentrations for turbines with a rated output ≥ 10 MW and operated for more than 4000 hours in any one calendar year during the three years before April 6, 1995. Equipment which monitors control	Continuous emissions monitoring equipment for NOx and CO or monitoring of operational characteristics recommended by the turbine manufacturer of emission control system supplier. Exhaust gas NOx emissions monitoring system for turbines 10 MW and greater that operated an average of more than 4,000 hours per year over the last three years before August 18, 1994. Annual	A continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel or CEMS for stationary gas turbines using water or steam injection. Monitor the total sulfur content of the fuel being fired.	A continuous monitoring system to monitor and record the fuel consumption and the ratio of water or steam to fuel or continuous emission monitoring for stationary gas turbines using water or steam injection. Annual performance tests or continuous monitoring for turbines without water or steam injection. Monitor the total sulfur content of the fuel being fired.

			system operating parameters and elapsed time of operation for turbines with a rated output < 10 MW. Annual source testing.	source testing except for turbines operated < 877 hrs/yr, which are to be source tested biennially.		
Recordkeeping	Maintain and keep records of CEMS data, source test reports, diagnostic emission checks, operating hours, maintenance , service, and tuning for five years.	Daily operating log for low-usage exemption maintained for two years. Records of fuel consumption, output, and flow rates if using NOx limits expressed in lbs/MWhr.	Permit number, manufacturer, model, rating in MW, actual startup and shutdown time, daily hours of operation, cumulative hours of operation to date for the calendar year, actual daily fuel usage, emission test results, and maintenance records for two years. Additional records of exemptions.	Operating log, start-up and shutdown records, records of each bypass transition period and primary re-ignition period maintained for five years	Performance testing; emission rates; monitoring data; CEMS audits and checks	Performance testing; emission rates; monitoring data; CEMS audits and checks
Fuel Restrictions	Liquid fuel	None	None	None	None	None

INCREMENTAL COST-EFFECTIVENESS

Health and Safety Code section 40920.6 requires an incremental cost-effectiveness analysis for Best Available Retrofit Control Technology (BARCT) rules or emission reduction strategies when there is more than one control option which would achieve the emission reduction objective of the proposed amendments relative to ozone, carbon monoxide, sulfur oxides, oxides of nitrogen, and their precursors. Incremental cost-effectiveness is the difference in the dollar costs divided by the difference in the emission reduction potentials between each progressively more stringent potential control options as compared to the next less expensive control option.

Incremental cost-effectiveness is calculated as follows:

$$\text{Incremental cost-effectiveness} = (C_{alt} - C_{proposed}) / (E_{alt} - E_{proposed})$$

Where:

$C_{proposed}$ is the present worth value of the proposed control option;
$E_{proposed}$ are the emission reductions of the proposed control option;
C_{alt} is the present worth value of the alternative control option; and
E_{alt} are the emission reductions of the alternative control option

The proposed project would require one facility to meet 18.8 ppm at 15 percent oxygen on a dry basis on three turbines. The next progressively more stringent potential control option would be to require turbines to meet 5 ppm at 15 percent oxygen on a dry basis and would affect two facilities and a total of six turbines. To meet 5 ppm, one facility would be required to implement SCR on their existing turbines. The other facility would be required to replace their turbines with lower emitting turbines to meet 5 ppm.

Incremental cost-effectiveness = ($160,832,987 – $6,712,430) / (1,791 – 138) =
$93,237 per ton of NOx reduced

The incremental cost analysis presented above demonstrates that the alternative control option is not viable when compared to the control strategy of the proposed amendments.

APPENDIX A – LIST OF AFFECTED FACILITIES

Table A-1: Facilities Affected by PR 1179.1

ID	Facility Name
20252	Banning City Wastewater Treatment Plant
2537	Corona City Department of Water & Power
7417	Eastern Municipal Water District
19159	Eastern Municipal Water District
1703	Eastern Municipal Water District
13088	Eastern Municipal Water District
9163	Inland Empire Utilities Agency
1179	Inland Empire Utilities Agency
147371	Inland Empire Utilities Agency
3513	Irvine Ranch Water District
800214	LA City Sanitation Bureau
10245	LA City Terminal Island Treatment Plant
800236	LA County Sanitation District
22674	LA County Sanitation District
94009	Las Virgenes Municipal Water District
17301	Orange County Sanitation District
29110	Orange County Sanitation District
5756	Redlands City Wastewater Treatment Plant
12923	Rialto City
9961	Riverside City Water Quality Control
11301	San Bernardino Municipal Water Department San Clemente City
20237	San Clemente City
51304	Santa Margarita Water District
181040	Santa Margarita Water District
13433	South Orange County Wastewater Authority
3966	South Orange County Wastewater Authority
10198	Valley Sanitation District
118526	Western Municipal Water District
111176	Western Riverside County Regional Wastewater Authority Treatment Plant
50402	Yucaipa Valley Water District

APPENDIX B – RESPONSES TO PUBLIC COMMENTS

Comment: PR 1179.1 should include a definition for "thermal stabilization period" and allow 2 hours for this period during startup, for cogeneration and combined cycle turbines.

Response: Staff included a 3-hour startup period for turbines ≥ 0.3 MW without SCR to allow sufficient time for the thermal stabilization period and/or any other startup mechanisms required for the turbine to reach stable conditions.

Comment: PR 1179.1 needs to specify how 40% natural gas is defined for the turbine emission limits.

Response: Staff revised the 18.8 ppm at 15% oxygen on a dry basis turbine emission limit to apply to any turbine ≥ 0.3 MW firing at least 60% digester gas. The rule specifies that 60% digester gas is based on volume averaged over a 24-hour period.

Comment: Turbines cannot meet natural gas emission limits when firing digester gas and more than 40% percent natural gas. Rule should have a weighted emission limit for turbines ≥ 0.3 MW firing less than 60% digester gas (more than 40% natural gas).

Response: Staff has included a provision for a weighted emission limit for turbines ≥ 0.3 MW firing more than 40% natural gas and less than 100% natural gas. Turbines firing 100% natural gas would be required to meet the natural gas NOx emission limit.

Comment: It is unclear what emission limits in Rules 1146 and 1146.1 dual fuel boilers are subject to when firing 100% natural gas.

Response: Staff has included dual fuel boilers that can fire 100% natural gas in the applicability of PR 1179.1. The emission limits for dual fuel boilers are contained in Table 1 and include the emission limit when firing 100% natural gas.

Comment: Throughout district rules, it is not clearly communicated that different rules and programs have different source test requirements.

Response: Source test requirements contained in PR 1179.1 are specific to PR 1179.1. Source test requirements contained in other rules and programs apply to the specific rule or program in which the requirements are contained. Facilities are required to meet all applicable requirements in across all applicable rules and programs.

Comment: PR 1179.1 does not include a provision currently in 1110.2 that allows a facility with engines at the same location with a combined output capacity rating of 1500 bhp or greater and a combined fuel usage of > 16 x 10^9 Btu per year (higher heating value) to comply with I&M plan requirements in lieu of installing a CEMS.

Response: Staff has included this provision to reflect the language currently in Rule 1110.2.

Comment: PR 1179.1 language pertaining to source test protocol submittal requirements does not clearly state when a subsequent source test protocol is required to be submitted for approval.

Response: Staff revised the rule language to clearly state when a subsequent source test protocol would be required for units subject to a previously approved protocol. Subsequent source test protocols would only be required if the unit has been altered in a manner that requires a permit alteration, if emission limits for the unit have changed since the previous source test, or if a new protocol is requested by the Executive Officer.

Comment: PR 1179.1 should allow Title V permit revisions to occur on the same cycle as Title V permit renewals.

Response: Staff has included a schedule for permit revisions that allows for Title V permit revisions to occur on the same cycle as Title V permit renewals.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Environmental Assessment for Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

September 2020

State Clearinghouse Number: 2020080171
South Coast AQMD Number: 08122020KR

Authors:	Kendra Reif	Air Quality Specialist
	Ryan Banuelos	Air Quality Specialist
	Kevin Ni	Air Quality Specialist
Technical Assistance:	Melissa Gamoning	Air Quality Specialist
	Isabelle Shine	Air Quality Specialist
Reviewed By:	Barbara Radlein	Program Supervisor, CEQA
	Jillian Wong, Ph.D.	Planning and Rules Manager
	Kevin Orellana	Program Supervisor
	Michael Morris	Planning and Rules Manager
	Karin Manwaring	Senior Deputy District Counsel
	William Wong	Principal Deputy District Counsel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

CHAIRMAN: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

VICE CHAIR: BEN BENOIT
Council Member, Wildomar
Cities of Riverside County

MEMBERS:

KATHRYN BARGER
Supervisor, Fifth District
County of Los Angeles

LISA BARTLETT
Supervisor, Fifth District
County of Orange

JOE BUSCAINO
Council Member, 15th District
City of Los Angeles Representative

MICHAEL A. CACCIOTTI
Council Member, South Pasadena
Cities of Los Angeles County/Eastern Region

VANESSA DELGADO
Senate Rules Committee Appointee

GIDEON KRACOV
Governor's Appointee

LARRY MCCALLON
Mayor, Highland
Cities of San Bernardino County

JUDITH MITCHELL
Council Member, Rolling Hills Estates
Cities of Los Angeles County/Western Region

V. MANUEL PEREZ
Supervisor, Fourth District
County of Riverside

CARLOS RODRIGUEZ
Council Member, Yorba Linda
Cities of Orange County

JANICE RUTHERFORD
Supervisor, Second District
County of San Bernardino

EXECUTIVE OFFICER:
WAYNE NASTRI

PREFACE

This document constitutes the Final Environmental Assessment (EA) for Proposed Rule 1179.1 – Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities. A Draft EA was circulated for a 30-day public review and comment period from August 12, 2020 to September 11, 2020 and one comment letter was received. The comment letter and response relative to the Draft EA have been included in Appendix D of this Final EA.

Analysis of PR 1179.1 in the Draft EA indicated that reducing NOx emissions is a direct environmental benefit, and furthermore, no secondary significant adverse environmental impacts were expected for any environmental topic areas. Since no significant adverse impacts were identified, an alternatives analysis and mitigation measures are not required. [CEQA Guidelines Section 15252].

To facilitate identification of the changes between the Draft EA and the Final EA, modifications to the document were included as underlined text and text removed from the document was indicated by ~~strikethrough~~. Subsequent to the release of the Draft EA for public review and comment, modifications were made to PR 1179.1 and some of the revisions were made in response to verbal and written comments received during the rule development process. The modifications include: 1) rewording rule title language and 2) including other minor edits and clarifications. To avoid confusion, minor formatting changes are not shown in underline or strikethrough mode.

South Coast AQMD staff has reviewed the modifications to PR 1179.1 after the release of the Draft EA for the 30-day public review and comment period, updated the CEQA analysis accordingly and concluded that none of the revisions: 1) constitute significant new information; 2) constitute a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the Draft EA. In addition, revisions to the proposed project in response to verbal or written comments during the rule development process would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft EA pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, the Draft EA has been revised to include the aforementioned modifications such that is now the Final EA for PR 1179.1.

TABLE OF CONTENTS

Page No.

Page No.

LIST OF FIGURES

LIST OF TABLES

CHAPTER 1

PROJECT DESCRIPTION

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (South Coast AQMD) in 1977[1] as the agency responsible for developing and enforcing emission control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin and Mojave Desert Air Basin. In 1977, amendments to the federal Clean Air Act (CAA) included requirements for submitting State Implementation Plans (SIPs) for nonattainment areas that fail to meet all federal ambient air quality standards (CAA Section 172), and similar requirements exist in state law (Health and Safety Code Section 40462). The federal CAA was amended in 1990 to specify attainment dates and SIP requirements for ozone, carbon monoxide (CO), nitrogen dioxide (NO2), and particulate matter with an aerodynamic diameter of less than 10 microns (PM10). In 1997, the United States Environmental Protection Agency (U.S. EPA) promulgated ambient air quality standards for particulate matter with an aerodynamic diameter less than 2.5 microns (PM2.5). The U.S. EPA is required to periodically update the national ambient air quality standards (NAAQS).

In addition, the California Clean Air Act (CCAA), adopted in 1988, requires the South Coast AQMD to achieve and maintain state ambient air quality standards for ozone, CO, sulfur dioxide (SO2), and NO2 by the earliest practicable date. [Health and Safety Code Section 40910]. The CCAA also requires a three-year plan review, and, if necessary, an update to the SIP. The CCAA requires air districts to achieve and maintain state standards by the earliest practicable date and for extreme non-attainment areas, to include all feasible measures pursuant to Health and Safety Code Sections 40913, 40914, and 40920.5. The term "feasible" is defined in the California Environmental Quality Act (CEQA) Guidelines[2] Section 15364, as a measure "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors."

By statute, the South Coast AQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas under the jurisdiction of the South Coast AQMD[3]. Furthermore, the South Coast AQMD must adopt rules and regulations that carry out the AQMP[4]. The AQMP is a regional blueprint for how the South Coast AQMD will achieve air quality standards and healthful air and the 2016 AQMP[5] contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases (GHGs), and toxic air contaminants (TACs). In particular, the 2016 AQMP states that both oxides of nitrogen (NOx) and volatile organic compounds (VOC) emissions need to be addressed, with the emphasis that NOx emission reductions are more effective to reduce the formation of ozone and PM2.5. Ozone is a criteria pollutant shown to adversely affect human health and is formed when VOCs react with NOx in the atmosphere. NOx is a precursor to the formation of ozone and PM2.5, and NOx emission reductions are necessary to achieve the ozone standard attainment. NOx emission reductions also contribute to attainment of PM2.5 standards.

During the rulemaking for the December 2018 amendments for Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process

[1] The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch. 324 (codified at Health and Safety Code Section 40400-40540).
[2] The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*
[3] Health and Safety Code Section 40460(a).
[4] Health and Safety Code Section 40440(a).
[5] South Coast AQMD, Final 2016 Air Quality Management Plan, March 2017. https://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp

Heaters (Rule 1146), Rule 1146.1 – Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters (Rule 1146.1), and Rule 1146.2 – Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters (Rule 1146.2), the South Coast AQMD received comments describing unique challenges faced by operators of publicly owned treatment works (POTW) facilities that treat municipal wastewater, especially regarding the combustion of digester gas or digester gas blends and the manner in which POTWs provide essential public services. In addition, Rule 1134 – Emissions of Oxides of Nitrogen from Stationary Gas Turbines (Rule 1134) previously contained emission limits for all fuels combusted in turbines that were in operation at POTWs prior to 1989. Further, NOx, VOC, and CO emissions from engines combusting all gaseous and liquid fuels, including digester gas, are regulated by Rule 1110.2 – Emissions from Gaseous- and Liquid-Fueled Engines (Rule 1110.2). To streamline and update the multiple rule requirements applicable to POTWs, South Coast AQMD recommended developing a separate rule to specifically address combustion equipment operating at POTWs. As such, Proposed Rule (PR) 1179.1 ~~– NOx -~~Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities was developed to establish Best Available Retrofit Control Technology (BARCT) requirements for combustion equipment operated at POTWs and to consolidate and migrate applicable requirements from Rules 1146, 1146.1 and 1146.2, Rule 1134, and 1110.2.

Specifically, PR 1179.1 is designed to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 British thermal units (Btu) per hour and fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 megawatt (MW) fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines rated at greater than 50 brake horsepower (bhp) fueled by digester gas or a digester gas blend. In addition, PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA), California Public Resources Code Section 21000 *et seq.*, requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the "public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment." [Public Resources Code Section 21067]. Since PR 1179.1 is a South Coast AQMD-proposed rule, the South Coast AQMD has the primary responsibility for supervising or approving the entire project as a whole and is the most appropriate public agency to act as lead agency. [CEQA Guidelines[6] Section 15051(b)].

CEQA requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented if feasible. The purpose of the CEQA process is to inform the lead agency, responsible agencies, decision makers and the general public of potential adverse environmental

[6] The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*

impacts that could result from implementing PR 1179.1 (the proposed project) and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The South Coast AQMD's regulatory program was certified by the Secretary of Resources Agency on March 1, 1989 per CEQA Guidelines Section 15251(l), and has been adopted as South Coast AQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment.

Because PR 1179.1 requires discretionary approval by a public agency, it is a "project" as defined by CEQA[7]. The proposed project will reduce NOx, CO, and VOC emissions for engines; and NOx and CO emissions for boilers and turbines located at POTWs; and will provide an overall environmental benefit to air quality. However, South Coast AQMD's review of the proposed project also shows that the activities that facility operators may undertake to comply with PR 1179.1 may also create secondary adverse environmental impacts that would not result in significant impacts for any environmental topic area. Thus, the analysis of PR 1179.1 indicates that the type of CEQA document appropriate for the proposed project is an Environmental Assessment (EA). The EA is a substitute CEQA document, which the South Coast AQMD, as lead agency for the proposed project, prepared in lieu of a Negative Declaration with no significant impacts (CEQA Guidelines Section 15252), pursuant to the South Coast AQMD's Certified Regulatory Program (Public Resources Code Section 21080.5, CEQA Guidelines Section 15251(l); South Coast AQMD Rule 110). The EA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and, 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

The Draft EA included~~s~~ a project description in Chapter 1 and an Environmental Checklist in Chapter 2. The Environmental Checklist provides a standard tool to identify and evaluate a project's adverse environmental impacts and the analysis concluded that no significant adverse impacts would be expected to occur if PR 1179.1 is implemented. Because PR 1179.1 will have no statewide, regional or areawide significance, no CEQA scoping meeting is required to be held for the proposed project pursuant to Public Resources Code Section 21083.9(a)(2). Further, pursuant to CEQA Guidelines Section 15252, since no significant adverse impacts were identified, no alternatives or mitigation measures are required.

The Draft EA was ~~is being~~ released for a 30-day public review and comment period from August 12, 2020 to September 11, 2020. One ~~All~~ comment~~s~~ letter was received during the public comment period on the analysis presented in the Draft EA; the comment letter and ~~will be~~ respons~~e~~~~ded to and~~ is included in ~~an~~ Appendix D of this ~~to the~~ Final EA.

Subsequent to the release of the Draft EA for public review and comment, modifications were made to PR 1179.1 and some of the revisions were made in response to verbal and written comments received during the rule development process. South Coast AQMD staff has reviewed the modifications to PR 1179.1 after the release of the Draft EA for the 30-day public review and comment period, updated the CEQA analysis accordingly and concluded that none of the revisions:

[7] CEQA Guidelines Section 15378

1) constitute significant new information; 2) constitute a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the Draft EA. In addition, revisions to the proposed project in response to verbal or written comments during the rule development process would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft EA pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, the Draft EA has been revised to include the aforementioned modifications such that is now the Final EA for PR 1179.1.

Prior to making a decision on the adoption of PR 1179.1, the South Coast AQMD Governing Board must review and certify the Final EA as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PR 1179.1.

PROJECT LOCATION

PR 1179.1 applies to certain combustion equipment (e.g., boilers, steam generators, process heaters, turbines, and engines) operated at POTWs located within the South Coast AQMD jurisdiction which covers an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) as defined in the California Code of Regulations, Title 17, Section 60104, and the non Palo Verde, Riverside County portions of the ~~Salton Sea Air Basin (SSAB) and~~ Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of South Coast AQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. A federal non-attainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 1-1).

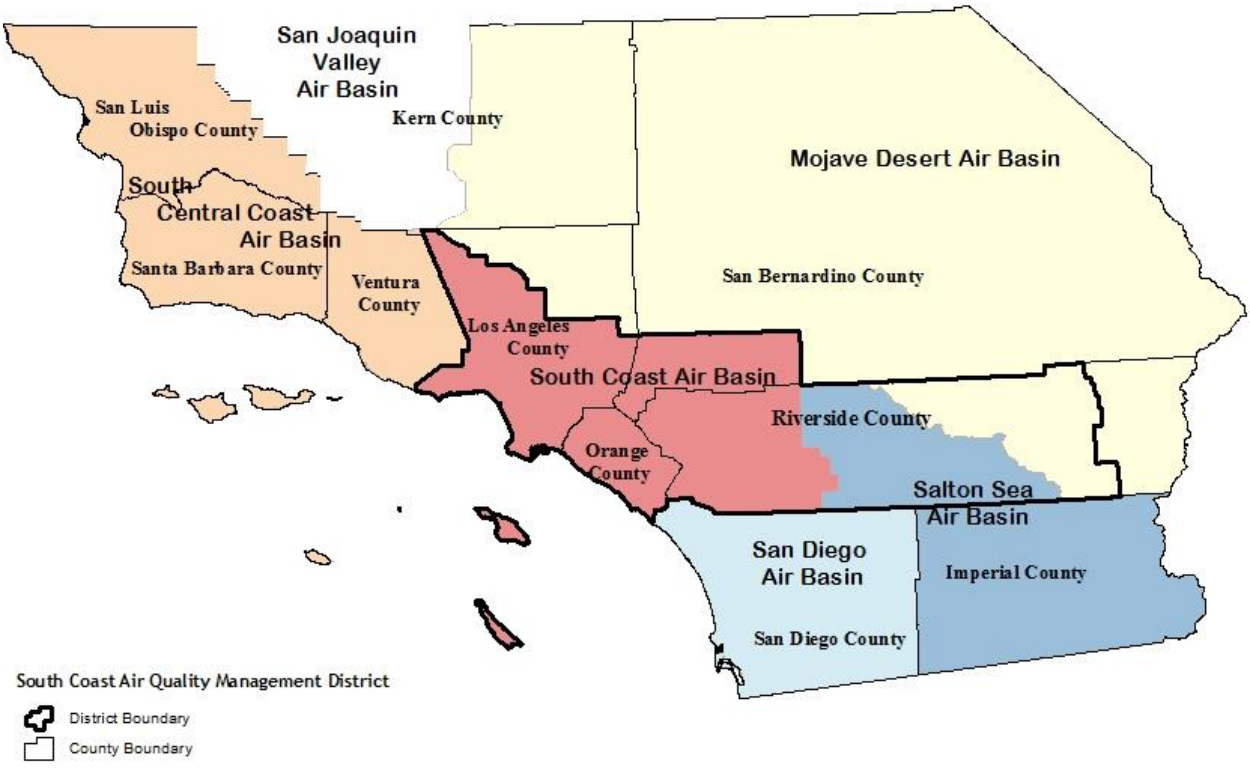


Figure 1-1
Southern California Air Basins

PROJECT BACKGROUND

POTWs, also known as wastewater treatment or reclamation plants, process and treat municipal wastewater and sewage, and are either owned or operated by a public entity. POTWs treat sewage and wastewater via a multi-stage process before discharging treated water from the facility. The multi-staged treatment process involves anaerobic digestion during which micro-organisms decompose organic solids in the absence of oxygen to produce a by-product, referred to as digester gas or biogas, which can be used as a viable source of fuel. Digester gas is typically utilized by combustion equipment to provide heat or power for multiple processes at the POTW. In the event excess digester gas is produced at the POTW and equipment that ordinarily utilizes digester gas is either operating at its maximum capacity or is otherwise unavailable, the excess digester gas is routed to and combusted in a flare. Due to a potential cost savings, utilizing digester gas that is produced on-site as a fuel source for combustion equipment is considered a beneficial use and is preferred over flaring, especially if relying on purchased natural gas provided by a local a utility to provide fuel for POTW combustion equipment could potentially be avoided.

Combustion equipment operated at POTWs include boilers, steam generators, process heaters, engines and turbines which are currently regulated by source-specific South Coast AQMD rules or by permit conditions. For example, NOx and CO emissions from the combustion of all fuel types, including digester gas, in boilers, process heaters and steam generators are regulated by Rules 1146 and 1146.1.

In addition, Rule 1134 previously contained emission limits for all fuels combusted in turbines that were in operation at POTWs prior to 1989. However, while there are six turbines currently operated at POTWs, none were operating prior to 1989. Rule 1134 was amended on April 5, 2019 to specifically exclude turbines located at POTWs because PR 1179.1 was undergoing rule development. Also, NOx, VOC, and CO emissions from engines combusting all gaseous and liquid fuels, including digester gas, are regulated by Rule 1110.2.

During the rule development for the December 2018 amendments to Rules 1146, 1146.1, and 1146.2, the South Coast AQMD received comments describing unique challenges faced by POTW operators that treat municipal wastewater, especially regarding the combustion of digester gas and the manner in which POTWs provide essential public services. In response to these comments, South Coast AQMD recommended developing a separate rule to specifically address combustion equipment operating at POTWs. As such, PR 1179.1 was developed to establish BARCT requirements for combustion equipment operated at POTWs and to consolidate and migrate applicable requirements from Rules 1146, 1146.1 and 1146.2, Rule 1134, and Rule 1110.2. Specifically, PR 1179.1 is designed to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 Btu per hour and fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 MW fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines rated at greater than 50 bhp fueled by digester gas or a digester gas blend. In addition, PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions.

TECHNOLOGY OVERVIEW

Combustion is a high temperature chemical reaction resulting from burning a gas, liquid, or solid fuel (e.g., natural gas, digester gas, diesel, fuel oil, gasoline, propane, and coal) in the presence of air (oxygen and nitrogen) to produce: 1) heat energy; and 2) water vapor or steam. An ideal combustion reaction is when the entire amount of fuel needed is completely combusted in the presence of air so that only carbon dioxide (CO2) and water are produced as by-products. However, since fuel contains other components such as nitrogen and sulfur and the amount of air mixed with the fuel can vary, in practice, fuel is not completely combusted whereby smog-forming by-products such as NOx, oxides of sulfur (SOx), CO, and soot (solid carbon) are produced and discharged into the atmosphere.

Of the total NOx emissions that can be generated during combustion, there are two types of NOx formed: 1) thermal NOx; and 2) fuel NOx. Thermal NOx is produced from the reaction between the nitrogen and oxygen from air in the combustion chamber at high temperatures while fuel NOx is formed during the reaction between the nitrogen contained in the fuel and the available oxygen from air in the combustion chamber. The amount of fuel NOx generated is dependent on fuel type and not the equipment per se; boilers, steam generators, process heaters, engines, and gas turbines all generate thermal NOx during combustion.

The following describes the various types of existing combustion equipment that may be affected by PR 1179.1 and the type of NOx emission control techniques that are typically employed.

Boilers, Steam Generators and Process Heaters

Boilers and steam generators use energy from a fuel source to heat water into steam which is then directed for usable work. There are two main types of boilers: water-tube and fire-tube. Water-

tube boilers circulate water through a series of tubes, the tubes are heated externally by the combustion gas, and the surrounding hot gases heat the water in the steam-generating tubes. Fire-tube boilers pass combustion gases inside a series of tubes that are surrounded by a closed vessel of water that is heated to produce steam. Process heaters use liquid or gaseous fuel (including landfill and digester gas) and/or solid fossil fuel to transfer heat from the combustion gases to water or process streams.

NOx emissions from boilers fitted with low NOx burners typically minimize the amount of NOx emissions generated during combustion. Low NOx burners differ from traditional burners by controlling the fuel-to-air mixing ratio in the combustion chamber at each burner in order to lower the peak flame temperature and reduce the amount of NOx created. All boilers that use digester gas as a fuel currently have South Coast AQMD permits. In addition, Rules 1146 and 1146.1 require that boilers rated greater than two million Btu per hour are required to achieve a NOx emission limit of either 15 ppm (corrected to three percent oxygen on a dry basis) when fueled by digester gas or 9 ppm (corrected to three percent oxygen on a dry basis) when fueled by natural gas. All the existing boilers subject to PR 1179.1 have South Coast AQMD Permits to Operate which contain the applicable NOx emission limits, so no physical modifications to the boilers are expected to be necessary in order to comply with the requirements in PR 1179.1.

Turbines

Gas turbines combust either gaseous fuel (e.g., natural gas, digester gas or a blend) or liquid fuel (e.g., diesel) to produce electricity. Turbines can be used in combined-cycle and simple-cycle arrangements. Combined-cycle turbines are cogeneration units designed to generate electricity and heat at the same time as they are able to recover heat from the exhaust to heat up water or to produce steam. Combined-cycle turbines are typically used for very large systems such as POTWs. Simple-cycle gas turbines produce electricity but do not recover heat from the exhaust. Controlling NOx emissions from turbines can be accomplished pre-combustion with lean pre-mix emission combustors (dry-low NOx) or injecting water or steam in the combustion chamber of the turbine. Controlling NOx emissions post-combustion can be accomplished with selective catalytic reduction (SCR) technology and requires a fuel gas treatment system to remove contaminants from gas streams prior to combustion. Newly manufactured turbines available on the market are capable of achieving low NOx emission levels without the need for post-combustion control technology such as SCR. The following provides a brief summary of each of these NOx control methods:

Fuel Gas Treatment

Fuel Gas Treatment can be employed to remove undesirable compounds from gaseous fuel supplies prior to combustion. For example, digester gas, contains contaminants such as siloxanes and sulfur compounds such as hydrogen sulfide (H2S), which, if combusted, can cause mechanical problems in the equipment, limit the effectiveness of other NOx control equipment, as well as produce contaminants in the exhaust stream. The following three types of fuel gas treatment approaches can be utilized for removing contaminants in the fuel gas and can be applied individually or in combination: consumable media, regenerative media and chiller/adsorption refrigeration.

The effectiveness of contaminant removal depends on the contaminants in the fuel and the selection of media appropriate for the contaminants. The three most common types of media that are used in the South Coast AQMD at POTWs are activated carbon, molecular sieves, and silica gel. Activated carbon is a versatile adsorbent because it is highly porous, suitable to adsorb organic contaminants. A molecular sieve has pores of uniform size and

is capable of performing selective removal of contaminants at low concentrations. Silica gel is a shapeless and porous adsorbent that has a greater capacity than activated carbon to adsorb siloxanes and has a high affinity for water that aids in moisture removal.

Consumable media systems are commonly used with activated carbon. This type of removal system requires saturated media to be changed out with fresh media.

Regenerative media systems are commonly used with molecular sieve, silica gel, clay and zeolite. These systems consist of at least two media canisters. One canister filled with fresh media processes the gaseous fuel while the other canister regenerates the spent media by purging with hot air. Regenerative media types require smaller canisters and less quantities of media when compared to consumable media systems. Regenerative media function can be enhanced by applying polymeric resins which increase service life, increase adsorbent capacity, and remove contaminants quicker and at a lower temperature during the regeneration process.

Chiller/adsorption refrigeration is capable of removing contaminants by reducing the temperature of the gaseous fuel such as digester gas to remove moisture and contaminants via condensation. Chiller/adsorption refrigeration can also be used in combination with consumable media whereby the consumable media step serves as a polishing stage to remove trace amounts of siloxanes or other contaminants. Wastewater treatment facilities have reported 50 percent removal efficiency of siloxanes and 32 percent long-term removal efficiency of siloxanes, via chiller/adsorption refrigeration.

Lean Pre-mixed Combustion or Dry Low Emissions

Prior to combustion, gaseous fuel and compressed air are pre-mixed, minimizing localized hot spots or spikes that produce elevated combustion temperatures and in turn, minimize the formation of NOx. Atmospheric nitrogen from the combustion air is mixed with additional excess air upstream of the combustor at deliberately fuel-lean conditions. By supplying approximately twice as much air as what is actually needed to burn the limited amount of fuel in the combustion chamber, the amount of NOx that can be formed is limited since very lean fuel conditions cannot produce the high temperatures that create thermal NOx. By utilizing this technology, NOx emissions have been demonstrated at less than nine parts per million by volume (ppmv), corrected to 15% oxygen, dry basis. The technology is engineered into the combustor as an intrinsic part of the turbine design. Fuel staging or air staging is utilized to keep the flame within its operating temperature range. It is not available as a "retrofit" technology and must be designed for each turbine application.

Water or Steam Injection

Water or steam injection is when demineralized water is injected into the combustor through the fuel nozzles to cool the flame temperature and thereby, reduce the amount of NOx produced. For example, NOx emission levels from natural gas turbines can be reduced via water or steam injection by 80%, corrected to 15% oxygen on a dry basis. Addition of water or steam increases mass flow through the turbine and creates a small amount of additional power. The addition of water or steam increases CO emissions. and there is added cost to demineralize the water. Turbines using water or steam injection have increased maintenance due to erosion and wear.

Selective Catalytic Reduction

Selective Catalytic Reduction (SCR) technology is widely used for gas turbines as the primary post-combustion approach for achieving additional NOx reductions because it is capable of reducing NOx emissions from the turbine exhaust by 90 to 95 percent.

With SCRs, ammonia is injected into the flue gas and reacts with NOx to form nitrogen and water in the presence of catalyst. SCR catalysts are made from ceramic materials and active catalytic components of base metals, zeolites, or precious metals. The catalyst may be configured into plates but many new systems are configured into honeycomb structure to ensure uniform dispersion and to reduce ammonia slip emissions to less than five ppmv. The reductant, ammonia, is available as anhydrous ammonia, aqueous ammonia, or urea. However, because anhydrous ammonia is an acutely hazardous material which poses safety risks, South Coast AQMD does not permit new installations of anhydrous ammonia storage tanks for air pollution control purposes. Urea pellets is a safer alternative to anhydrous ammonia but requires conversion to aqueous ammonia in order to be used in SCRs. Most new SCRs installations utilize aqueous ammonia in a 19 percent solution.

To perform optimally, the temperature of the exhaust gas as it is routed through the SCR needs to be between 400 degrees Fahrenheit and 800 degrees Fahrenheit in order for the SCR catalyst to be fully activated. During start-up and shutdown of the turbine, the temperature of the exhaust will be below optimal range greatly reducing the effectiveness of the SCR's ability to reduce NOx emissions. For this reason, NOx concentration limits are generally not applicable during start-up or shutdown.

The catalyst is susceptible to "poisoning" if the flue gas contains contaminants including sulfur compounds, particulates, reagent salts, or siloxanes. Because these contaminants are readily found in digester gas, and other biogas, gas treatment of the fuel to remove these contaminants may be necessary to prevent the poisoning catalysts requiring the unit to be shut down for cleaning or replacement.

Replacement with New Turbines

Newer gas turbines are capable of achieving low NOx emission levels between four and 25 ppm when firing natural gas without SCR. Achievable NOx emission levels while firing digester gas vary and depend on the chemical composition of the digester gas. Dry low NOx systems are incompatible with digester gas due to the low Wobbe index number for digester gas, but there is one commercially available 4.6 MW recuperative turbine that incorporates a dry low NOx system compatible with biogas. There is one turbine on the market whose manufacturer guarantees NOx emission levels at 25 ppm, corrected at 15 percent oxygen on a dry basis, for digester gas. Two other turbine manufacturers produce turbines with estimated NOx emission levels of 15 ppm and 25 ppm when firing digester gas with the latter for the larger sized turbines in the 10 MW range. Another turbine manufacturer has claimed to be able to guarantee NOx emissions levels of 15 ppm and 25 ppm, corrected at 15 percent oxygen on a dry basis, depending on the model, for turbines fueled by digester gas, without requiring SCR technology.

Internal Combustion Engines using Gaseous Fuel

Internal combustion engines create power by mixing fuel in a cylinder controlled by valves in a timed cycle. The cylinder contains a piston which compresses the fuel igniting it by either a spark (spark ignition) or until the fuel ignites from pressure (compression ignition). The expansive force

created by the ignited fuel is transferred by the piston through a connecting rod to a crankshaft which transfers the resulting power to useable work. The power created can generate electricity or, by an external shaft, propulsion. The extreme heat created by the combustion of the fuel exits the engine through the exhaust system at a temperature sufficient to create undesirable pollutants such as NOx and greenhouse gases such as CO2, methane and nitrous oxide (N2O). The emissions are often controlled by complex catalyst systems for compression ignition engines, or a single simple catalyst for spark ignited engines.

PR 1179.1 applies to engines at POTWs, but these engines will continue to be subject to the same permitted emission limits as contained in Rule 1110.2.

PROJECT DESCRIPTION

This section provides a general summary of the key elements contained in PR 1179.1. Additional information about ~~A preliminary draft of~~ PR 1179.1 can be found in Appendix A.

PR 1179.1 establishes emission limits for boilers (which include steam generators and process heaters) rated greater than 400,000 Btu per hour, turbines rated at less than 0.3 MW, and engines operated at POTWs, that either use digester gas or a blend of digester gas and natural gas as fuel, and turbines rated at 0.3 MW and larger. PR 1179.1 excludes boilers (as well as steam generators and process heaters) that use natural gas as the exclusive fuel type because these equipment categories are subject to the requirements in Rule 1146 series. PR 1179.1 also excludes engines that use exclusively natural gas or diesel fuel because these equipment categories are subject to the requirements in Rule 1110.2. Lastly, PR 1179.1 establishes BARCT for all turbines rated at greater than or equal to 0.3 MW operated at POTWs, irrespective of whether digester gas, natural gas, or digester gas that is blended with natural gas is used as a fuel, since Rule 1134 (which regulates turbines) specifically excludes turbines located at POTW facilities in the rule applicability. Table 1-1 summarizes the emission limits for the affected equipment.

The applicable emission limits in PR 1179.1 for engines, boilers and turbines operated at POTWs will go into effect the date the rule is adopted.

In addition, the proposed project also includes source testing, as well as monitoring, recordkeeping, and reporting requirements. Further, PR 1179.1 provides the following limited exemptions from the emission limits in Table 1-1 for the following equipment categories: 1) low-use boilers subject applicable requirements in Rule 1146; 2) special use turbines such as for the purpose of flood control and providing emergency backup power; 3) natural gas boilers and engines subject to the requirements in either the Rule 1146 series or Rule 1110.2, as applicable; 4) low-use engines that operate less than 200 hours or less per year; 5) turbines rated less than 0.3 MW and in operation prior to May 3, 2013; and 6) existing small boilers rated at less than or equal to two million Btu per hour without NOx concentration limits specified in the permits.

Subsequent to the circulation of the Draft EA for public comment and review, the following modifications were made to PR 1179.1: 1) revising the rule title; and 2) incorporating other minor edits and clarifications. These changes are considered to be administrative in nature with no potential to create new or modify the environmental impacts previously analyzed. As such, no revisions to analysis and the conclusions reached were necessary. Thus, staff's review of the modifications to PR 1179.1 since the Draft EA was released indicate that none of the resulting revisions to the Draft EA: 1) constitute significant new information; 2) constitute a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial

importance relative to the Draft EA. In addition, revisions to the proposed project in response to verbal or written comments during the rule development process would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft EA pursuant to CEQA Guidelines Sections 15073.5 and 15088.5.

Implementation of the proposed project is expected to reduce NOx emissions by 0.05 ton per day and will provide an overall environmental benefit to air quality.

Table 1-1
PR 1179.1 Concentration Limits

BOILERS, STEAM GENERATORS, AND PROCESS HEATERS FIRED ON DIGESTER GAS OR DIGESTER GAS BLEND				
EQUIPMENT CATEGORY	NOx (ppm)[1]	CO (ppm)[1]	VOC (ppm)	COMPLIANCE DATE
Rated heat input capacity > 2 MMBtu/hr	15	400	N/A	On or before [*Date of Adoption*]
Rated heat input capacity ≤ 2 MMBtu/hr	30			On or before [*Date of Adoption*]
TURBINES FIRED ON DIGESTER GAS, DIGESTER GAS BLEND, OR NATURAL GAS				
EQUIPMENT CATEGORY	NOx (ppm)[2]	CO (ppm)[2]	VOC (ppm)	COMPLIANCE DATE
Rating ≥ 0.3 MW firing 40% natural gas or less	18.8	130	N/A	On or before [*Date of Adoption*]
Simple cycle with rating ≥ 0.3 MW firing more than 40% natural gas	5			On or before [*Date of Adoption*]
Combined cycle with rating ≥ 0.3 MW firing more than 40% natural gas	2			On or before [*Date of Adoption*]
Rating < 0.3 MW firing digester gas or digester gas with natural gas	9			On or before [*Date of Adoption*]
ENGINES FIRED ON DIGESTER GAS OR DIGESTER GAS BLEND				
EQUIPMENT CATEGORY	NOx (ppm)[2]	CO (ppm)[2]	VOC (ppm)[3]	COMPLIANCE DATE
Engines > 50 bhp	11	250	30	On or before [*Date of Adoption*]

[1] All parts per million (ppm) emission limits are referenced at 3% volume stack gas oxygen on a dry basis.
[2] All parts per million (ppm) emission limits are referenced at 15% volume stack gas oxygen on a dry basis.
[3] Parts per million (ppm) by volume, measured as carbon, corrected to 15% oxygen on a dry basis.

SUMMARY OF AFFECTED FACILITIES AND EQUIPMENT

Implementation of PR 1179.1 will apply to 30 POTW facilities operating 82 pieces of equipment that include boilers, turbines, and engines. A list of these facilities is provided in Appendix B of this EA. Each facility subject to PR 1179.1 is classified by the North American Industry Classification System (NAICS) code, as 221320 – Sewage Treatment Facilities.

Of the 30 facilities in South Coast AQMD's jurisdiction that are subject to PR 1179.1, no physical modifications to any combustion equipment are anticipated to be necessary in order to comply with the proposed emission limits in PR 1179.1. Most turbines subject to PR 1179.1 currently operate pursuant to South Coast AQMD permits which contain the emission limits proposed in PR 1179.1. Only one POTW facility that operates three turbines that are each rated greater than 0.3 MW would be expected to make some operational changes in order to achieve the proposed NOx emission limit proposed in PR 1179.1. That facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure and this operational change can be accomplished without the need to either install additional NOx emission control equipment such as SCR or replace their turbines. The facility estimated that an additional 8,000 gallons per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Because this is an operational change that does not require any physical modifications to existing piping to supply the additional water, no construction activities are expected to occur at this facility.

The remaining POTW boilers, turbines, and engines are not expected to undergo any physical modifications because they are currently achieving the applicable emission limits that are being migrated from Rules 1146, 1146.1 and 1146.2, Rule 1110.2 or existing permit limits for incorporation into PR 1179.1. Table 1-2 identifies the POTW with the potentially affected turbines.

Table 1-2
Potentially Affected Turbines

Facility ID	Facility Name	Type of Equipment	Number of Affected Equipment
800236	LA County Joint Water Pollution Control Plant	Digester Gas-Fired Turbine	3

CHAPTER 2

ENVIRONMENTAL CHECKLIST

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	Proposed Rule 1179.1 – ~~NOx –~~Emissions Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Ms. Kendra Reif, (909) 396-2492
PR 1179.1 Contact Person:	Ms. Melissa Gamoning, (909) 396-3115
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PR 1179.1 proposes to establish BARCT requirements for combustion equipment operated at POTW facilities to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 Btu per hour fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 MW fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO, and VOC from engines rated at greater than 50 bhp fueled by digester gas or a digester gas blend. In addition, PR 1179.1 establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions. The Final ~~Draft~~ EA did not result in the identification of any environmental topic areas that would be significantly adversely affected by PR 1179.1. Two facilities affected by PR 1179.1 were identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5.
Surrounding Land Uses and Setting:	Various
Other Public Agencies Whose Approval is Required:	Not applicable

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓"involve at least one impact that is a "Potentially Significant Impact". An explanation relative to the determination of impacts can be found following the checklist for each area.

☐ Aesthetics	☐ Geology and Soils	☐ Population and Housing
☐ Agriculture and Forestry Resources	☐ Hazards and Hazardous Materials	☐ Public Services
☐ Air Quality and Greenhouse Gas Emissions	☐ Hydrology and Water Quality	☐ Recreation
☐ Biological Resources	☐ Land Use and Planning	☐ Solid and Hazardous Waste
☐ Cultural and Tribal Cultural Resources	☐ Mineral Resources	☐ Transportation
☐ Energy	☐ Noise	☐ Wildfire
☐ Mandatory Findings of Significance		

DETERMINATION

On the basis of this initial evaluation:

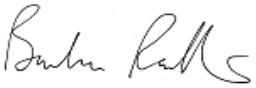
☑ I find the proposed project, in accordance with those findings made pursuant to CEQA Guidelines Section 15252, COULD NOT have a significant effect on the environment, and that an ENVIRONMENTAL ASSESSMENT with no significant impacts has been prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will NOT be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. An ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL ASSESSMENT will be prepared.

☐ I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect: 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards; and, 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL ASSESSMENT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects: 1) have been analyzed adequately in an earlier ENVIRONMENTAL ASSESSMENT pursuant to applicable standards; and, 2) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: August 7, 2020 **Signature:** 

Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development and Area Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As explained in Chapter 1, the main focus of PR 1179.1 is to establish BARCT requirements for combustion equipment operated at POTWs and to consolidate and migrate all POTW-applicable requirements from Rules 1146, 1146.1 and 1146.2, Rule 1134, and Rule 1110.2 in order to consolidate all of these requirements into one rule. Specifically, the BARCT requirements are designed to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 Btu per hour and fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 MW fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines greater than 50 bhp fueled by digester gas or a digester gas blend. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports.

Of the 30 facilities in South Coast AQMD's jurisdiction that are subject to PR 1179.1, no physical modifications to any combustion equipment are anticipated to be necessary in order to comply with the proposed emission limits in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain the applicable emission limits. Only one POTW facility that operates three turbines that are each rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure and this operational change can be accomplished without the need to either install additional NOx emission control equipment such as SCR or replace their turbines. The facility estimated that an additional 8,000 gallons per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Because this is an operational change that does not require any physical modifications to existing piping to supply the additional water, no construction activities are expected to occur at this facility. The following components of PR 1179.1 are administrative or procedural in nature and as such, would not be expected to cause any physical modifications at affected facilities: conducting monitoring, keeping records, and preparing reports. As such, these components of PR 1179.1 would not be expected to create any secondary adverse environmental impacts.

Also, PR 1179.1 contains requirements for POTW facilities to conduct source tests. Wastewater treatment plants are already required by other existing rules to conduct periodic source tests for most combustion equipment subject to this rule. However, POTW operators of turbines rated at less than 0.3 MW are not currently subject to any existing South Coast AQMD rule but would be required to conduct source tests under PR 1179.1.

PR 1179.1 is estimated to reduce up to 0.05 ton per day of NOx emissions, as a result of one facility increasing the quantity of water injected into the three turbines in order to achieve NOx emissions at a concentration of less than 18.8 ppm. For these reasons, the analysis in this EA focuses on the potential secondary adverse environmental impacts associated with the increased amount of water injection. The effects of the potential increased water usage have been evaluated relative to the environmental topics identified in the following environmental checklist (e.g., aesthetics, agriculture and forestry resources, biological resources, etc.).

Subsequent to the circulation of the Draft EA for public comment and review, the following modifications were made to PR 1179.1: 1) revising the rule title; and 2) incorporating other minor edits and clarifications. These changes are considered to be administrative in nature with no

potential to create new or modify the environmental impacts previously analyzed. As such, no revisions to analysis and the conclusions reached were necessary. Thus, staff's review of the modifications to PR 1179.1 since the Draft EA was released indicate that none of the resulting revisions to the Draft EA: 1) constitute significant new information; 2) constitute a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the Draft EA. In addition, revisions to the proposed project in response to verbal or written comments during the rule development process would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft EA pursuant to CEQA Guidelines Sections 15073.5 and 15088.5.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
I.	**AESTHETICS.** Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c)	In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point(s).) If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality?	☐	☐	☐	☑
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☑

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase

of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

I. a), b), c) & d) No Impact. Of the 30 facilities in South Coast AQMD's jurisdiction that are subject to PR 1179.1, none of the facilities will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at the facility would be expected.

Because the increased water injection activities will occur within the boundaries of the affected facility and none of the affected facilities will be expected to make physical modifications in order to comply with PR 1179.1, views of any scenic vistas or state scenic highways will not be obstructed. For the same reasons, implementation of PR 1179.1 would have no substantial adverse effect on scenic vistas or other scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Similarly, PR 1179.1 would not require the alteration of buildings or other equipment. The potential increased quantity of water injection that may occur at one POTW would not require any approvals from the local city or county planning departments. Therefore, PR 1179.1 would not be expected to conflict with applicable zoning or other regulations governing scenic quality.

Since PR 1179.1 does not include any components that would involve construction activities or additional physical modifications to the facility requiring supplemental lighting, no additional temporary construction lighting or permanent lighting at any of the facilities subject to PR 1179.1 would be expected. For these reasons, the proposed project would not create a new source of substantial light or glare.

Conclusion

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing PR 1179.1. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
II.	**AGRICULTURE AND FORESTRY RESOURCES.** Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use?	☐	☐	☐	☑
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
c)	Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑
e)	Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined in Public Resources

Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g)).

- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

II. a), b), c), d), & e) No Impact. No locations of the 30 facilities subject to PR 1179.1 or their immediately surrounding areas are on or near areas zoned for agricultural use, Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency. Further, the proposed project would not require any construction or alterations to any of the facilities subject to PR 1179.1 and it would not require the conversion of farmland to non-agricultural use or conflict with zoning for agriculture use or a Williamson Act contract.

The locations of the facilities subject to PR 1179.1 are sited in industrial use zones in urbanized areas that are not located near forest land. Therefore, the proposed project is not expected to conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)) or result in the loss of forest land or conversion of forest land to non-forest use.

Conclusion
Based upon these considerations, significant adverse agriculture and forestry resources impacts are not expected from implementing PR 1179.1. Since no significant agriculture and forestry resources impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☑
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☑	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
d) Create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐
e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑	☐
f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

Significance Criteria

To determine whether or not air quality and greenhouse gas impacts from implementing PR 1179.1 are significant, impacts will be evaluated and compared to the criteria in Table 2-1 PR 1179.1 will be considered to have significant adverse impacts if any one of the thresholds in Table 2-1 are equaled or exceeded.

Table 2-1
South Coast AQMD Air Quality Significance Thresholds

Mass Daily Thresholds [a]		
Pollutant	**Construction** [b]	**Operation** [c]
NO_x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM_{10}	150 lbs/day	150 lbs/day
$PM_{2.5}$	55 lbs/day	55 lbs/day
SO_x	150 lbs/day	150 lbs/day
CO	550 lbs/day	550 lbs/day
Lead	3 lbs/day	3 lbs/day
Toxic Air Contaminants (TACs), Odor, and GHG Thresholds		
TACs (including carcinogens and non-carcinogens)	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to South Coast AQMD Rule 402	
GHG	10,000 MT/yr CO_2eq for industrial facilities	
Ambient Air Quality Standards for Criteria Pollutants [d]		
NO_2 1-hour average annual arithmetic mean	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)	
PM_{10} 24-hour average annual average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation) 1.0 μg/m^3	
$PM_{2.5}$ 24-hour average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation)	
SO_2 1-hour average 24-hour average	0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state)	
Sulfate 24-hour average	25 μg/m^3 (state)	
CO 1-hour average 8-hour average	South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
Lead 30-day Average Rolling 3-month average	1.5 μg/m^3 (state) 0.15 μg/m^3 (federal)	

[a] Source: South Coast AQMD CEQA Handbook (South Coast AQMD, 1993)
[b] Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).
[c] For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.
[d] Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.
[e] Ambient air quality threshold based on South Coast AQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million μg/m^3 = microgram per cubic meter ≥ = greater than or equal to
MT/yr CO_2eq = metric tons per year of CO_2 equivalents > = greater than

Revision: April 2019

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. Two facilities that contain five turbines less than 0.3 MW each are expected to require new periodic source testing pursuant to subdivision (e) of the proposed rule. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

a) No Impact. The South Coast AQMD is required by law to prepare a comprehensive district-wide Air Quality Management Plan (AQMP) which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, and to ensure that new sources of emissions are planned and operated to be consistent with the SCAQMD's air quality goals. The AQMP's air pollution reduction strategies include control measures which target stationary, area, mobile and indirect sources. These control measures are based on feasible methods of attaining ambient air quality standards. Pursuant to the provisions of both the state and federal Clean Air Acts, the South Coast AQMD is also required to attain the state and federal ambient air quality standards for all criteria pollutants.

The most recent regional blueprint for how the South Coast will achieve air quality standards and healthful air is outlined in the 2016 AQMP[8] which contains multiple goals of promoting reductions of criteria air pollutants, greenhouse gases, and toxics. In particular, the 2016 AQMP includes control measure CMB-05 which committed to additional NOx emission reductions of five tons per day to occur by 2025. PR 1179.1 proposes to establish BARCT limits for equipment operated at POTWs to reduce NOx and CO from certain boilers, steam generators and process heaters, turbines and engines. In addition, PR 1179.1 will regulate emissions of VOC from certain engines.

For these reasons, PR 1179.1 is not expected to obstruct or conflict with the implementation of the 2016 AQMP because the emission reductions from implementing PR 1179.1 are in accordance with the overall emission reduction goals in the 2016 AQMP. Thus, implementing PR 1179.1 to reduce emissions from equipment located at POTWs would not conflict with or obstruct implementation of the applicable air quality plans.

[8] South Coast AQMD, Final 2016 Air Quality Management Plan, March, 2017. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

b) and e) Less Than Significant Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make an operational change related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. The facility estimated that an additional 8,000 gallons per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Increasing the amount of demineralized water needed for water injection purposes is not change that would require physical modifications to the existing plumbing. Thus, no construction activities are expected to occur.

Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has provided the following additional information regarding the anticipated increase in water injected into the turbines:

- The facility has its own supply of water and the increase in water injection can be employed immediately by adjusting the water input flow rate;
- Negligible changes to CO emissions from the turbines are expected based on monitoring data; and
- Injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed.

Two facilities, each with five turbines (less than 0.3 MW), will be required to conduct source tests on each turbine. Owners/operators of affected facilities would be expected to hire a contractor to conduct the source tests. Since the turbines are relatively small, one crew (comprised of two workers) is capable of source testing all turbines at one facility on a single day.

For a worst-case scenario, this analysis assumes that both facilities will be conducting source tests on the same day. Each source testing crew is assumed to drive one light-duty gasoline-fueled truck with a fuel economy rating averaging 21 miles per gallon (mpg) and one medium-duty diesel-fueled maintenance truck with a fuel economy rating averaging 10 mpg. Each vehicle is assumed to drive approximately 40 miles round trip to conduct the source tests at each facility.

Operational Impacts

Total operational emissions were estimated using emission factors for on-road vehicles from CARB's EMFAC2017[1] for the following mobile sources: medium-duty diesel fueled trucks used to provide source testing support; light duty gasoline-fueled passenger vehicles used for transporting workers to facilities in order to conduct source tests.

Table 2-2 summarizes the peak daily emissions associated with operation. A peak day of operation is assumed to consist of source testing at two facilities on the same day. Additional details of the assumptions and calculations can be found in Appendix B.

Table 2-2
Peak Daily Operational Emissions by Pollutant (lb/day)

Activity	VOC	NOx	CO	SOx	PM10	PM2.5
One Light Duty Auto Worker Trip to Conduct Source Testing	0.02	0.19	0.10	0.00	0.02	0.01
One Medium Duty Truck Trip to Conduct Source Testing	0.02	0.01	0.15	0.00	0.00	0.00
One Source Test	**0.03**	**0.20**	**0.24**	**0.00**	**0.02**	**0.01**
Two Source Tests	**0.07**	**0.40**	**0.49**	**0.00**	**0.04**	**0.02**
Significance Threshold	**55**	**55**	**550**	**150**	**150**	**55**
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Assumptions: Though unlikely, a peak day is assumed to include source testing at two facilities. See Appendix B for additional assumptions and calculations.

The air quality analysis indicates that the peak daily emissions do not exceed the South Coast AQMD's air quality significance thresholds for any pollutant during operation; Therefore, the physical activities that are expected to occur as a result of implementing PR 1179.1 are not expected to cause any air quality impacts either during construction or operation.

Construction and Operational Impacts
In conclusion, the air quality analysis indicates that no increase in peak daily emissions during construction is expected to occur and a less than significant increase in peak daily emissions during operation is expected to occur; thus, the proposed project is not expected to result in significant adverse air quality impacts.

Cumulatively Considerable Impacts
Based on the foregoing analysis, there will be no criteria pollutant project-specific air quality impacts from implementing PR 1179.1 during construction or operation. Therefore, cumulative air quality impacts are also not expected to occur since South Coast AQMD's cumulative significance thresholds are the same as project-specific significance thresholds. Potential adverse impacts from implementing PR 1179.1 would not be "cumulatively considerable" as defined by CEQA Guidelines Section 15064(h)(1) for air quality impacts. Per CEQA Guidelines Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable.

The South Coast AQMD's guidance on addressing cumulative impacts for air quality is as follows: "As Lead Agency, the South Coast AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR." "Projects that exceed the project-specific significance thresholds are considered by the South Coast AQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not

exceed the project-specific thresholds are generally not considered to be cumulatively significant."[9]

This approach was upheld by the Court in Citizens for Responsible Equitable Environmental Development v. City of Chula Vista (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the South Coast AQMD's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines Section 15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing non-attainment area, these increases are below the significance criteria…" "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." As in Chula Vista, here the South Coast AQMD has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established South Coast AQMD significance thresholds. See also, Rialto Citizens for Responsible Growth v. City of Rialto (2012) 208 Cal. App. 4th 899. Here again the court upheld the South Coast AQMD's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the proposed project will not contribute to a significant unavoidable cumulative air quality impact.

c) Less than Significant Impact. Since no physical modifications are expected to occur as a result of compliance with PR 1179.1 that would cause construction or operation air quality emission impacts, the effects of implementing PR 1179.1 would not be expected to adversely affect sensitive receptors located near any of the facilities subject to PR 1179.1. Further, the proposed project will require equipment located at POTW facilities to achieve BARCT emission levels which will result in NOx emission reductions, an air quality benefit. Therefore, PR 1179.1 is not expected to expose sensitive receptors to substantial pollutant concentrations.

d) Less Than Significant Impact. Odor problems depend on individual circumstances. For example, individuals can differ quite markedly from the populated average in their sensitivity to odor due to any variety of innate, chronic or acute physiological conditions. This includes olfactory adaptation or smell fatigue (i.e., continuing exposure to an odor usually results in a gradual diminution or even disappearance of the small sensation).

Implementation of PR 1179.1 will only require a physical change at one POTW to inject increased amounts of demineralized water into the three existing turbines and demineralized water does not have a perceptible odor. Further, no additional worker or vendor trips are expected to be needed during maintenance or source testing activities that would require the additional use of diesel-fueled vehicles capable of generating diesel exhaust odor greater than what is already typically present at the affected facilities. Thus, PR 1179.1 is not expected to create significant adverse

[9] South Coast AQMD Cumulative Impacts Working Group White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, August 2003, Appendix D, Cumulative Impact Analysis Requirements Pursuant to CEQA, at D-3. http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf

objectionable odors during construction or operation. Since no significant air quality impacts were identified for odors, no mitigation measures for odors are necessary or required.

III. f) and g) Less Than Significant Impact. Significant changes in global climate patterns have recently been associated contributing to an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of greenhouse gas (GHG) emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming. State law defines GHG to include the following: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6) (Health and Safety Code Section 38505(g)). The most common GHG that results from human activity is CO2, followed by CH4 and N2O.

As previously explained in Section III. b) and e), implementation of PR 1179.1 is not expected to cause an adverse increase of criteria air pollutants, including CO2, which is a GHG. Table 2-3 summarizes the GHG analysis which shows that PR 1179.1 may result in the generation of 0.10 MT per year of CO2eq, which is less than the South Coast AQMD's air quality significance threshold for GHGs. The detailed calculations of project GHG emissions can be found in Appendix B.

Summary of GHG Emissions from Affected Facilities

Phase	Activity	CO2 Emissions (MT/yr)
Operation	Source Test Trips	0.10
	Subtotal	0.10
	Total Emissions	**0.10**
	Significance Threshold	10,000
	Significant?	**No**

As shown in Table 2-3, the South Coast AQMD air quality significance threshold for GHGs would not be exceeded. For this reason, implementing the proposed project would not be expected to generate significant adverse cumulative GHG air quality impacts. Further, as noted in Section III. a), implementation of PR 1179.1 would not be expected to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing criteria pollutants and the same is true for GHG emissions since GHG emissions would not be impacted in any way by PR 1179.1. Therefore, GHG impacts are not considered significant. Since no significant air quality impacts were identified for GHGs, no mitigation measures are necessary or required

Conclusion

Based upon these considerations, significant air quality and GHG emissions impacts are not expected from implementing PR 1179.1. Since no significant air quality and GHG emissions impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IV.	**BIOLOGICAL RESOURCES.** Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☑
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☑
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☑
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
f)	Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☑

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18.8 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

IV. a), b), c), & d) No Impact. All 30 POTWs are existing facilities located industrial areas and none will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines which are each rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at the facility would be expected. Further, because the increased water injection activities will occur within the boundaries of the affected facility and no other facilities will be expected to make physical modifications in order to comply with PR 1179.1, the proposed project is not expected to adversely affect in any way habitats that support riparian habitat, federally protected wetlands, or migratory corridors. Similarly, special status plants, animals, or natural communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service are not expected to disturb if PR 1179.1 is implemented. Therefore, PR 1179.1 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely. PR 1179.1 does not require the acquisition of additional land or

further conversions of riparian habitats or sensitive natural communities where endangered or sensitive species may be found. In addition, the implementation of PR 1179.1 does not require any construction therefore, it would not affect any wetlands or impact the path of migratory bird species.

IV. e) & f) No Impact. The proposed project is not expected to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans, because land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by implementation of PR 1179.1. Additionally, PR 1179.1 would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because compliance with PR 1179.1 would occur at an existing facility in a previously disturbed area which are not typically subject to Habitat or Natural Community Conservation Plans.

Conclusion

Based upon these considerations, significant biological resource impacts are not expected from implementing PR 1179.1. Since no significant biological resource impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
V.	**CULTURAL AND TRIBAL CULTURAL RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☑
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5?	☐	☐	☐	☑
c)	Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☑
d)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074, as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is either:				
	• Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)?	☐	☐	☐	☑
	• A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code §5024.1(c)? (In applying the criteria set forth in Public Resources Code §5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.)	☐	☐	☐	☑

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18.8 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

V. a), b), c), & d) No Impact. There are existing laws in place that are designed to protect and mitigate potential impacts to cultural resources. For example, CEQA Guidelines state that generally, a resource shall be considered "historically significant" if the resource meets the criteria for listing in the California Register of Historical Resources, which include the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represent the work of an important creative individual, or possesses high artistic values;
- Has yielded or may be likely to yield information important in prehistory or history (CEQA Guidelines Section 15064.5).

Buildings, structures, and other potential culturally significant resources that are less than 50 years old are generally excluded from listing in the National Register of Historic Places, unless they are shown to be exceptionally important. The implementation of the proposed project would not lead to construction or the alteration of buildings located at any of the POTW facilities subject to PR 1179.1 requirements. Therefore, PR 1179.1 has no potential to cause a substantial adverse change to a historical or archaeological resource, directly or indirectly to destroy a unique paleontological

resource or site or unique geologic feature, or to disturb any human remains, including those interred outside formal cemeteries. Implementing PR 1179.1 is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources.

For the same reasons, PR 1179.1 is not expected to require physical modifications that would contribute to changes at a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, PR 1179.1 is not expected to result in a physical modification that would affect a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. Similarly, PR 1179.1 is not expected to result in a physical change to a resource determined by the South Coast AQMD to be significant to any tribe. For these reasons, PR 1179.1 is not expected to cause any substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074.

As part of releasing this CEQA document for public review and comment, the South Coast AQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code Section 21080.3.1(b)(1). The NAHC notification list provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the South Coast AQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code Section 21080.3.1(b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code Section 21082.3(a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. [Public Resources Code Section 21080.3.2(b)(1)-(2) and Section 21080.3.1(b)(1)].

Conclusion

Based upon these considerations, significant adverse cultural and tribal cultural resources impacts are not expected from implementing PR 1179.1. Since no significant cultural and tribal cultural resources impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VI.	**ENERGY.** Would the project:				
a)	Conflict with or obstruct adopted energy conservation plans, a state or local plan for renewable energy, or energy efficiency?	☐	☐	☐	☑
b)	Result in the need for new or substantially altered power or natural gas utility systems?	☐	☐	☑	☐
c)	Create any significant effects on local or regional energy supplies and on requirements for additional energy?	☐	☐	☑	☐
d)	Create any significant effects on peak and base period demands for electricity and other forms of energy?	☐	☐	☑	☐
e)	Comply with existing energy standards?	☐	☐	☐	☑
f)	Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☐	☑
g)	Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☑

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses energy resources in a wasteful and/or inefficient manner.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

VI. a), e) f) & g) No Impact. All 30 POTW facilities subject to PR 1179 utilize digester gas or a blend of digester gas as fuel for operating various combustion equipment. The digester gas is produced from processing decomposing organic solids in sewage and wastewater. In the event excess digester gas is produced at the POTW and equipment that ordinarily utilizes digester gas is either operating at its maximum capacity or is otherwise unavailable, the excess digester gas is routed to and combusted in a flare. Due to a potential cost savings, utilizing digester gas that is produced on-site as a fuel source for combustion equipment is considered a beneficial use and is preferred over flaring, especially if relying on purchased natural gas provided by a local utility to provide fuel for POTW combustion equipment could potentially be avoided. Implementation of PR 1179.1 would not change the existing use of digester gas or digester gas blends as an energy source to fuel the various combustion equipment operating at POTW facilities. Further, PR 1179.1 will not change how facilities process and handle excess digester gas. For these reasons, PR 1179.1 is not expected to conflict with any adopted energy conservation plans or violate any energy conservation standards because the 30 POTW facilities subject to PR 1179.1 would be expected to continue implementing any existing energy conservation plans that are currently in place regardless of whether PR 1179.1 is implemented. For these reasons, PR 1179.1 is not expected to conflict with energy conservation plans or existing energy standards, or use non-renewable resources in a wasteful manner.

None of the POTW facilities subject to PR 1179.1 will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. Since the facility has its own supply of water and the increase in water injection can be employed immediately by adjusting the water input flow rate, additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at this facility would be expected. For these reasons,

implementation of PR 1179.1 would not require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects.

VI. b), c), & d) Less than Significant. Of the 30 POTW facilities subject to PR 1179.1, none will need additional electricity or other forms of energy in order to implement the proposed project. Thus, PR 1179.1 will not be expected to create any significant effects on peak and base period demands for electricity and other forms of energy.

One POTW facility intends to increase the quantity of water injected into its three large turbines in order to meet the proposed NOx emission limit, and this will slightly reduce the energy output of the three turbines by 400 kilowatts (kW) per year. The average gross energy output from the existing turbines is 20.4 megawatts, but after injecting water, it'll reduce to 20.0 megawatts which would result in a 2% decrease in efficiency over the course of one year. Because the digester fuel combusted in the three large turbines is produced on-site and the turbines produce electricity which provide on-site power elsewhere within the facility, this minimal energy penalty would not trigger the need for a utility to provide additional electricity to the affected facility or require new or substantially altered power systems since any additional energy needed can be provided from existing supplies. Thus, implementation of PR 1179.1 would be expected to result in less than significant energy impacts.

Diesel-fueled source testing support trucks and gasoline-fueled source testing worker vehicles will travel to two facilities to conduct 10 source tests with a frequency pursuant to subdivision (e) in the proposed rule. The analysis assumes that on a peak day there will be two gasoline-fueled light duty work vehicles and two diesel-fueled medium duty support vehicles used to conduct source testing. The analysis assumes that each source testing trip will be 40 miles round trip. The analysis assumes an average fuel economy of 21 mpg for gasoline-fueled passenger vehicles and 10 mpg for diesel-fueled source testing trucks. The projected fuel demand during operation is presented in Table 2-4.

Table 2-4
Annual Total Projected Fuel Usage for Operation Activities

	Diesel	**Gasoline**
Projected Operational Energy Use (gal/yr)[a]	8	4
Year 2017 South Coast AQMD Jurisdiction Estimated Fuel Demand (gal/yr)[b]	775,000,000	7,086,000,000
Total Increase Above Baseline	0.00000%	0.000000%
Significance Threshold	1%	1%
Significant?	**No**	**No**

Notes:

a) Estimated peak fuel usage from operational activities. Diesel usage estimates are based on source test trips. Gasoline usage estimates are derived from source test trips.

b) California Annual Retail Fuel Outlet Report Results (CEC-A15) Spreadsheets, 2017 California Energy Commission (http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html). [Accessed June 21, 2019.]

Operational gasoline truck usage is only expected to consume about 4 gallons of gasoline, approximately 0.00000% of the annual gasoline supply. Diesel operated heavy duty truck usage could consume 8 gallons of diesel, which is only 0.00000% of the annual diesel supply. The projected increased use of gasoline and diesel fuels as a result of implementing PR 1179.1 are well below the South Coast AQMD significance threshold for fuel supply. Thus, no significant adverse impact on fuel supplies would be expected during operation.

Further, since minimal amounts of fuels such as natural gas, gasoline, and diesel would be needed to implement the operational changes that may occur as part of implementing PR 1179.1, no change to existing local or regional natural gas, gasoline, and diesel supplies and usage would be expected to occur and there would be no need for new or substantially altered natural gas utility systems.

Conclusion

Based upon these considerations, significant adverse energy impacts are not expected from implementing PR 1179.1. Since no significant energy impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VII. GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
• Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	☐	☐	☐	☑
• Strong seismic ground shaking?	☐	☐	☐	☑
• Seismic-related ground failure, including liquefaction?	☐	☐	☐	☑
• Landslides?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☑
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	☑
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☑
f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☐	☐	☐	☑

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.
- Unique paleontological resources or sites or unique geologic features are present that could be directly or indirectly destroyed by the proposed project.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

VII. a), b), c) and f) No Impact. All 30 POTWs are existing facilities located industrial areas and none will need to make any physical modifications changes to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems. Thus, no additional construction at the facility would be expected. Further, because the increased water injection activities will occur within equipment piping, all within the boundaries of the affected facility, and no other facilities will be expected to make any physical

modifications or operational changes in order to comply with PR 1179.1, implementation of the proposed project is not expected to disturb any soil or geological formations. Therefore, PR 1179.1 would not directly or indirectly cause potential adverse effects or result in the substantial erosion or loss of topsoil. Also, since implementation of PR 1179.1 will have no effect on the soil types present at the affected facilities, the existing soils will not be made further susceptible to expansion or liquefaction. Furthermore, PR 1179.1 will not create any new conditions that would cause subsidence landslides, or alter unique geologic features at any of the 30 POTW facilities. Thus, the proposed project would not be expected to increase or exacerbate any existing risks associated with soils at the affected facility locations. Implementation of PR 1179.1 would not involve relocating any facility onto a geologic unit or soil that is unstable or that would become unstable as a result of the project; therefore, it would not be expected to potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Finally, because PR 1179.1 is not expected to require soil to be disturbed, implementation of the proposed project is not expected to directly or indirectly destroy a unique paleontological resource or site or unique geological feature. No impacts are anticipated.

VII. d) & e) No Impact. The 30 facilities subject to PR 1179.1 are POTWs which treat sewage and wastewater and implementation of PR 1179.1 would not alter how these facilities conduct their existing operations. Further, PR 1179.1 does not contain any provision that would require the installation of septic tanks or other alternative wastewater disposal systems since all 30 facilities have existing sanitary systems that are connected to the local sewer systems. Therefore, no persons or property will be exposed to new impacts related to expansive soils or soils incapable of supporting water disposal. Thus, the implementation of PR 1179.1 will not adversely affect soils associated with a installing a new septic system or alternative wastewater disposal system or modifying an existing sewer.

Conclusion

Based upon these considerations, significant adverse geology and soils impacts are not expected from the implementation of PR 1179.1. Since no significant geology and soils impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
VIII.	**HAZARDS AND HAZARDOUS MATERIALS.** Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☑
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
c)	Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☑
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment?	☐	☐	☐	☑
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	☑
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
g)	Significantly increased fire hazard in areas with flammable materials?	☐	☐	☑	☐

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

VIII. a) & b) No Impact. All 30 POTWs subject to PR 1179.1 are existing facilities located industrial areas and none will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. The additional water usage would not require physical modifications to existing piping or water pumping systems and the water does not utilize any hazardous materials. Thus, no additional construction at the facility would be expected. Further, while the affected facilities may currently have existing activities that involve the routine transport, use, or disposal of hazardous materials, implementation of PR 1179.1 would not alter these existing activities or create a new significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

VIII. c) No Impact. As explained in Section VIII. a) and b), while the affected facilities may currently have existing activities that involve the routine transport, use, or disposal of hazardous materials, implementation of PR 1179.1 would not alter these existing activities or create a new

significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Thus, even though some of the affected facilities may be located within one-quarter mile of an existing or newly proposed school, PR 1179.1 does not include new requirements that would cause any of the affected facilities to generate new hazardous emissions, or change how hazardous or acutely hazardous materials, substances, or waste is currently handled.

VIII. d) No Impact. Government Code Section 65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). While two of the 30 facilities, presented in Appendix B are identified on lists of California Department of Toxics Substances Control hazardous waste facilities per Government Code Section 65962.5, PR 1179.1 contains no requirements that interfere with existing hazardous waste management programs since facilities handling hazardous waste would be expected to continue to manage any and all hazardous materials and hazardous waste, in accordance with applicable federal, state, and local rules and regulations. Therefore, compliance with PR 1179.1 would neither change any existing hazards to public or environment nor create any new significant hazards to the public or environment.

VIII. e) No Impact. Federal Aviation Administration regulation, 14 CFR Part 77 – Safe, Efficient Use and Preservation of the Navigable Airspace, provide information regarding the types of projects that may affect navigable airspace. Projects may adversely affect navigable airspace if they involve construction or alteration of structures greater than 200 feet above ground level within a specified distance from the nearest runway or objects within 20,000 feet of an airport or seaplane base with at least one runway more than 3,200 feet in length and the object would exceed a slope of 100:1 horizontally (100 feet horizontally for each one foot vertically from the nearest point of the runway). Even if any of the affected facilities are located within an airport land use plan or, within two miles of a public airport or public use airport, PR 1179.1 will not result in the alteration of any buildings or structures. Therefore, implementation of PR 1179.1 is not expected to increase or create any new safety hazards to peoples working or residing in the vicinity of public/private airports.

VIII. f) No Impact. Health and Safety Code Section 25506 specifically requires all businesses handling hazardous materials to submit a business emergency response plan to assist local administering agencies in the emergency release or threatened release of a hazardous material. Business emergency response plans generally require the following:

- Identification of individuals who are responsible for various actions, including reporting, assisting emergency response personnel and establishing an emergency response team;
- Procedures to notify the administering agency, the appropriate local emergency rescue personnel, and the California Office of Emergency Services;
- Procedures to mitigate a release or threatened release to minimize any potential harm or damage to persons, property or the environment;
- Procedures to notify the necessary persons who can respond to an emergency within the facility;
- Details of evacuation plans and procedures;
- Descriptions of the emergency equipment available in the facility;

- Identification of local emergency medical assistance; and,
- Training (initial and refresher) programs for employees in:
    1. The safe handling of hazardous materials used by the business;
    2. Methods of working with the local public emergency response agencies;
    3. The use of emergency response resources under control of the handler;
    4. Other procedures and resources that will increase public safety and prevent or mitigate a release of hazardous materials.

In general, every county or city and all facilities using a minimum amount of hazardous materials are required to formulate detailed contingency plans to eliminate, or at least minimize, the possibility and effect of fires, explosion, or spills. In conjunction with the California Office of Emergency Services, local jurisdictions have enacted ordinances that set standards for area and business emergency response plans. These requirements include immediate notification, mitigation of an actual or threatened release of a hazardous material, and evacuation of the emergency area.

Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of not only the public (surrounding local communities), but the facility employees as well. The proposed project would not impair the implementation of, or physically interfere with any adopted emergency response plans or emergency evacuation plans that may be in place at the existing facility because PR 1179.1 does not require the new or altered use of hazardous materials and would not involve any alterations to buildings or structures.

VIII. g) Less Than Significant Impact. The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations. Further, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against the potential risk of upset. PR 1179.1 would not change the existing requirements and permit conditions for the proper handling of flammable materials at the affected facility. Further, PR 1179.1 does not contain any requirements that would prompt facility owners/operators to begin using new flammable materials. In addition, the National Fire Protection Association has special designations for deflagrations (e.g., explosion prevention) when using materials that may be explosive and PR 1179.1 would not alter how the affected facilities fire prevention plans.

Conclusion

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not expected from implementing PR 1179.1. Since no significant hazards and hazardous materials impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
IX.	**HYDROLOGY AND WATER QUALITY.** Would the project:				
a)	Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☑
b)	Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☑
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
	• Result in substantial erosion or siltation on- or off-site?	☐	☐	☐	☑
	• Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	☑
	• Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
	• Impede or redirect flood flows?	☐	☐	☐	☑
d)	In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☑
e)	Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☑

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f)	Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☑
g)	Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☑	☐
h)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

IX. a), b), e), f), & h) No Impact. Of the 30 facilities that will be subject to PR 1179.1, only one facility that operates three large turbines which utilize water injection as a NOx emission control method will need to use additional water in order to achieve the 18.8 ppm NOx emission limit. The type of water that is used for water injection in the turbines is demineralized ~~deionized~~ water. Since the POTW is by design, a wastewater treatment facility, the facility has sufficient supplies of water that it is capable of treating ~~and deionizing~~ to remove contaminants prior to injecting it into the turbines to prevent build-up of calcium and other minerals. The facility estimated that an additional 8,000 gallons of demineralized ~~deionized~~ water per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities.

Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has provided the following additional information regarding the anticipated increase in water injected into the turbines:

- The facility has its own supply of water and the increase in water injection can be employed immediately by adjusting the water input flow rate;
- No groundwater is used by this facility for the purposes of water injection into turbines because groundwater contains sand and other particles or debris which is not suitable; and
- Due to the high temperature in the combustion chamber, all of the injected water is vaporized such that there is no wastewater stream.

Since no wastewater stream is generated from the water injection process, the proposed project would not be expected to: 1) violate any water quality standards, waste discharge requirements of

the applicable Regional Water Quality Control Board, or otherwise substantially degrade surface or ground water quality; 2) require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities; and 3) give any cause for the POTW, which is the wastewater treatment provider, to question or evaluate whether adequate wastewater capacity exists post-project.

Further, since no groundwater will be utilized to satisfy the increased demand of water for injection purposes, PR 1179.1 will not: 1) substantially decrease groundwater supplies or interfere substantially with groundwater recharge or impede sustainable groundwater management of the basin; and 2) conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

IX. g) Less than Significant Impact. Of the 30 facilities that will be subject to PR 1179.1, only one facility that operates three large turbines which utilize water injection as a NOx emission control method will need to use additional water in order to achieve the 18.8 ppm NOx emission limit. The type of water that is used for water injection in the turbines is demineralized ~~deionized~~ water. Since the POTW is by design, a wastewater treatment facility, the facility has sufficient supplies of water that it is capable of treating ~~and deionizing~~ to remove contaminants prior to injecting it into the turbines to prevent build-up of calcium and other minerals. The facility estimated that an additional 8,000 gallons of demineralized ~~deionized~~ water per day per turbine for a total of 24,000 gallons per day would be needed to supplement their existing water injection activities. Since an increased use of 24,000 gallons of water per day is less than the significance threshold of 262,820 gallons per day for potable water and 5,000,000 gallons per day of total water, the proposed project will result in less than significant water demand impacts. The water demand is relatively minor when compared to the significance thresholds for water usage, and is expected to be well within the facility's existing supporting infrastructure to process, treat, and supply large quantities of water. Similarly, because the POTW has existing water supplies which are sufficient to support the implementation of additional water injection for NOx emission control purposes, the availability of sufficient water supplies to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years is not expected to be significantly impacted by PR 1179.1. Further, PR 1179.1 is a rule aimed to reduce emissions from combustion equipment located at existing wastewater treatment facilities and the affected facility has the adequate capacity to serve the proposed project's demand in addition to the provider's existing commitments.

IX. c) No Impact. Implementation of PR 1179.1 would not be expected to substantially alter the existing drainage patterns of any POTW facility or areas beyond what currently exists at each site. Because all of the POTW facilities are sited in urban industrial areas, PR 1179.1 will not cause any changes where streams or rivers would flow through any of the POTW facilities. Thus, PR 1179.1 would not cause an alteration to the course or flow of a stream or river. In addition, PR 1179.1 would not create new or contribute to existing runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff, because PR 1179.1 does not contain any requirements that would change existing drainage patterns or the procedures for how surface runoff is handled.

IX. d) No Impact. As previously explained in Section IV – Biological Resources, PR 1179.1 would not require new development to occur. The implementation of PR 1179.1 would not require construction, therefore, PR 1179.1 would not be expected to expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of the failure of a levee or

dam, or inundation by seiche, tsunami, or mudflow because any flood event of this nature would be part of the existing setting or topography that is present for reasons unrelated to PR 1179.1. Similarly, there is no risk of release of pollutants due to inundation as a result of PR 1179.1.

Conclusion

Based upon these considerations, significant adverse hydrology and water quality impacts are not expected from implementing PR 1179.1. Since no significant hydrology and water quality impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
X.	**LAND USE AND PLANNING.** Would the project:				
a)	Physically divide an established community?	☐	☐	☐	☑
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☑

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

X. a) & b) No Impact. PR 1179.1 does not require the construction of new buildings or the alteration of existing buildings. For this reason, implementation of PR 1179.1 is not expected to physically divide an established community. Therefore, no impacts are anticipated.

Further, land use and other planning considerations are determined by local governments and PR 1179.1 does not alter any land use or planning requirements. PR 1179.1 would regulate emissions from combustion equipment operating at existing POTW facilities without requiring any alterations to existing buildings or structures. Thus, implementation of PR 1179.1 would not be expected to affect or conflict with any applicable land use plan, policy, or regulation of an agency

with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Conclusion

Based upon these considerations, significant adverse land use and planning impacts are not expected from implementing PR 1179.1. Since no significant land use and planning impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XI.	**MINERAL RESOURCES.** Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☑
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☑

Significance Criteria
Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XI. a) & b) No Impact. There are no provisions in PR 1179.1 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state, or of

a locally-important mineral resource recovery site delineated on a local general plan, specific plant, or other land use plant. The proposed project would not require construction activities or place new demand on mineral resources in order to reduce emissions from combustion equipment operating at POTW facilities. Therefore, no significant adverse mineral resources impacts are expected from implementing PR 1179.1 are anticipated.

Conclusion

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementing PR 1179.1. Since no significant mineral resource impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XII.	**NOISE.** Would the project result in:				
a)	Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	☑
b)	Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	☑
c)	For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Significance Criteria

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each

of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XII. a), b) & c) No Impact. All of the 30 facilities affected by PR 1179.1 are located in urbanized, industrial areas and the existing noise environment at these facilities is typically dominated by noise from existing equipment on-site, vehicular traffic around the facilities, and trucks entering and exiting facility premises. Further, none of the facilities and their various existing combustion equipment will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three turbines rated greater than 0.3 MW would be expected to make some relatively minor operational changes in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. To specifically reduce NOx emissions, one facility would need to increase their total water usage by 24,000 gallons per day as part of their existing water injection process for their three turbines. Thus, no additional construction and associated noise-producing construction equipment and vehicles would be needed at any of the affected facilities. As such, no changes to the existing overall noise profiles of the affected facilities are expected to occur and noise levels would be expected to stay within existing baseline noise levels from day-to-day operations at each facility.

Finally, as explained in Section VIII. e), even if any of the affected facilities are located within an airport land use plan or, within two miles of a public airport or public use airport, PR 1179.1 will not result in the alteration of any buildings or structures requiring construction and associated noise-producing construction equipment and vehicles. Thus, persons residing or working within two miles of a public airport or private airstrip would not be exposed to excessive noise levels if PR 1179.1 is implemented.

Conclusion
Based upon these considerations, significant adverse noise impacts are not expected from the implementing PR 1179.1. Since no significant noise impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIII.	**POPULATION AND HOUSING.** Would the project:				
a)	Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	☑
b)	Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XIII. a) & b) No Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications changes to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable

emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace their turbines. Thus, no construction activities are expected to occur. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment, but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed. Thus, PR 1179.1 is not expected to involve the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. Maintenance activities resulting from PR 1179.1 would also not be expected to result in the need for additional employees because existing personnel are available to perform the required day-to-day maintenance. PR 1179.1 is not anticipated to not result in changes in population densities, population distribution, or induce significant growth in population.

Conclusion

Based upon these considerations, significant adverse population and housing impacts are not expected from implementing PR 1179.1. Since no significant population and housing impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIV. PUBLIC SERVICES. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☐	☑
b) Police protection?	☐	☐	☐	☑
c) Schools?	☐	☐	☐	☑
d) Parks?	☐	☐	☐	☑
e) Other public facilities?	☐	☐	☐	☑

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time, or other performance objectives.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XIV. a) & b) No Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make some relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. Thus, no construction activities are expected to occur. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed. Further, injecting additional water is not expected to pose a safety issue requiring the support of public service personnel. Thus, implementation of PR 1179.1 is not expected to substantially alter or increase the need or demand for additional public services (e.g., fire and police departments and related emergency services, etc.) above current levels, so no significant impact to these existing services is anticipated.

XIV. c), d), & e) No Impact. As explained in Section XIII. a) and b), PR 1179.1 is not anticipated to generate any significant effects, either direct or indirect, on the population or population distribution within South Coast AQMD's jurisdiction as no additional workers are anticipated to be needed in order to comply with PR 1179.1. Because PR 1179.1 is not expected to induce substantial population growth in any way, and because the local labor pool (e.g., workforce) would remain the same since PR 1179.1 would not trigger changes to current employment levels, no additional schools would need to be constructed as a result of implementing PR 1179.1. Therefore, since no substantial increase in local population would be anticipated as a result of implementing PR 1179.1, there would be no corresponding impacts to local schools or parks and there would be no corresponding need for new or physically altered public facilities in order to maintain acceptable service ratios, response times, or other performance objectives. Therefore, no impacts would be expected to schools, parks, or other public facilities.

Conclusion

Based upon these considerations, significant adverse public services impacts are not expected from implementing PR 1179.1. Since no significant public services impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XV.	**RECREATION.**				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☑
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services?	☐	☐	☐	☑

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XV. a) & b) No Impact. As previously explained in Section XIII – Population and Housing, PR 1179.1 is not expected to affect population growth or distribution within the South Coast AQMD's jurisdiction because no additional workers are needed to implement PR 1179.1 at the affected facilities. Thus, PR 1179.1 will have no effect on the existing labor pool supply in the local Southern California area. As such, PR 1179.1 is not anticipated to generate any significant adverse effects, either indirectly or directly on population growth within the South Coast AQMD's

jurisdiction or population distribution, thus no additional demand for recreational facilities would be expected. PR 1179.1 would not be expected to affect recreation in any way because PR 1179.1 would not increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical modification or effect on the environment because it would not directly or indirectly increase or redistribute population.

Conclusion

Based upon these considerations, significant adverse recreation impacts are not expected from implementing PR 1179.1. Since no significant recreation impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVI. SOLID AND HAZARDOUS WASTE. Would the project:				
a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☑	☐
b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	☐	☐	☐	☑

Significance Criteria

The proposed project impacts on solid and hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XVI. a) Less Than Significant Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none of the facilities will need to make any physical modifications to their various combustion equipment comply with the emission reduction requirements in PR 1179.1 because they currently operate pursuant to South Coast AQMD permits which contain applicable emission limits.

Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make some relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. Thus, no construction activities are expected to occur, which means no construction waste will be generated. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. The facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors will be needed. Further, injecting additional water is not expected to generate any solid or hazardous waste requiring disposal.

Further, PR 1179.1 will not alter the quantities generated or the manner in which the existing affected facilities currently handle and dispose of their solid and hazardous waste. Thus, the existing solid and hazardous waste generation at each of the affected facilities will remain unchanged such that PR 1179.1 will have no impacts on existing permitted landfill capacities.

XVI. b) No Impact. Operators of all affected facilities subject to PR 1179.1 are required to comply with all applicable local, state, or federal waste disposal regulations, and PR 1179.1 does not contain any provisions that would weaken or alter current practices. Further, as explained in Section XVI. a), PR 1179.1 does not have any provision that would increase the disposal of solid or hazardous waste. Thus, implementation of PR 1179.1 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations in a manner that would cause a significant adverse solid and hazardous waste impact.

Conclusion

Based upon these considerations, significant adverse solid and hazardous waste impacts are not expected from implementing PR 1179.1. Since no significant solid and hazardous waste impacts were identified, no mitigation measures are necessary or required.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVII. TRANSPORTATION. Would the project:					
a)	Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☐	☑
b)	Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)?	☐	☐	☐	☑
c)	Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☑
d)	Result in inadequate emergency access?	☐	☐	☐	☑

Significance Criteria

Impacts on transportation and traffic will be considered significant if any of the following criteria apply:

- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans, or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists, or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XVII. a) & b) No Impact. PR 1179.1 is designed to establish emission limits that are representative of BARCT for NOx, CO, and VOC emissions from engines and BARCT for NOx and CO emissions from boilers/steam generators, process heaters, and turbines located at POTWs that were not addressed in other source-specific rules. Of the 30 facilities that will be subject to PR 1179.1 after adoption, none will need to make any physical modifications to comply with the emission reduction requirements in PR 1179.1 because their combustion equipment currently operate pursuant to South Coast AQMD permits which contain applicable emission limits. Only one POTW facility that operates three large turbines (each are rated greater than 0.3 MW) is expected to make relatively minor operational changes related to increasing the amount of water injected into the combustion chambers in order to achieve the 18.8 ppm NOx emission limit to comply with PR 1179.1. The facility has indicated that they can achieve this NOx emission limit by increasing the amount of water that is currently injected into the combustion chamber as a NOx emission reduction measure without having to either install additional NOx emission control equipment such as SCR or replace or retrofit their turbines. Thus, no construction activities are expected to occur. Since the turbines currently employ water injection for NOx emission control purposes, increasing the amount of water injected into the turbines is a matter of adjusting the flow rate and is expected to occur as part of normal day-to-day operations of the turbines. As previously discussed in Section III – Air Quality and Greenhouse Gas Emissions, the facility has indicated that injecting additional water may require increased maintenance due to erosion and wear on turbine equipment but the maintenance can be conducted by existing employees so no additional workers or vendors, and in turn, no additional vehicle trips will be needed.

In accordance with the promulgation of SB 743 which requires analyses of transportation impacts in CEQA documents to consider a project's vehicle miles traveled (VMT) in lieu of applying a Level of Service (LOS) metric when determining significance for transportation impacts, CEQA Guidelines Section 15064.3(b)(4) gives a lead agency to use discretion to choose the most appropriate methodology to evaluate a project's VMT, allowing the metric to be expressed as a change in absolute terms, per capita, per household, or in any other measure.

No additional need for vehicle trips means that PR 1179.1 would not increase construction or operational VMT. Further, since PR 1179.1 will not create a need for additional vehicle trips, the proposed project will not conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b). Similarly, because implementation of PR 1179.1 will not alter any transportation plans, PR 1179.1 will also not conflict with a program plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

XVII. c) & d) No Impact. PR 1179.1 does not involve or require the construction of new roadways, because the focus of PR 1179.1 is to control emissions from certain combustion equipment operating at POTW facilities. Thus, no changes to current public roadway designs including a geometric design feature that could increase traffic hazards are expected. Further, PR 1179.1 is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facilities, or alter the existing long-term circulation patterns within the area of each affected facility. Further, impacts to existing emergency access at the affected facilities would also not be affected because PR 1179.1 does not contain any requirements specific to emergency access points and each affected facility would be expected to continue to maintain their existing emergency access. As a result, PR 1179.1 is not expected to result in inadequate emergency access.

Conclusion

Based upon these considerations, significant adverse transportation and traffic impacts are not expected from implementing PR 1179.1. Since no significant transportation and traffic impacts were identified, no mitigation measures are necessary or required.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XVIII. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☑
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☑
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☑
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☑
e) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires?	☐	☐	☐	☑

Significance Criteria

A project's ability to contribute to a wildfire will be considered significant if the project is located in or near state responsibility areas or lands classified as very high fire hazard severity zones, and any of the following conditions are met:

- The project would substantially impair an adopted emergency response plan or emergency evacuation plan.
- The project may exacerbate wildfire risks by exposing the project's occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, and other factors.
- The project may exacerbate wildfire risks or may result in temporary or ongoing impacts to the environment because the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) are required.
- The project would expose people or structures to significant risks such as downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.

- The project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires.

Discussion
PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XVIII. a), b), c), d), & e) No Impact. Of the 30 facilities subject to PR 1179.1, none are located in or near state responsibility areas or lands classified as very high fire hazard severity zones. Further, as explained in Section VIII. f), the proposed project would not impair the implementation of, or physically interfere with any adopted emergency response plans or emergency evacuation plans that may be in place at the existing facilities because PR 1179.1 does not require the new or altered use of hazardous materials and would not involve any alterations to buildings or structures. In addition, implementation of PR 1179.1 will not require the construction of any new buildings or structures. Thus, PR 1179.1 is not expected to substantially impair an adopted emergency response plan or emergency evacuation plan in effect at any of the facilities subject to PR 1179.1. In the event of a wildfire, no exacerbation of wildfire risks, and no consequential exposure of pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire due to slope, prevailing winds, or other factors would be expected to occur. Thus, PR 1179.1 would neither expose people or structures to new significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes, nor would it expose people or structures, either directly or indirectly, to a new significant risk of loss, injury, or death involving wildfires. Finally, PR 1179.1 does not require new or alter existing maintenance of associated infrastructure at or surrounding affected facilities (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Thus, PR 1179.1 is not expected to have any influence on the occurrence of wildfires or any facility's ability to combat or prepare for wildfires.

Conclusion
Based upon these considerations, significant adverse wildfire risks are not expected from implementing PR 1179.1. Since no significant wildfire risks were identified, no mitigation measures are necessary or required

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
XIX.	**MANDATORY FINDINGS OF SIGNIFICANCE.**				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☑
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)	☐	☐	☑	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☑	☐

Discussion

PR 1179.1 establishes BARCT emission limits for 82 boilers, steam generators, process heaters, turbines and engines which operate at 30 POTW facilities. Most of the affected combustion equipment are fueled by digester gas or a digester gas blend, except for large turbines rated at greater than 0.3 MW which may also be fueled by natural gas. PR 1179.1 also establishes requirements for POTWs to conduct source tests and monitoring, keep records, and prepare reports. All but one POTW facility, which operates three large turbines, currently operate their affected equipment pursuant to South Coast AQMD permits which contain the BARCT emission limits that will be memorialized in PR 1179.1. In order to reduce NOx emissions to meet BARCT (e.g., 18 ppm NOx), the remaining facility indicated that no additional air pollution control equipment will need to be installed and no replacement or retrofit of their existing turbines will be necessary. Instead, the POTW facility indicated that further NOx emission reductions can be achieved by increasing the quantity of water currently injected into combustion chamber for each of the three turbines by approximately 8,000 gallons per day per turbine for a total daily increase

of 24,000 gallons. As such, the responses to the environmental checklist questions focus on the potential secondary adverse environmental impacts associated with the increased amount of water injection that is expected to occur in order to attain the desired NOx emission reductions.

XIX. a) No Impact. The 30 existing facilities that are subject to PR 1179.1 are located within existing developed areas that have been greatly disturbed and that currently do not support any species of concern or the habitat on which they rely. Further, as explained in Section IV - Biological Resources, PR 1179.1 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because the proposed project will not lead to any activities that will reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XIX. b) Less Than Significant Impact. Based on the foregoing analyses, PR 1179.1 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts from implementing PR 1179.1 would not be "cumulatively considerable" as defined by CEQA Guidelines Section 15064(h)(1) for any environmental topic because there are no, or only minor incremental project-specific impacts that were concluded to be less than significant. Per CEQA Guidelines Section 15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulatively considerable. South Coast AQMD cumulative significant thresholds are the same as project-specific significance thresholds.

Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by PR 1179.1 for any environmental topic area.

XIX. c) Less Than Significant Impact. Based on the foregoing analyses, PR 1179.1 is not expected to cause adverse effects on human beings for any environmental topic, either directly or indirectly because: 1) the reduction of NOx emissions is an air quality benefit and no adverse air quality or GHG impacts were identified in Section III – Air Quality and Greenhouse Gases; 2) energy impacts were determined to be less than significant as analyzed in Section VI – Energy; and 3) the increased water usage and wastewater was determined to be less than significant as analyzed in Section IX – Hydrology and Water Quality.; . In addition, the analysis concluded that there would be no significant environmental impacts for the remaining environmental impact topic areas: aesthetics, agriculture and forestry resources, biological resources, cultural and tribal cultural resources, geology and soils, hazards and hazardous materials land use and planning, mineral resources, noise, population and housing, public services, recreation, solid and hazardous waste, transportation, and wildfire.

Conclusion

As previously discussed in environmental topics I through XIX, the proposed project has no potential to cause significant adverse environmental effects. Since no significant impacts were identified, no mitigation measures are necessary or required.

APPENDICES

Appendix A:	**Proposed Rule 1179.1 – ~~NOx~~ Emissions Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities**
Appendix B:	**Operational Emissions Assumptions and Calculations**
Appendix C:	**PR 1179.1 List of Affected Facilities and Affected Industry**
Appendix D:	**Comment Letter Received on the Draft EA and Response**

APPENDIX A

Proposed Rule 1179.1 – ~~NOx~~ Emissions Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities

In order to save space and avoid repetition, please refer to the latest version of PR 1179.1 located elsewhere in the Governing Board Package (meeting date October 2, 2020). The version of PR 1179.1 that was circulated with the Draft EA and released on August 12, 2020 for a 30-day public review and comment period ending on September 11, 2020 was identified as Proposed Rule 1179.1 - Preliminary Draft Rule Language (July 22, 2020) which is available from the South Coast AQMD's website at: http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1179.1/pr-1179-1---final.pdf. Original hard copies of the Draft EA, which include the draft version of the proposed rule listed above, can be obtained by contacting the Public Information Center by phone at (909) 396-2001 or by email at PICrequests@aqmd.gov.

APPENDIX B

Operational Emissions Assumptions and Calculations

Appendix B: Operational Emissions Assumptions and Calculations

Mobile Source Emissions for Operation

Activity	Trip Distance (miles)	CO2 Emissions (lb/mile)	Number Trips/yr	CO2 Emissions (lb/yr)	CO2 Emissions (MT/yr)
Source Test Trips - Passenger Auto	40	1.93	2.00	154.40	0.07
Source Test Trips - Medium Duty Truck	40	0.79	2.00	63.20	0.03
Total				217.60	0.10

CO2 emission factors obtained from EMFAC 2017

Onroad Vehicles, VMT + Fuel Usage

	Activity	Description	Trip Distance (miles)	Number Trips/yr	VMT	Fuel Type	MPG	Gallons Fuel	Peak Day Trips
Phase	Source Test Trips - Passenger Auto	10 Source Tests (5 per facility)	40	2.0	80.0	Gasoline	21	4	2
	Source Test Trips - Medium Duty Truck	10 Source Tests (5 per facility)	40	2.0	80.0	Diesel	10	8	2
	Total VMT				160				4

VMT = vehicle miles traveled
MPG = miles per gallon
Fuel Usage = VMT / MPG

EMFAC 2017 Emission Factors (lbs/mile)

Vehicle Type	-	VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4
Light Duty Auto	-	0.000440	0.004682	0.002427	0.000019	0.000388	0.000244	1.927986	0.000042
Medium Duty/ Delivery	-	0.000392	0.000299	0.003638	0.000008	0.000104	0.000044	0.789383	0.000041

Mobile Emissions (lbs/trip)

Trip Type	Miles	VOC	NOx	CO	SOx	PM10	PM2.5	CO2	CH4	CO2e
One Light Duty Auto Worker Trip - Source Testing	40	0.018	0.187	0.097	0.001	0.016	0.010	77.119	0.002	77.161
One Medium Duty Source Testing Trip	40	0.016	0.012	0.146	0.000	0.004	0.002	31.575	0.002	31.617

Calculations
Mobile Emissions = Emission Factor * Miles
CO2e = CO2 + 25*CH4

APPENDIX C

PR 1179.1 List of Affected Facilities and Affected Industry

Appendix C: PR 1179.1 List of Affected Facilities and Affected Industry

Facility ID	Facility Name	Facility Address	On List per Government Code 65962.5	Distance from School (meters)	Distance from Sensitive Receptor (meters)	Located Within Two Miles of an Airport?
1179	Inland Empire Utilities Agency Water Reclamation Facility Regional Plant #2	16400 El Prado Rd, Chino 91710	No	1370	694	Yes
1703	Eastern Municipal Water District	42565 Avenida Alvarado, Temecula 92590	No	2090	928	No
2537	Corona City, Department of Water & Power	2205 Railroad St, Corona 92880	No	1870	1190	Yes
3513	Irvine Ranch Water District	3512 Michelson Dr., Irvine 92612	No	1530	649	Yes
3866	South Orange County Wastewater Authority	34156 Del Obispo St., Dana Point 92629	No	410	45	No
5756	Redlands Wastewater Treatment Plant	1950 Nevada St., Redlands 92373	No	1450	1800	Yes
7417	Eastern Municipal Water District	1301 Case Rd., Perris 92570	No	1770	896	Yes
9163	Inland Empire Utilities Agency	2662 E. Walnut St., Ontario 91761	Yes	419	5	Yes
9961	Riverside Water Quality Control Plant	5950 Acorn St., Riverside 92504	No	812	589	Yes
10198	Valley Sanitary District	45-500 Van Buren St., Indio 92201	No	882	587	No
10245	Terminal Island Water Reclamation Plant	445 Ferry St., San Pedro 90731	Yes	2010	1260	No
11301	San Bernardino Water Reclamation Facility	399 Chandler Pl., San Bernardino 92408	No	1620	344	Yes
12923	Rialto City	501 E Santa Ana Ave., Bloomington 92316	No	2690	1740	No
13088	Eastern Municipal Water District	17140 Kitching St., Moreno Valley 92551	No	686	72	Yes
13433	South Orange County Wastewater Authority-Regional Treatment Plant	29200-01 La Paz Rd., Laguna Niguel 92677	No	622	255	No
17301	Orange County Sanitation District	10844 Ellis Ave., Fountain Valley 92708	No	413	234	No
19159	Eastern Municipal Water District	770 N Sanderson Ave., San Jacinto 92582	No	1090	648	No
20237	San Clemente City, Wastewater Division	380 Avenida Pico, San Clemente 92672	No	593	53	No
20252	Banning City Waste Water Treatment Plant	2242 E Charles St., Banning 92220	No	2180	378	Yes
22674	Los Angeles County Sanitation District Valencia Plant	28185 The Old Rd., Valencia 91355	No	2650	1430	No
29110	Orange County Sanitation District	22212 Brookhurst St., Huntington Beach 92646	No	598	38	No
50402	Yucaipa Valley Water District	880 W County Line Rd., Yucaipa 92399	No	2230	698	No
51304	Santa Margarita Water District	26111 Antonio Pkwy., Rancho Santa Margarita, 92688	No	800	800	No
94009	Las Virgenes	3700 Las Virgenes Rd., Calabasas 91302	No	730	185	No
111176	Western Riverside County Regional Wastewater Authority	14634 River Rd., Corona 92880	No	747	37	Yes
118526	Western Municipal Water District	22751 Nandina Ave., Riverside 92518	No	2550	1020	Yes
147371	Inland Empire Utilities Agency	6063 Kimball Ave., Chino 91710	No	1020	410	Yes
181040	Santa Margarita Water District - 3A Treatment Plant	26801 Camino Capistrano, Laguna Niguel, 92677	No	2800	370	No
800214	Hyperion Water Reclamation Plant	12000 Vista Del Mar, Playa Del Rey 90293	No	668	100	Yes
800236	Los Angeles County Joint Water Pollution Control Plant	24501 S. Figueroa St., Carson 90745	No	822	232	No

NAICS Code	Description of Industry
221320	Sewage Treatment Facilities

APPENDIX D

Comment Letter Received on the Draft EA and Response

Comment Letter #1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY Gavin Newsom, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7 – Office of Regional Planning
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 897-9140
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life.

September 8, 2020

Barbara Radlein
South Coast Air Quality Managing District
21865 Copley Drive
Diamond Bar, CA 91765-4182

RE: Proposed Rule 1179.1 – Environmental Assessment (EA)
SCH # 2020080171
GTS # 07-MULTIPLE-2020-00167
Vic. South Coast Air Quality Management District

Dear Barbara Radlein:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for this project's Environmental Assessment (EA). Proposed Rule (PR) 1179.1 proposes to establish Best Available Retrofit Control Technology (BARCT) requirements for combustion equipment operated at Publicly Owned Treatment Works (POTW) facilities to reduce emissions of: 1) NOx and CO from boilers, steam generators and process heaters rated greater than 400,000 British thermal units (Btu) per hour fueled by digester gas or a digester gas blend; 2) NOx and CO from turbines rated less than 0.3 megawatt (MW) fueled by digester gas or a digester gas blend; 3) NOx and CO from turbines rated at greater than or equal to 0.3 MW fueled by natural gas, digester gas, or a digester gas blend; and 4) NOx, CO and VOC from engines rated at greater than 50 rated brake horsepower (bhp) fueled by digester gas or a digester gas blend.

After reviewing the EA, Caltrans does not expect project approval to result in a direct adverse impact to the existing State transportation facilities.

For future site specific CEQA evaluations, please keep in mind any work performed within Caltrans' Right-of-Way (R/W) will require further review and approval by Caltrans. Any proposed work within Caltrans' R/W will require an encroachment permit prior to activities or construction.

If you have any questions, please contact Reece Allen, the project coordinator, at reece.allen@dot.ca.gov, and refer to GTS # 07-MULTIPLE-2020-00167

Sincerely,

MIYA EDMONSON
IGR/CEQA Branch Chief
cc: Scott Morgan, State Clearinghouse

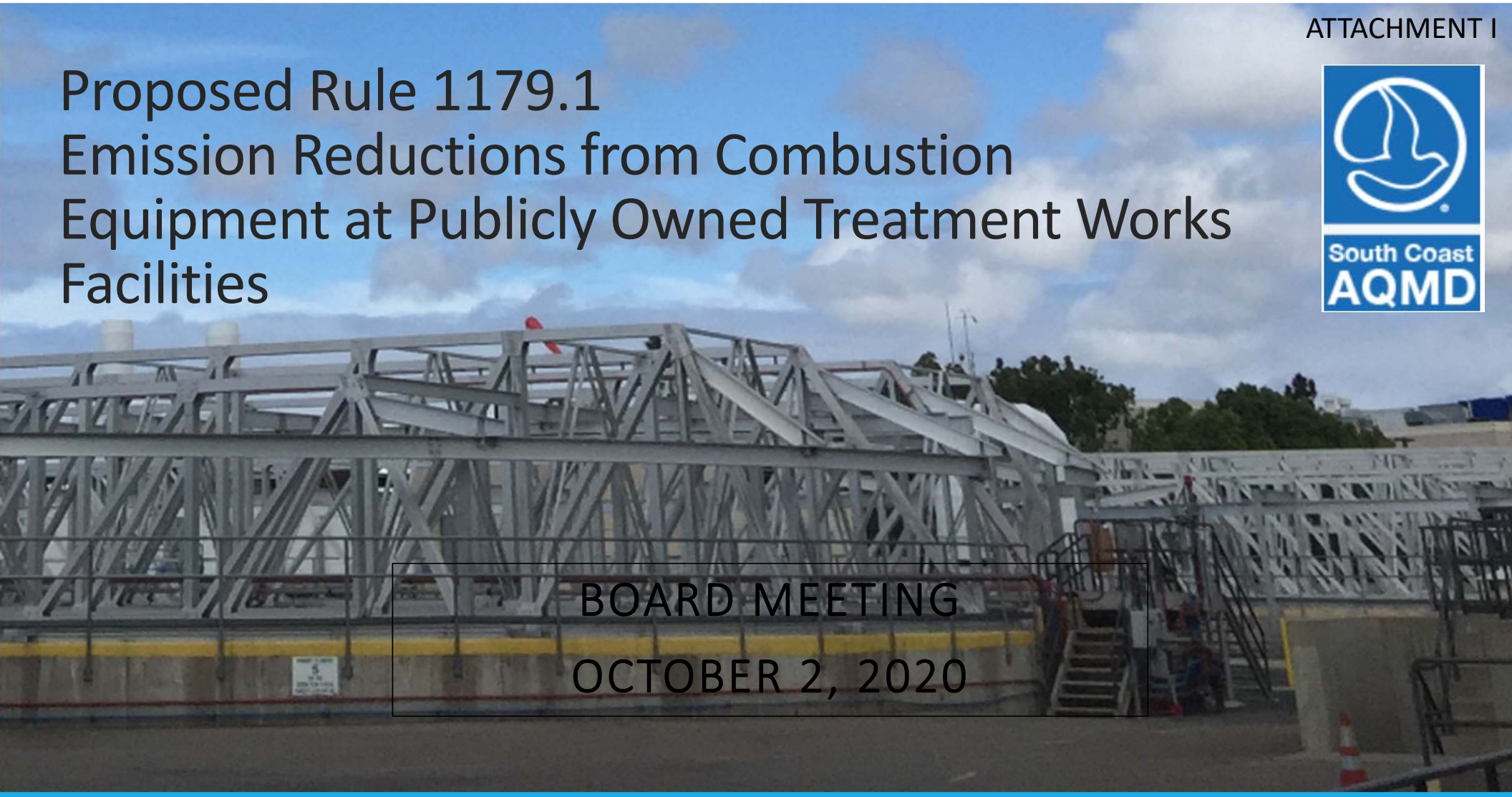
"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"

Response to Comment Letter #1

This comment letter summarizes the key elements of PR 1179.1 and concludes that implementation of the proposed project will not likely result in a direct adverse impact to existing State transportation facilities, indicating agreement with the conclusion in the Final EA that no significant transportation impacts were identified. This comment letter also indicates that for future site-specific CEQA evaluations which involve any work performed within Caltrans' Right-of-Way will require further review and approval by Caltrans, including an encroachment permit prior to activities or construction. Since implementation of PR 1179.1 will not involve any future site-specific construction or other activities involving roadways within Caltrans' Right-of-Way, no review and approval of an encroachment permit will be required.

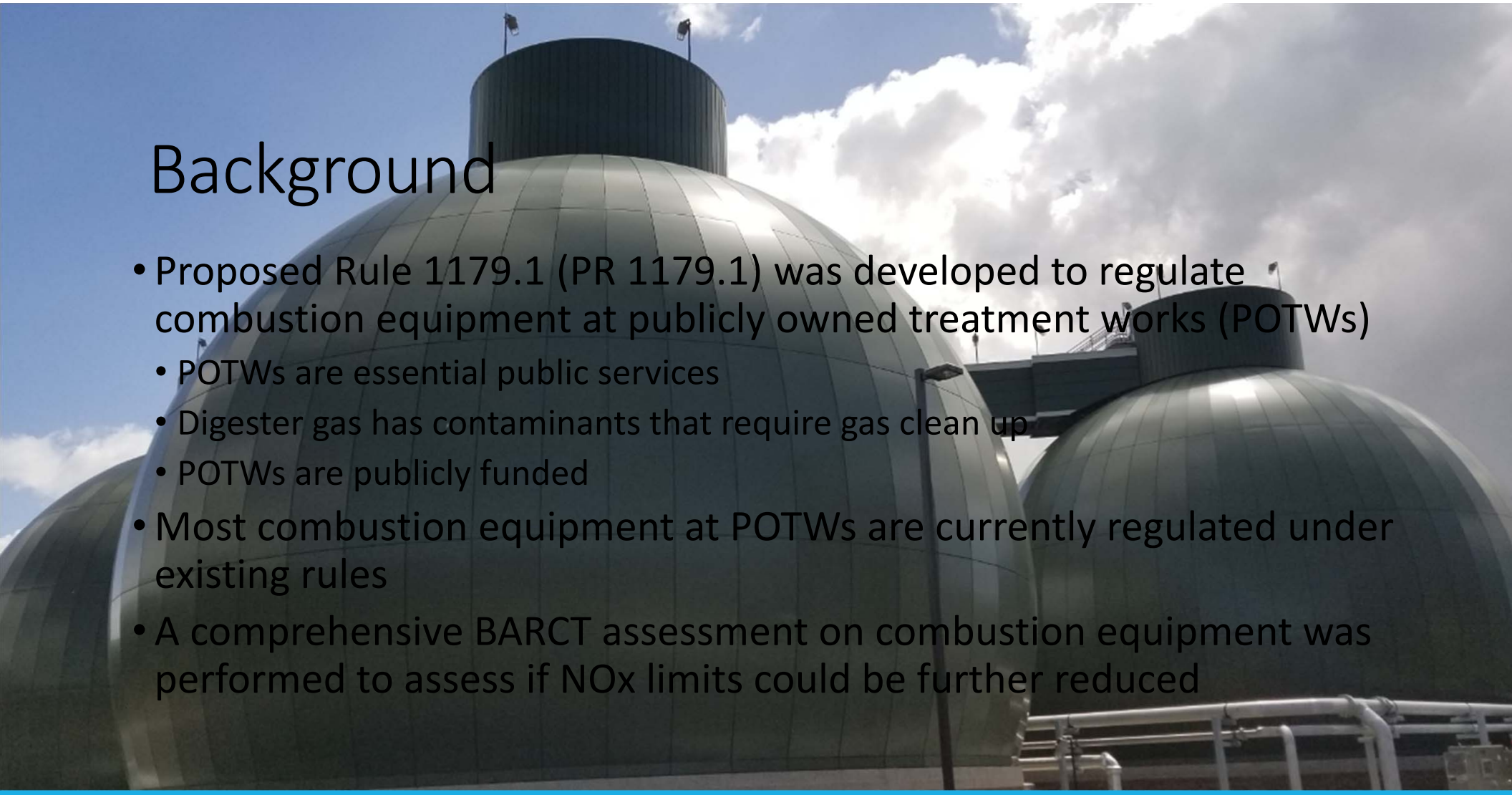
ATTACHMENT I

Proposed Rule 1179.1 Emission Reductions from Combustion Equipment at Publicly Owned Treatment Works Facilities



BOARD MEETING

OCTOBER 2, 2020



Background

- Proposed Rule 1179.1 (PR 1179.1) was developed to regulate combustion equipment at publicly owned treatment works (POTWs)
  - POTWs are essential public services
  - Digester gas has contaminants that require gas clean up
  - POTWs are publicly funded
- Most combustion equipment at POTWs are currently regulated under existing rules
- A comprehensive BARCT assessment on combustion equipment was performed to assess if NOx limits could be further reduced

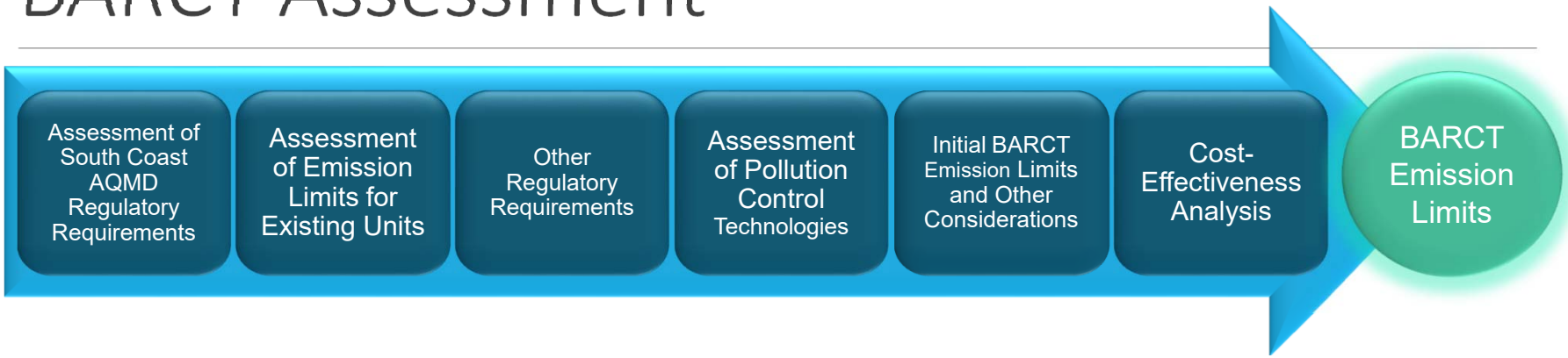
Applicability of PR 1179.1

- PR 1179.1 will apply to 30 POTW facilities
- PR 1179.1 applies to digester gas-fired boilers, turbines and engines
  - Addresses NOx, CO and VOC
- Also applies to natural gas-fired turbines at POTWs

Proposed Amendments

- Most provisions reflect existing requirements from source-specific rules for boilers, engines and turbines
- PR 1179.1 contains requirements for:
  - Emission limits
  - Averaging times
  - Startup and shutdown
  - Source testing
  - Monitoring, reporting and recordkeeping

BARCT Assessment



- BARCT emission limits represent the maximum degree of reductions achievable, taking into account environment, energy, and economic impacts for this class/category of sources
- Conducted a BARCT assessment for boilers and turbines that are fueled with digester gas
  - Only lower NOx limits for turbines were found to be cost-effective
- Staff relied on the 2019 BARCT assessment for engines

Proposed NOx Emission Limits

- Turbines ≥ 0.3 MW would be subject to an 18.8 ppm NOx emission limit
  - Affects 3 turbines at one facility
- NOx emission limits for other equipment reflect current rule/permit requirements

Equipment Category	NOx Emission Limit*
Boilers > 2 MMBtu/hr	15 ppm
Boilers ≤ 2 MMBtu/hr	30 ppm
Turbines ≥ 0.3 MW	18.8 ppm (new limit)
Turbines < 0.3 MW	9 ppm
Engines	11 ppm

*Emission limits corrected to 3% O2 for boilers and 15% O2 for turbines and engines

Other Proposed Amendments

Startup and Shutdown

- New startup and shutdown provisions for turbines

Monitoring, Reporting, and Recordkeeping

- Added requirement to keep records for service, tuning and hours of operation
- Added requirement that all records be kept for 5 years

Cost-Effectiveness and Emission Reductions

Cost-effectiveness

- Cost-effectiveness for the rule is approximately $50,000 per ton of NOx reduced*

Emission Reductions

- Emission reductions from turbines subject to PR 1179.1 are 0.05 tons per day of NOx

*Cost-effectiveness for turbines to meet the proposed emission limit only is $48,600 per ton of NOx reduced

Staff Recommendation

- Staff is not aware of any key remaining issues
- Recommendation is to adopt Resolution:
  - Certifying the Final Environmental Assessment for PR 1179.1
  - Adopting Rule 1179.1

Back to Agenda

BOARD MEETING DATE: October 2, 2020 AGENDA NO. 29

PROPOSAL: Receive and File 2019 Annual Report on AB 2588 Program and Approve Updates to Facility Prioritization Procedure for the AB 2588 Program, Public Notification Procedures, and AB 2588 and Rule 1402 Supplemental Guidelines

SYNOPSIS: The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) requires local air pollution control districts to prepare an annual report. The report provides the public with information regarding South Coast AQMD programs to reduce emissions of toxic air contaminants. This annual update describes the various activities in 2019 to satisfy the requirements of AB 2588 and Rule 1402, such as quadrennial emissions reporting and prioritization, the preparation and review of Air Toxics Inventory Reports, Health Risk Assessments, Voluntary Risk Reduction Plans, Risk Reduction Plans, and additional South Coast AQMD activities related to air toxics. Staff is also seeking approval of updates to the Facility Prioritization Procedure for the AB 2588 Program, Public Notification Procedures, and the AB 2588 and Rule 1402 Supplemental Guidelines to correct typographical errors and to provide additional information and clarification. These actions are to receive and file the 2019 Annual Report on the AB 2588 Air Toxics “Hot Spots” Program and approve revisions to the Facility Prioritization Procedure for the AB 2588 Program, Public Notification Procedures, AB 2588 and Rule 1402 Supplemental Guidelines.

COMMITTEE: Reviewed: Stationary Source Committee, September 18, 2020

RECOMMENDED ACTIONS:

1. Receive and File:
    a. 2019 Annual Report on the AB 2588 Program.
2. Approve updates to the following guidance documents:
    a. Facility Prioritization Procedure for the AB 2588 Program;
    b. Public Notification Procedures; and
    c. AB 2588 and Rule 1402 Supplemental Guidelines.

Wayne Nastri
Executive Officer

PF:SR:TG:VM

Introduction

The California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) enacted in 1987, is a statewide program implemented by local air districts to address health risks from air emissions associated with existing permitted facilities. One of the main goals of AB 2588 is to provide the public with information regarding potential health effects from toxic air contaminants emitted from existing facilities, and to develop plans to reduce associated risks. The South Coast AQMD implements AB 2588 requirements through Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, which includes additional requirements beyond the state law, including a program to encourage facilities to voluntarily reduce risk, and to compel high risk facilities to reduce toxic emissions much more quickly than previously required.

The AB 2588 Program as implemented under Rule 1402 is only one part of South Coast AQMD's comprehensive program in regulating air toxics. Other elements include South Coast AQMD's permitting program, requirements of Rule 1401 – New Source Review of Toxic Air Contaminants and Rule 1401.1 – Requirements For New and Relocated Facilities Near Schools, rules adopted to address air toxic emissions from certain equipment and processes, enforcement efforts to ensure facilities comply with all applicable air quality requirements, and the Multiple Air Toxics Exposure Study, a study measuring the amount of regional toxic air contaminants and their risks throughout the air basin. Additionally, South Coast AQMD has performed ambient air monitoring in many neighborhoods and found high levels of air toxics. This monitoring has helped to identify high risk facilities, which have then been required to implement risk reduction measures under Rule 1402. Additional reductions have occurred through voluntary measures, enforcement actions, Orders for Abatement, and rule development.

As required under the California Health and Safety Code Section 44363, staff has prepared the "2019 Annual Report on the AB 2588 Program." This annual report summarizes South Coast AQMD's air toxics program activities in 2019, including AB 2588 activities and other air toxic related programs as explained below. The annual report will be available on South Coast AQMD's website and distributed to county boards of supervisors, city councils, and local health officers.

Background

The AB 2588 Program, combined with implementation of Rule 1402, includes requirements for toxic emissions inventories, categorizing and prioritizing facilities, and reviewing and approving detailed Air Toxic Inventory Reports (ATIRs), Health Risk Assessments (HRAs), public notifications, Voluntary Risk Reduction Plans (VRRPs) and Risk Reduction Plans (RRPs).

There are two broad classes of facilities within the AB 2588 Program: larger facilities (core facilities) are subject to individual reporting requirements while facilities that are generally small businesses are in the industrywide source categories and have fewer requirements under the AB 2588 Program than core facilities. Industrywide source category facilities are generally small businesses with relatively similar emission

profiles (such as gas stations and auto-body shops). Some industrywide categories have requirements in source-specific rules to address toxic air contaminants.

Larger facilities (core facilities) are required to report their air toxic emissions to South Coast AQMD, such as hexavalent chromium, nickel, benzene, formaldehyde, and diesel particulate matter (DPM), every four years through the web-based Annual Emissions Reporting (AER) Program. This quadrennial emissions reporting is staggered so that not all facilities report their toxics emissions at the same time. Of the 471 facilities in South Coast AQMD's core AB 2588 Program, 68 facilities were required to submit their reports in 2019 for reporting year 2018.

On October 7, 2016, Rule 1402 was amended to add requirements for Potentially High Risk Level facilities. Potentially High Risk Level facilities are facilities that South Coast AQMD staff believes may pose significant health risk to the local community. Potentially High Risk facilities must implement Early Action Reduction Plans to immediately reduce risk and to submit ATIRs, HRAs and RRPs under expedited timelines. So far, three facilities in Paramount (Anaplex Corp, Aerocraft Inc. and Lubeco Inc.) have been designated as Potentially High Risk Level facilities under Rule 1402.

The AB 2588 Program requires air districts to categorize each facility using the reported emissions as either high, intermediate, or low priority to determine if a facility needs to conduct a Health Risk Assessment (HRA). Once a facility is designated as high priority, they may be required to submit a Health Risk Assessment to assess the risk to their surrounding community. From the beginning of the AB 2588 Program in 1987 through the end of 2019, staff has reviewed and approved 349 HRAs from 339 facilities. Of these, 61 facilities were required to perform public notification activities and 28 facilities were required to implement risk reduction measures.

2019 Accomplishments

The attached report summarizes staff activities in 2019 for the AB 2588 Program, implementation of Rule 1402, air toxic monitoring performed in conjunction with the AB 2588 Program and Rule 1402, analysis of toxic program impacts from the addition of new or revised health risk values for air toxics, and future activities.

Summary of Activities for Specific AB 2588 Program Facilities

In 2019, 68 facilities filed quadrennial emission reports. Additionally, 48 facilities were subject to AB 2588 review. These include facilities that were notified in prior calendar years and are in various stages of review in 2019. Staff reviewed 31 ATIRs, 11 HRAs, five RRPs, five VRRPs, and three revised priority scores from 48 facilities in 2019. Approximately 8,600 residences were notified that they were exposed to risks above the AB 2588 thresholds, and staff held three public notification meetings. Table 1 lists the facilities that submitted documents required by the AB 2588 Program in 2019. The attached Annual Report provides detailed information regarding the AB 2588 Program activities at each facility.

Table 1 – AB 2588 Program Facilities in 2019

Facility Name	ID No.	Facility Name	ID No.
Aerocraft Heat Treating Co. Inc.	23752	Pac Rancho, Inc.	140871
Air Liquide Large Industries U.S., LP	148236	Pacific Clay Products, Inc.	17953
All American Asphalt - Irwindale	114264	Pasadena Department of Water and Power [b]	800168
All American Asphalt - Perris	148146	Phillips 66 Co/LA Refinery Wilmington Plant *	171107
Anaplex Corp	16951	Phillips 66 Company/Los Angeles Refinery *	171109
Arconic Global Fasteners & Rings, Inc.	134931	Plains West Coast Terminals	800417
Chevron Products Co. (El Segundo Refinery)	800030	Robertson's Ready Mix – Redlands	42623
City of Cerritos, Water Division	74396	Robertson's Ready Mix – Gardena	134112
Eco Services Operations Corp.*	180908	San Diego Gas & Electric	4242
Eisenhower Medical Center	3671	SFPP, L.P*	800278
Elite Comfort Solutions*	182610	So Cal Edison Co*	4477
Equilon Enter. LLC, Shell Oil Prod. US*	800372	So Cal Gas Co./Playa del Rey Storage Facility	8582
Evonik Corporation*	183926	So Cal Holding, LLC	169754
Gerdau/TAMCO	18931	Tesoro Refining & Marketing Co., LLC, Calciner*	174591
Glendale City, Glendale Water & Power*	800327	Tesoro Refining & Marketing Co., LLC, Los Angeles Refinery*	800436 174655 174694 174703
Hixson Metal Finishing	11818	Tesoro Refining & Marketing Co., LLC (Sulfur Recovery Plant)*	151798
Holliday Rock Co., Inc.	41580		
Kirkhill Inc*	187823		
LA City, Sanitation Bureau (Hyperion Treatment Plant)*	800214		
LA City, Street Maintenance Bureau Department of Public Works	25196	Torrance Refining Co. LLC.	181667
Light Metals*	83102	TST, Inc.*	43436
Los Angeles By-Products	60384	Ultramar, Inc.*	800026
Lubeco, Inc.	41229	Vista Metals Corporation*	14495
MM West Covina LLC*	113873	Vorteq Pacific	191677
Motion Picture & Television Fund	16211	Whittier Fertilizer	511
PABCO Bldg Products LCC	45746		

Note: * indicates facilities notified to prepare either an ATIR or a VRRP.

Air Monitoring and Source Testing Activities to Support the AB 2588 Program
Based on monitoring for hexavalent chromium in Paramount, three facilities were designated as Potentially High Risk Level Facilities in 2016 and 2017. High levels of hexavalent chromium were discovered, in some instances affecting nearby communities. Efforts then followed to identify and address the sources of these emissions. As a result, several facilities made a range of improvements, some voluntary and some through rule changes and enforcement actions. South Coast AQMD's ongoing air monitoring results indicate substantial progress in reducing ambient levels of hexavalent chromium due to these actions. As a result, South Coast AQMD has modified air monitoring efforts in Paramount to focus on conducting studies to evaluate other potential sources of hexavalent chromium and also monitoring other areas that may have higher potential for air toxics exposure.

In June 2019, staff began air monitoring in the West Rancho Dominguez area at 14 different locations. The West Rancho Dominguez area is mostly industrial with concrete batch plants, hexavalent chromium metal finishing facilities, and hexavalent chromium spray coating facilities within close proximity to each other. Staff have been investigating potential sources in the vicinity of these monitors and working with the facilities to identify voluntary actions that could be implemented to reduce hexavalent chromium emissions. Staff continues to work with facilities in the area to identify and address additional potential sources of hexavalent chromium.

HRA Modeling Projects
In 2019, staff supported permitting and enforcement activities by reviewing air dispersion modeling to determine compliance with Rules 1420.2 – Emission Standards for Lead from Metal Melting Finishing, and 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants.

Rule 1420.2 establishes standards for lead emissions from metal melting facilities. Air dispersion modeling is used to identify the appropriate location for placement of ambient air monitors. In 2019, staff reviewed compliance plans with air dispersion modeling for three facilities under this rule: two involve siting of ambient air monitors, and one for relief from future monitoring requirements.

Rule 1466 establishes limits for particulate matter emissions from soils with toxic air contaminants. In 2019, staff reviewed one request from a facility requesting an alternate limit for particulate matter emissions under this rule. Staff reviewed the request to ensure the alternate limit remains health protective to the public.

Rules Adopted or Amended in 2019
On October 4, 2019, Rule 1407 – Control of Emissions of Arsenic, Cadmium, and Nickel from Non-Chromium Metal Melting Operations, was amended to further reduce emissions of arsenic, cadmium, and nickel by establishing new requirements such as control efficiency requirements and mass emissions limits.

On December 6, 2019, Rule 1480 – Ambient Monitoring and Sampling of Metal Toxic Air Contaminants, was adopted to require facilities designated as a Metal Toxic Air Contaminant Monitoring Facility to conduct air monitoring and sampling.

Program Impacts from New or Revised Health Risk Values for Air Toxics
OEHHA adopted risk values for hexamethylene diisocyanate (HDI) (monomer and polydiisocyanates) and proposed risk values for toluene in 2019. Chronic Reference exposure levels (RELs), 8-hour chronic RELs, and acute RELs were adopted for HDI, and chronic RELs, 8-hour chronic RELs, and acute RELs were proposed for toluene. In reviewing 2015 through 2018 reporting data, 21 facilities reported emissions of HDI monomers but did not previously have risk values. HDI polyisocyanates are newly added pollutants with no prior reporting requirements and are not currently required to be reported by AB 2588 facilities. However, facilities required to submit inventory reports under Rule 1402 will be required to report HDI polyisocyanate emissions beginning in 2020.

Staff will continue to monitor the status of the proposed RELs for toluene. Adoption of the proposed RELs for toluene has a potential to affect most if not all facilities due to the widespread use of toluene as a solvent and as a byproduct from combustion of fuels.

Future Activities
In 2020, AB 2588 staff will:

- Audit quadrennial emissions inventories for approximately 125 facilities;
- Conduct public notification and public meetings, as necessary; and
- Update AB 2588 guidance documents including Facility Prioritization Procedures for the AB 2588 Program, AB 2588 and Rule 1402 Supplemental Guidelines, South Coast AQMD Public Notification Procedures for Facilities under AB 2588 and Rule 1402, and AB 2588 Quadrennial Air Toxics Emission Inventory Reporting Procedures.

In addition to the routine AB 2588 Program implementation activities, staff plans to:

- Track development of potential REL revisions by OEHHA;
- Notify seven asphalt aggregate plants to prepare ATIRs or VRRPs if warranted;
- Continue to provide support to rulemaking staff;
- Work with CARB and through the CAPCOA Toxics and Risk Managers Committee (TARMAC) to update CARB AB 2588 Guidelines, including review of draft list of chemicals;
- Continue to work with CARB and through the TARMAC to develop HRA guidelines for the industrywide categories of gasoline dispensing facilities, autobody shops, and diesel internal combustion engines, and to provide training to South Coast AQMD staff and the regulated community; and
- Train new staff on the expanded emissions reporting under amended Rule 301 and upcoming AB 617.

Updates to the Facility Prioritization Procedure, Public Notification Procedures, and the AB 2588 & Rule 1402 Supplemental Guidelines

AB 2588 staff reviews these guidance documents to ensure they contain updated information and additional clarification on the requirements and procedures of the AB 2588 Program.

Facility Prioritization Procedures

In June 2016, the Board adopted revisions to the Facility Prioritization Procedure in conjunction with amendments to Rule 1402 that incorporated the 2015 OEHHA Risk Assessment Guidelines update. The Board also adopted revisions to the Facility Prioritization Procedures in November 2016 which incorporated updates from the August 2016 CAPCOA Facility Prioritization Procedures.

In September 2018, the Board adopted revisions to update the Facility Prioritization Procedure to incorporate the most current meteorological dataset (Version 9) and adjusting the calculation of the non-cancer acute score to account for short-term exposure at the facility fenceline. Staff updated the Facility Prioritization Procedure to correct minor transcription errors from the September 2018 version in September 2019. Staff is proposing to update the Facility Prioritization Procedure to correct the equation for calculation of cancer and non-cancer chronic score for workers and to provide additional clarification on the Worker Adjustment Factor (WAF).

Public Notification Procedures

In November 2016, the Board adopted revisions to incorporate modified public notification procedures for facilities that elect to participate in the Voluntary Risk Reduction Program and to require South Coast AQMD staff to conduct the public notification meeting. Staff is proposing to update the Public Notification Procedures to provide additional clarification on the requirements for conducting public notification and public meetings.

AB 2588 & Rule 1402 Supplemental Guidelines

The Board adopted amendments to the AB 2588 and Rule 1402 Supplemental Guidelines to clarify language and by adding guidance on different elements of the AB 2588 Program in November 2016. Staff is proposing to update the AB 2588 and Rule 1402 Supplemental Guidelines and provide more clarity for implementation of the AB 2588 Program and Rule 1402.

Attachments

1. Annual Report on AB 2588 Air Toxics “Hot Spots” Program
2. Facility Prioritization Procedure for the AB 2588 Program
3. Public Notification Procedures
4. AB 2588 and Rule 1402 Supplemental Guidelines
5. Board Meeting Presentation

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

2019
Annual Report on AB 2588 Air Toxics "Hot Spots" Program

October 2020

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Annual Report on AB 2588 Air Toxics "Hot Spots" Program

October 2020

Deputy Executive Officer
Planning, Rule Development and Area Sources
Philip M. Fine, Ph.D.

Assistant Deputy Executive Officer
Planning, Rule Development and Area Sources
Sarah L. Rees, Ph.D.

Planning and Rules Manager
Planning, Rule Development and Area Sources
Tracy A. Goss, P.E.

Authors: Victoria Moaveni, Program Supervisor
Fortune Chen, Senior Air Quality Engineer
Tracy Tang, Senior Air Quality Engineer
Alberto Jasso, Air Quality Engineer II
Edward Lee, Air Quality Engineer II
Kevin Chiu, Air Quality Engineer II
Matthew Lee, Air Quality Engineer I
Pierre Sycip, Air Quality Specialist

Reviewed by: William Wong, Principal Deputy District Counsel

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

GOVERNING BOARD

Chairman: DR. WILLIAM A. BURKE
Speaker of the Assembly Appointee

Vice Chairman: BEN BENOIT
Council Member, Wildomar
Cities of Riverside County

MEMBERS:

KATHRYN BARGER
Supervisor, Fifth District
County of Los Angeles

LISA BARTLETT
Supervisor, Fifth District
County of Orange

JOE BUSCAINO
Council Member, 15th District
City of Los Angeles Representative

MICHAEL A. CACCIOTTI
Council Member, South Pasadena
Cities of Los Angeles County/Eastern Region

VANESSA DELGADO
Senate Rules Committee Appointee

GIDEON KRACOV
Governor's Appointee

LARRY MCCALLON
Mayor, Highland
Cities of San Bernardino County

JUDITH MITCHELL
Councilmember, Rolling Hills Estates
Cities of Los Angeles County/Western Region

V. MANUEL PEREZ
Supervisor, Fourth District
County of Riverside

CARLOS RODRIGUEZ
Council Member, Yorba Linda
Cities of Orange County

JANICE RUTHERFORD
Supervisor, Second District
County of San Bernardino

EXECUTIVE OFFICER:

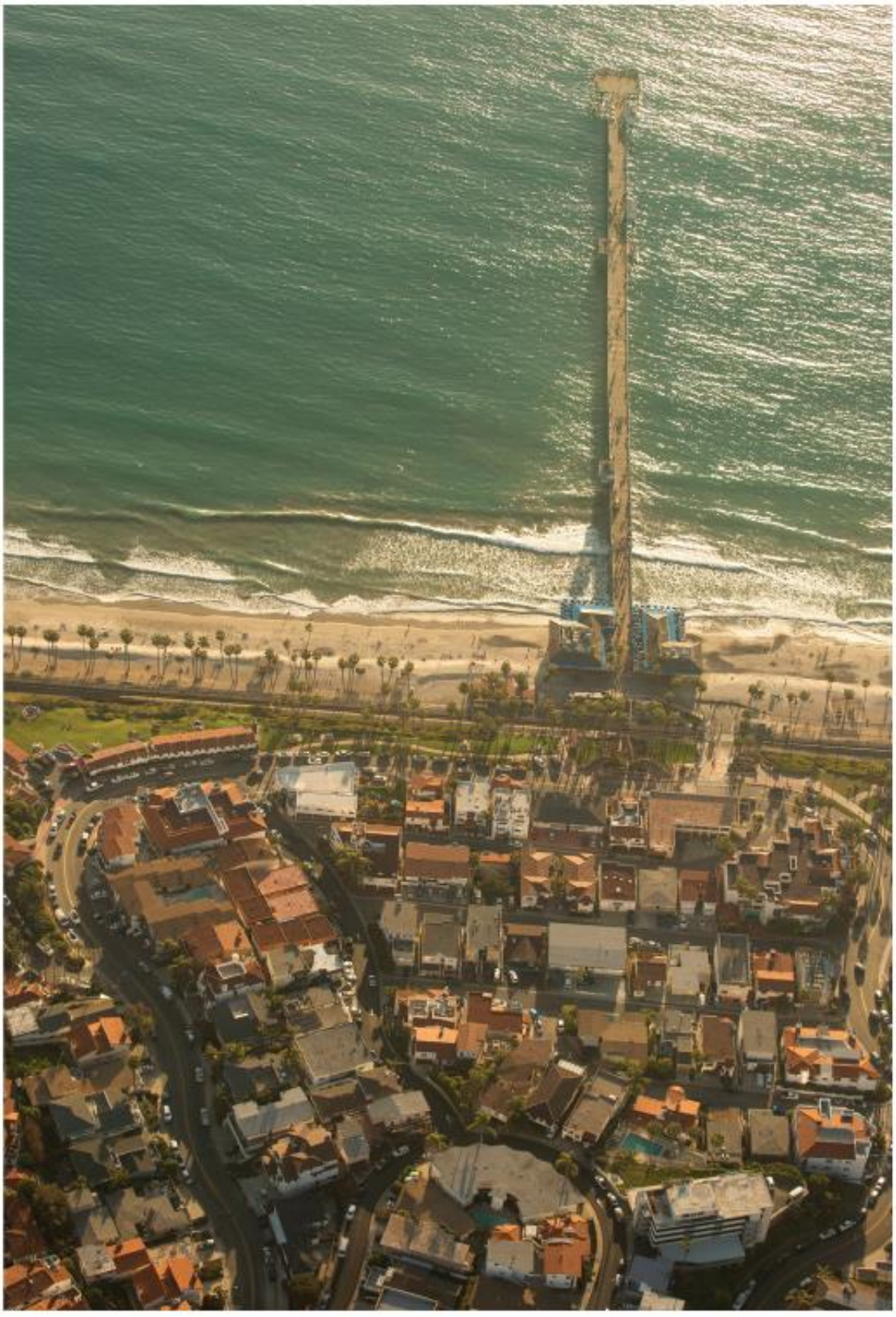
WAYNE NASTRI

Table of Contents

List of Figures

List of Tables

Executive Summary



South Coast AQMD implements the California Air Toxics "Hot Spots" Information Act through Rule 1402 and includes requirements beyond the state law. The AB 2588 Program as implemented under Rule 1402 is only one part of South Coast AQMD's comprehensive program in regulating air toxics. Other elements include permitting, rule development, enforcement efforts, and the Multiple Air Toxics Exposure Study.

Executive Summary

The California Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) was enacted in 1987. It is a key statewide program implemented by local air districts to address health risks from air emissions associated with existing permitted facilities. One of the main goals of AB 2588 is to provide the public with information regarding potential health effects from toxic air contaminants emitted from existing permitted facilities, and to develop plans to reduce associated risks. The South Coast Air Quality Management District (South Coast AQMD) implements AB 2588 requirements through Rule 1402, which includes additional requirements beyond the state law, including a program to encourage facilities to voluntarily reduce risk, and to compel high risk facilities to reduce toxic emissions much more quickly than previously required.

The AB 2588 Program as implemented under Rule 1402 is only one part of South Coast AQMD's comprehensive program in regulating air toxics. Other elements include South Coast AQMD's permitting program and Rule 1401 requirements, enforcement efforts to ensure facilities comply with all applicable air quality requirements, and the Multiple Air Toxics Exposure Study, a study measuring the amount of regional toxic air contaminants and their risks throughout the air basin. Additionally, within the past five years, South Coast AQMD has performed ambient air monitoring in many neighborhoods and found high levels of air toxic contaminants. This monitoring has helped to identify high risk facilities, thereby requiring them to implement risk reduction measures under Rule 1402. Monitoring will also be an important component for implementation of the AB 617 program that targets air pollution reductions in environmental justice communities.

Under state law, South Coast AQMD is required to prepare an Annual Report of activities. This report fulfills that requirement and describes the South Coast AQMD's ongoing efforts to regulate and reduce air toxic emissions.

The following summaries highlight key AB 2588 activities in 2019:

AB 2588 and Rule 1402 Implementation Activities	Prioritized 68 facilities based on their quadrennial toxic emission inventory updates
	Initiated 49 audits based on prioritization scores
	Reviewed 31 ATIRs, 11 HRAs, 5 RRPs, and 5 VRRPs, and 3 revised priority scores from 48 facilities
Streamlining and Program Improvement Activities	Updated AB 2588 Facility Prioritization Procedures
	Provided support to rulemaking and AB 617 staff
	Provided support in implementation of Rules 1420.2 and 1466

Chapter 1

California's Air Toxics "Hot Spots" Program

The California Air Toxics "Hot Spots" Information Act was adopted in 1987 under Assembly Bill 2588. This chapter will cover the elements and requirements of the program including emissions reporting, prioritization, health risk assessments, public notification, risk reduction plans, and industry wide sources.

California's Air Toxics "Hot Spots" Program

Background

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act. The "Hot Spots Act" was proposed under Assembly Bill 2588 and therefore is commonly referred to as AB 2588. Since exposure to toxic air contaminants may produce various adverse health impacts, AB 2588 incorporated certain goals such as to collect emissions data of toxic air contaminants from stationary sources, identify facilities having localized impacts, determine health risks, and notify affected individuals. The California Air Resources Board (CARB) has developed the AB 2588 Program requirements of the "Hot Spots" Act; however, local air districts are required to implement and enforce the requirements. This chapter describes the state requirements of the AB 2588 Program.

Emissions Reporting

Facilities are subject to AB 2588 reporting requirements if they emit any toxic air contaminants listed by CARB in the *Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program* (CARB Emission Inventory Guidelines).[1] Under the AB 2588 Program, larger facilities (core facilities) are subject to individual reporting requirements while facilities that are generally small businesses are in the industrywide source (IWS) categories, which are described later in this chapter. CARB Emission Inventory Guidelines provides both criteria and direction for facilities to compile and submit air toxic emission data. The requirements within the CARB Emission Inventory Guidelines have been incorporated by reference into title 17 of the California Code of Regulations and thus are enforceable.

Prioritization

Core facilities in the AB 2588 Program submit an air toxics inventory once every four years. The AB 2588 Program requires air districts to categorize each facility using the reported emissions as either high, intermediate, or low priority to determine if a facility needs to conduct a Health Risk Assessment (HRA) and to determine appropriate program fees. The California Air Pollution Control Officers Association (CAPCOA) *Facility Prioritization Guidelines* (CAPCOA Prioritization Guidelines) provides state-wide guidance to local air districts for prioritizing facilities.[2]

The CAPCOA Prioritization Guidelines presents two procedures for prioritizing facilities. The emission and potency procedure relies on three parameters to prioritize facilities: emissions, potency or toxicity, and the proximity of potential receptors; the dispersion adjustment procedure relies on four parameters: emissions, potency or toxicity, dispersion, and receptor proximity. While

[1] *Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program*, September 26, 2007, California Air Resources Board https://www.arb.ca.gov/ab2588/final/reg.pdf

[2] *Facility Prioritization Guidelines*, August 2016, California Air Pollution Control Officers Association http://www.capcoa.org/wp-content/uploads/2016/08/CAPCOA%20Prioritization%20Guidelines%20-%20August%202016%20FINAL.pdf

there are two procedures, both are similar in nature and involve calculating scores for separate health effects in order to derive a final score.

Using the procedures, a facility first receives separate scores for carcinogenic (cancer) effects and non-cancer chronic and acute effects. The facility is then given a Total Facility Score (TS) which is the higher of these scores. The Total Facility Scores are separated into three categories: high priority are those with TS greater than 10, intermediate priority for less than or equal to 10 but greater than one, and low priority for TS less than or equal to one. Once a facility is designated as high priority, they may be required to submit a Health Risk Assessment to assess the risk to their surrounding community. Facilities ranked with intermediate priority are considered to be District Tracking facilities and must continue to submit toxics emissions reports on a quadrennial basis. Facilities ranked with low priority may be eligible to be exempted from the AB 2588 Program altogether.

Priority Score	Category	Action
TS > 10	High Priority	Submit HRA
1 < TS ≤ 10	Intermediate Priority	No HRA required; continue toxics emissions reports
TS ≤ 1	Low Priority	May be eligible to be exempt from AB 2588 Program

Health Risk Assessments

AB 2588 requires that the Office of Environmental Health Hazard Assessment (OEHHA) develop risk assessment guidelines for the program. The most recent version of these guidelines is the February 2015 version of *The Guidance Manual for Preparation of Health Risk Assessments*[3] (OEHHA HRA Guidelines). The 2015 OEHHA HRA Guidelines incorporated age sensitivity factors which resulted in increased cancer risk estimates by approximately three times. The OEHHA HRA Guidelines contains a description of the algorithms, recommended exposure variates, cancer and non-cancer health values, and the air modeling protocols needed to perform a HRA in accordance with the state AB 2588 Program. The entire risk assessment process can be characterized in four steps described below:

Hazard Identification

Hazard Identification involves identifying all toxic air contaminants emitted from a facility and whether these pollutants are potential human carcinogens or non-carcinogens containing other types of adverse health effects. A facility must identify all substances that are listed in the CARB Emissions Inventory Guidelines.

Exposure Assessment

The purpose of the exposure assessment is to estimate extent of public exposure of emitted toxic air contaminants, and estimating exposures for which potential health effects will be evaluated.

[3] https://oehha.ca.gov/media/downloads/crnr/2015guidancemanual.pdf

Evaluating exposure involves emission quantification, air dispersion modeling, and identifying exposure routes and exposure durations.

Dose Response

Dose-response assessment is the process of characterizing the relationship between exposure to a toxic air contaminant and the incidence of an adverse health effect in exposed populations. For dose-response, OEHHA has compiled cancer potency factors and non-cancer reference exposure levels (RELs) for certain toxic air contaminants. By using these factors along with the estimated exposure information for the toxic air contaminants identified during the hazard identification process, potential cancer and non-cancer risks can be evaluated during risk characterization.

Risk Characterization

Risk characterization is the final step of the risk assessment process. Modeled concentrations and exposure information determined through the exposure assessment process are used with cancer potency factors and non-cancer RELs to assess total cancer risk and noncarcinogenic health effects. An HRA shows the combined cancer risk and non-cancer risk for all toxic air contaminants emitted from a specific facility.

Public Notification

Public notification is a core element of the AB 2588 Program requirements. California Health and Safety Code (H&S Code), Section 44362(b) requires the operator of the facility to provide notice to all exposed persons regarding the results of the HRA if the local air district finds there is significant health risk from the facility. The public notification procedures are specified by the local air districts.

Risk Reduction Plans

In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan (SB 1731), which required each air district to specify the significant risk level, above which risk reduction would be required. The requirements of SB 1731 are found in California H&S Code, Sections 44390 through 44394. The requirements are for facilities to audit and identify the source of toxic emissions and risk, then develop and carry out a plan to reduce the emissions and risk. This state law also presents an implementation timeline for risk reduction plans; however, local air districts may create more stringent timelines in their respective programs.

Industrywide Sources

Under the AB 2588 Program individual air districts may designate separate IWS categories. Facilities falling into this category are generally small businesses where individual compliance would impose economic hardship. The advantage to industrywide categories is that compliance may be handled collectively for each category rather than each individual facility. For each IWS category, a district may prepare an industrywide emission inventory and HRA. The California Air Pollution Control Officers Association (CAPCOA), in cooperation with OEHHA and CARB

develop IWS risk assessment guidelines.[4] These guidelines provide a cost-effective and uniform method for calculating facility emissions and estimating toxic risks for these facilities under each air district's jurisdiction.

The requirements for designating individual IWS categories are:

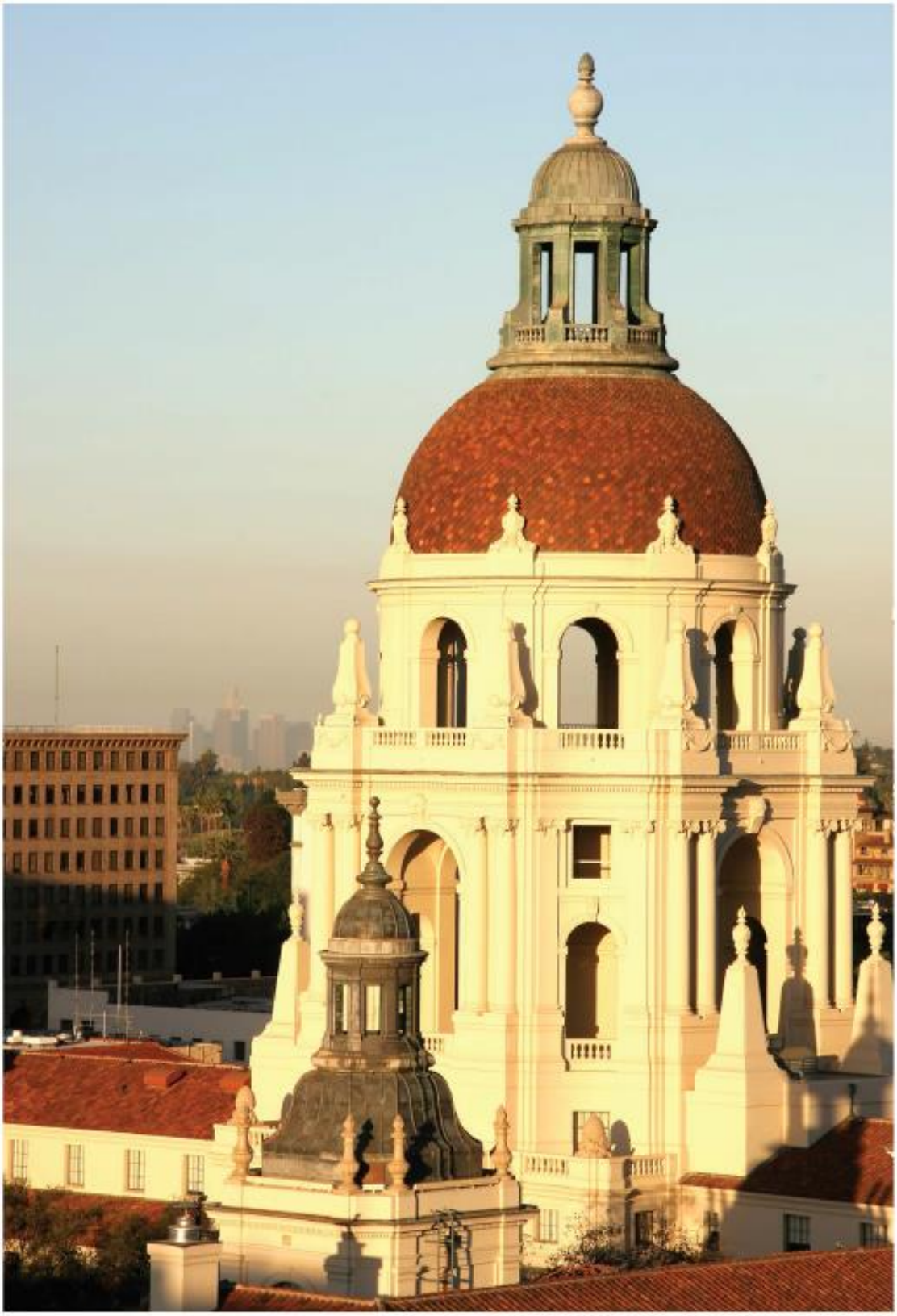
- facilities must emit less than 10 tons per year of criteria pollutants;
- facilities share a common Standard Industrial Classification (SIC) code;
- the majority of the class are small businesses;
- individual compliance would impose severe economic hardships; and
- emissions are easily and generically characterized.

Periodic Updates to the AB 2588 Guidelines

The AB 2588 Air Toxics "Hot Spots" Emissions Inventory Criteria and Guidelines Regulation (EICG) provides direction and outlines the requirements for quantifying and reporting air toxics emissions required by the "Hot Spots" Program. The current regulation was approved by the Office of Administrative Law on August 27, 2007. CARB is currently working on updating the EICG which includes updating the list of chemicals required to be quantified and reported to CARB. The updated EICG is expected to be published in late 2020.

[4] Three IWS risk assessment guidelines have been published: autobody shops, dry cleaners, and retail gasoline stations https://ww3.arb.ca.gov/ab2588/riskassess.htm

Chapter 2
South Coast AQMD's Air Toxics "Hot Spots" Program



South Coast AQMD's Air Toxics "Hot Spots" Program incorporates the requirements of the state AB 2588 program through Rule 1402. South Coast AQMD has achieved significant reductions in air toxics in the Basin. This chapter covers the elements and requirements of the South Coast AQMD Air Toxics "Hot Spots" Program and outlines the AB 2588 staff activities in 2019.

South Coast AQMD's Air Toxics "Hot Spots" Program

Background

The South Coast AQMD's Air Toxics "Hot Spots" Program incorporates the requirements of the state AB 2588 program, as well as additional and/or more stringent requirements. Despite being one of the smoggiest urban areas in the U.S., South Coast AQMD has achieved significant reductions in air toxics in the Basin. For example, monitoring studies have shown that cancer risks have decreased by more than 50 percent in the past decade alone.[5] While these reductions were primarily attributable to reductions in diesel particulate matter, there have also been a significant reduction in risks from stationary source facilities. The AB 2588 Program as implemented by South Coast AQMD has played a significant role in achieving those reductions, by improving public awareness thereby leading many businesses to voluntarily reduce their toxic emissions, and through mandatory risk reductions triggered by facilities exceeding health risk thresholds. Figure 2-1[6] below demonstrates the reductions in risk that have been achieved despite the substantial number of facilities located within our district.

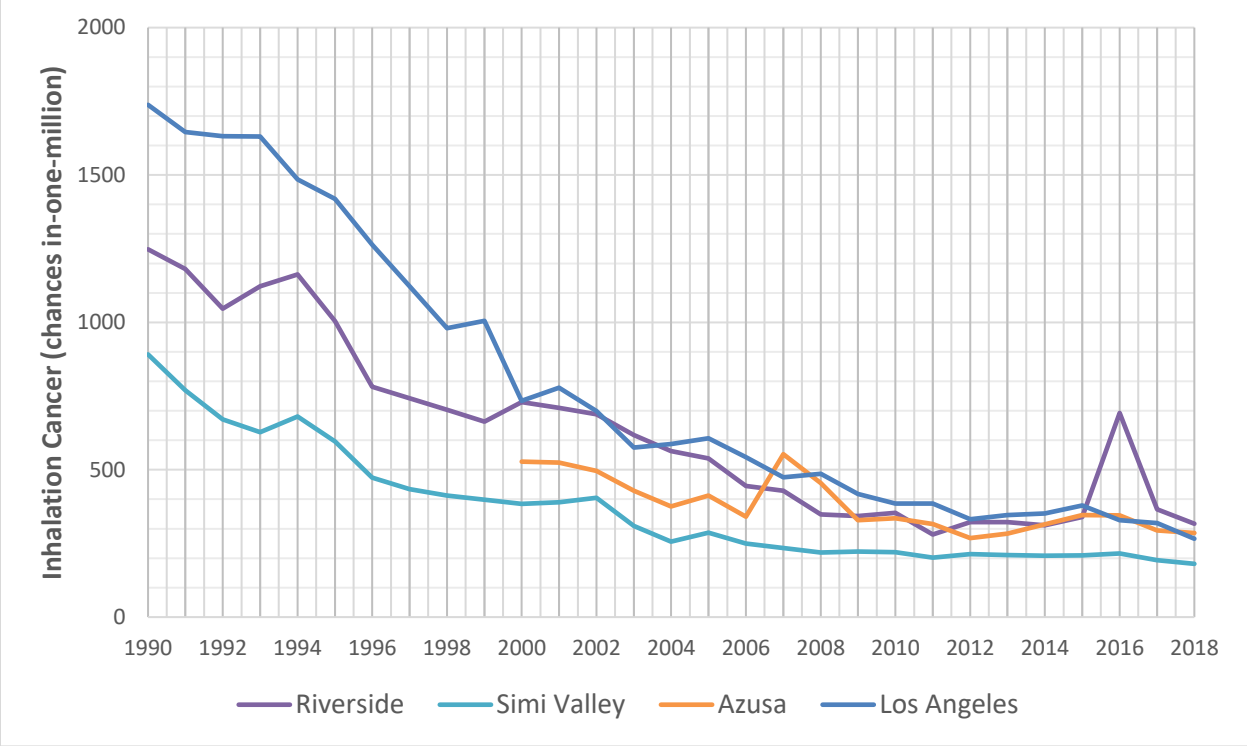


Figure 2-1: Trends in Inhalation Cancer Risks[7] in the Basin (1990-2018)

[5] Reductions measured between the Multiple Air Toxics Exposure Studies (MATES) versions III and IV: https://www.aqmd.gov/docs/default-source/default-document-library/mates-v-admin-comm-presentation-060917final_jg.pdf

[6] See Appendix B for more information on the monitoring stations and monitoring network within the Basin.

[7] Calculated with 2015 OEHHA Risk Assessment Guidelines, excluding cancer risks from DPM.

There was an increase in risk in 2016 due to elevated methylene chloride readings in Riverside county. However, the readings from 2016 were not consistent with historical trends, and readings have since decreased. Additional details are provided in Appendix B.

South Coast AQMD *Rule 1402 - Control of Toxic Air Contaminants from Existing Sources* implements various aspects of AB 2588 and SB 1731 including public notification and risk reduction requirements for facilities. Rule 1402 adopts health risk thresholds and implementation schedules that are above what are specified in AB 2588 and SB 1731. Rule 1402 was most recently amended in October 2016. This most recent amendment included a new provision beyond what is required under state law. This provision created a Voluntary Risk Reduction Program that allows facilities to implement early risk reduction measures that go beyond the normal risk reduction thresholds in exchange for an alternative public notification process. At the same time, a Potential High Risk Level facility category was also created. Facilities designated under the Potential High Risk Level category must comply with expedited schedules for submitting an Air Toxics Inventory Report (ATIR) and HRA reports and for reducing risk. Both the Voluntary Risk Reduction Program and the new Potential High Risk Level category result in facilities evaluating and reducing their associated air toxics risks faster than would occur under the state AB 2588 program alone.

Program Implementation Elements

Under South Coast AQMD's AB 2588 Program, core facilities are categorized into four groups, or phases. Phases are assigned to discrete reporting years with each phase reporting once every four years. Currently, there are over 400 core facilities as categorized in Table 2-1 that are subject to the following main components of the South Coast AQMD's AB 2588 Program:

- **Emissions Reporting** – Since the FY 2000-01 reporting cycle, toxics emissions reporting for the AB 2588 Program was incorporated into South Coast AQMD's Annual Emissions Reporting (AER) Program. Core facilities must report emissions of any toxic air contaminants or ozone depleting compounds (ODC) specified in South Coast AQMD's Rule 301(e) through the AER Program. Since there are four phases, each core facility is required to submit a more detailed inventory by reporting 177 toxic air contaminants during the quadrennial reporting year. This detailed inventory serves as a foundation for an ATIR, if required.

- **Prioritization** – South Coast AQMD uses a refined method for prioritizing facilities based on CAPCOA Guidelines. The current South Coast AQMD Procedure incorporates the revised risk calculation methodologies from the 2015 OEHHA HRA Guidelines. The South Coast AQMD Prioritization Procedure is described in more detail in the *Streamlining Activities* chapter.

  In 2019, 68 facilities were required to report their quadrennial toxic emission inventory updates. Based on emissions inventory submittals, South Coast AQMD staff calculated priority scores for these facilities.

- **Health Risk Assessment** – High priority facilities (those with priority scores greater than ten), including those that qualify for the Voluntary Risk Reduction Program, are required

to prepare an ATIR, a complete and detailed inventory of approximately 450 toxic air contaminants, along with detailed information about the processes and release points using the Emissions Inventory Module from the latest CARB Hotspots Analysis and Reporting Program (HARP). For facilities participating in the traditional pathway, if the ATIR indicates that the facility is still considered a high priority, the facility must prepare an HRA that conforms to the OEHHA HRA Guidelines. Specific instructions for the South Coast AQMD are also available in the *AB 2588 and Rule 1402 Supplemental Guidelines, (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act).*[8] This document is commonly referred to as the AB 2588 Supplemental Guidelines.

- **Public Notification** – If the health risk reported in the HRA exceeds the Notification Risk Levels of Rule 1402, then the facility is required to provide public notice to the affected community. The Notification Risk Levels of Rule 1402 are triggered when cancer risk from the facility exceeds 10 chances in-one-million, or when the acute or chronic hazard indices are greater than 1. The requirements for public notification are described in the *South Coast AQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402*, October 2016 (South Coast AQMD Public Notification Procedure).[9] These requirements emphasize transparency in communicating risk to the affected community in the following ways:

    - The notice must clearly identify the area above the notification thresholds.
    - The notice must be distributed to all addresses (individual residences and workplaces), and to parents of children attending school in the area of impact.
    - The approved HRA must also be provided to all schools in the area of impact.
    - South Coast AQMD conducts a public meeting to describe the HRA results to the affected community and to answer questions from community members.

- **Risk Reduction** – Rule 1402 adopts stringent health risk thresholds and aggressive implementation schedules that are beyond the traditional AB 2588 and SB 1731 state requirements (see Table 2-2 for associated categories). Under state requirements, facilities exceeding a significant risk threshold must reduce risk within five years. Under Rule 1402, Potential High Risk Level facilities must submit an Early Action Reduction Plan to immediately reduce risk, followed by a detailed Risk Reduction Plan designed to comprehensively reduce risk. The Risk Reduction Plan under Rule 1402 must be implemented as quickly as feasible, but no later than two years after approval. Facilities exceeding the Action Risk Level under Rule 1402 must also implement risk reduction plans no later than two and a half years after risk reduction plan approval.[10] Rule 1402 also

[8] *AB 2588 and Rule 1402 Supplemental Guidelines, (Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act)*, September 2018, South Coast AQMD.

[9] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn_procedures.pdf

[10] Rule 1402 allows extensions but only for those facilities that meet certain requirements. Extensions are not allowed for facilities exceeding the Significant Risk Level. Even with extensions, the implementation timelines are shorter than state requirements.

includes an optional Voluntary Risk Reduction Program provision that is designed to achieve risk reductions that are not otherwise required under state program requirements. In order to qualify for the Voluntary Risk Reduction Program, a facility must have a previously approved HRA and must not be designated as a Potentially High Risk Level facility.

- **Fees** – State and local costs of implementing the Act are recovered through annual fees. As described previously, AB 2588 requires each district to recover state and district program costs. These fees are specified in South Coast AQMD Rules 307.1.

Table 2-1: AB 2588 Facilities by Source Category

Facility Categories	Number of Facilities
Airports	1
Amusement Parks	2
Entertainment	5
Harbors	1
Hospitals and Health-Related	30
Military Base	4
Office Buildings	1
Schools and Educational Institutions	16
Other Institutional/Commercial	19
Other Service/Commercial	5
Dairy/Poultry Farms	9
Other Agricultural Processing	2
Fermentation and Brewing (Breweries/Distilleries/Wineries)	1
Food flavoring manufacturing	1
Pharmaceuticals	4
Other Food Processing Facility	1
Bulk Plants	19
Terminal Depots	13
Electricity Generation	35
Petroleum Refinery	10
Crude Oil Production	35
Aerospace	41
Building/Construction/Mineral Products	44
Cement Production	1
Chemical Plants	12
Electronic	4
Furniture/Household Products	2
Glass Production	1
Hydrogen Production	3
Iron and Steel Production	7
Metal and Alloys Products	27

Facility Categories	Number of Facilities
Printing/Publishing	2
Pulp and Paper Manufacturing	5
Other Industrial/Manufacturing	63
Landfill – Industrial Waste	1
Landfill - Municipal Solid Waste	20
Wastewater Treatment – Industrial	1
Wastewater Treatment – Municipal	21
Other Waste Disposal	2
Total Facilities	**471**

Table 2-2: Rule 1402 Risk Categories

Rule 1402 Levels	Thresholds	Requirements	RRP Implementation Timeline
Notification Risk Level	Cancer risk of 10 chances in-one-million or greater Acute or chronic HI of 1.0 or greater Exceeding lead National Ambient Air Quality Standard (NAAQS)	Public notification	No risk reduction required
Voluntary Risk Level	Cancer risk of 10 chances in-one-million or greater Acute or chronic HI of 1.0 or greater Exceeding lead National Ambient Air Quality Standard (NAAQS)	Public notification (modified) and implement VRRP	No later than 2.5 years after approval of plan (an additional 2.5 years extension may be requested)
Action Risk Level	Cancer risk greater than 25 chances in-one-million Cancer burden of 0.5 or more Acute or chronic HI of 3.0 or more Exceeding lead NAAQS	Public notification and implement RRP	No later than 2.5 years after approval of plan (an additional 2.5 years extension may be requested)
Significant Risk Level	Cancer risk of 100 chances in-one-million or greater Cancer burden of 0.5 or more Acute or chronic HI of 5.0 or more	Public notification and implement RRP	No later than 2 years after approval of plan for facilities designated as Potentially High Risk Facilities

Figure 2-2 below shows the process used by South Coast AQMD to implement AB 2588 under Rule 1402.

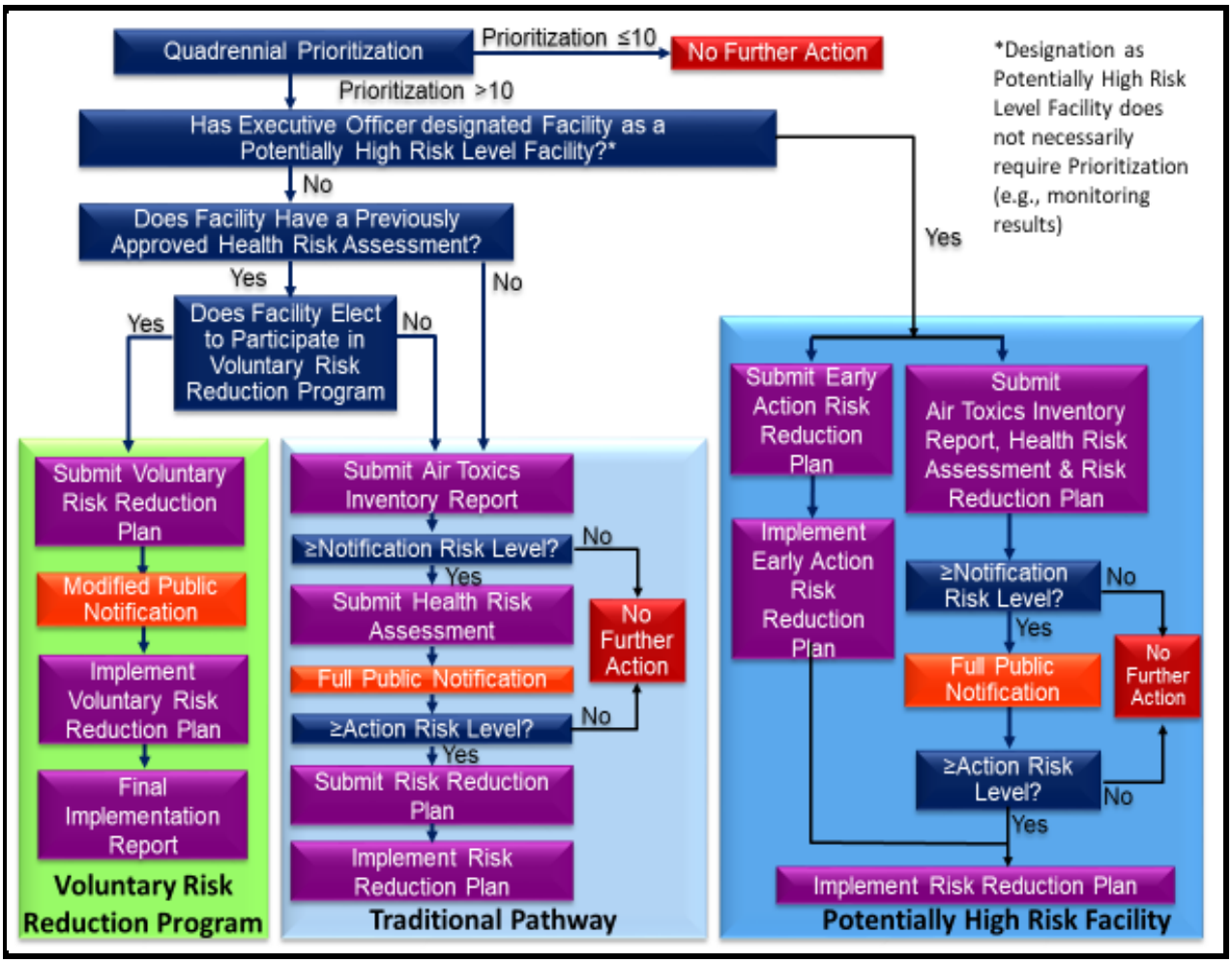


Figure 2-2: Overview of the AB 2588 Program

Progress in Implementing the AB 2588 Program

From the beginning of the AB 2588 Program in 1987 through the end of 2019, staff has reviewed and approved 349 HRAs from 339 facilities. There are more approved HRAs than facilities as some facilities have prepared more than one HRA. Of these 339 facilities, 28 were required to implement risk reduction measures, 61 were required to perform public notification activities, while the remaining facilities were below the public notification threshold. As a result of the AB 2588 Program, about 95 percent of facilities that have been in the Program historically have HRAs demonstrating cancer risks below ten chances in-one-million and a hazard index (HI) of less than 1.0 for both non-cancer acute and non-cancer chronic, or their emissions have been low enough to not require an HRA. The summary of risks from approved HRAs illustrated in Figure 2-3 is based on the information in Appendix C, which lists the core facilities and the health risks from their approved HRAs. Table C-1 in Appendix C lists the facilities in order of their cancer

risks and Table C-2 in Appendix C lists the same facilities ordered by facility ID. Table D-1 in Appendix D lists facilities which have prepared a Risk Reduction Plan (RRP) for the AB 2588 Program and their corresponding health risks [H&S Code 44363(a) (2) and (3)] and Table D-2 in Appendix D lists facilities which have successfully participated in the Voluntary Risk Reduction Program. Appendix E contains a list of acronyms and abbreviations used in this report.

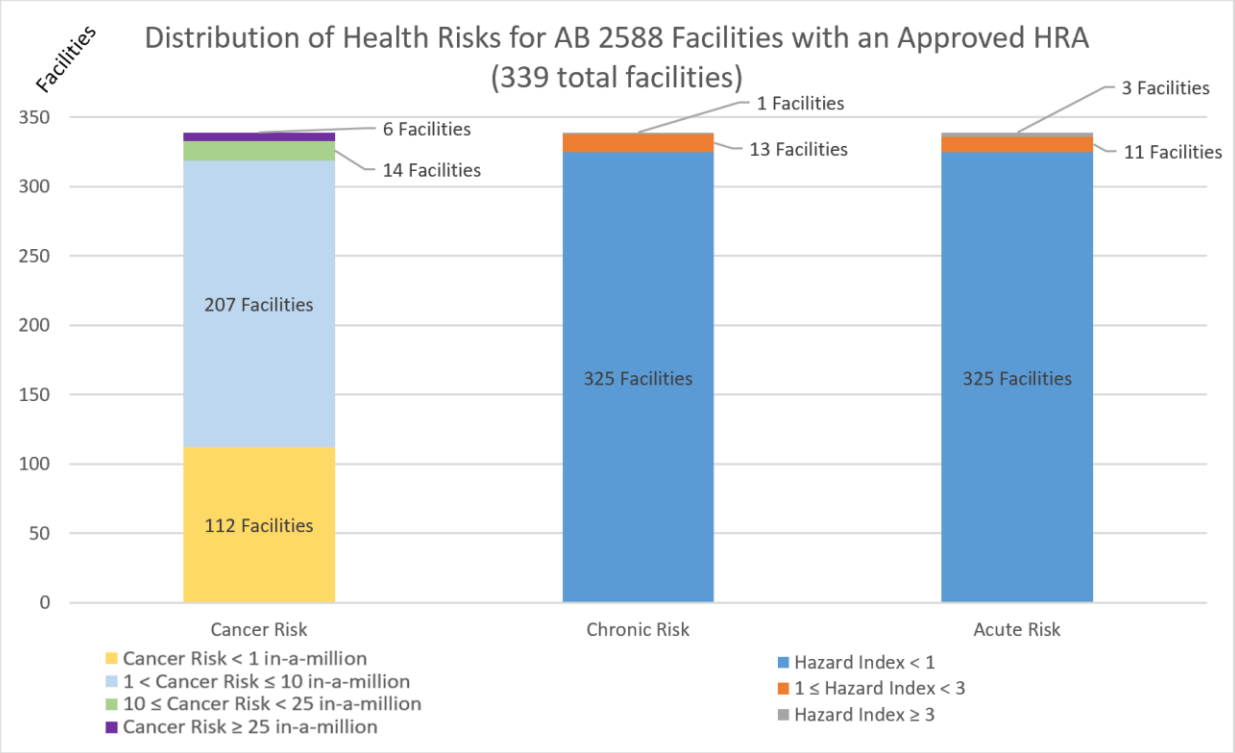


Figure 2-3: Distribution of Risks for AB 2588 Facilities with an Approved HRA

Summary of South Coast AQMD Staff Activities for AB 2588 Facilities in 2019

In 2019, staff addressed facilities in various stages of the AB 2588 process and initiated audit activities on 49 facilities with priority scores greater than 10. Key activities conducted include review of 31 ATIRs, 11 HRAs, five RRPs, five Voluntary Risk Reduction Plans (VRRPs), and three revised priority scores. Many of these key activities were for facilities that tend to have more sources and are more complex such as refineries and other industrial facilities. Overall, a total of 212 documents were reviewed in 2019 from 48 facilities, with some facilities having multiple documents submitted for South Coast AQMD staff review. Table 2-3 presents a summary of key activities for facilities participating in the traditional AB 2588 Program and Table 2-4 presents a summary of key activities for facilities participating in the Rule 1402 Voluntary Risk Reduction Program.

Table 2-3: Actions Taken in 2019 for Facilities in the Traditional AB 2588 Program

Facility Name	ID #	ATIR		HRA		RRP		Status
		R	A	R	A	R	A	
Aerocraft Heat Treating Co. Inc. [a]	23752						X	See Appendix A.2
Air Liquide Large Industries U.S., LP	148236	X						
All American Asphalt - Irwindale	114264							See Appendix A.4
All American Asphalt - Perris	148146							See Appendix A.5
Anaplex Corp [a]	16951					X		RRP initially rejected on 04/24/2019. See facility entry in Appendix A.6
Arconic Global Fasteners & Rings, Inc.	134931							See Appendix A.7
City of Cerritos, Water Division	74396							See Appendix A.10
Eco Services Operations Corp. [b]	180908							See Appendix A.11
Eisenhower Medical Center	3671	X	X					
Equilon Enter. LLC, Shell Oil Prod. US [b]	800372			X				
Evonik Corporation [b]	183926							See Appendix A.15
Gerdau/TAMCO	18931							See Appendix A.16
Glendale City, Glendale Water & Power [b]	800327				X	X		Public notification meeting on 06/26/2019.
Hixson Metal Finishing	11818							See Appendix A.18
Holliday Rock Co., Inc.	41580	X	X					
Kirkhill Inc [b]	187823			X	X			Public notification meeting on 11/13/2019.
LA City, Sanitation Bureau (Hyperion Treatment Plant) [b]	800214		X					VRRP approved as ATIR
LA City, Street Maintenance Bureau Department of Public Works	25196							See Appendix A.23
Light Metals [b]	83102	X						
Los Angeles By-Products	60384							See Appendix A.25
Lubeco Inc [a]	41229				X	X		
MM West Covina LLC [b]	113873			X				

Facility Name	ID #	ATIR		HRA		RRP		Status
		R	A	R	A	R	A	
Motion Picture & Television Fund	16211							See Appendix A.28
PABCO Bldg Products LCC	45746							See Appendix A.29
Pac Rancho, Inc.	140871							See Appendix A.30
Pacific Clay Products, Inc.	17953							See Appendix A.30
Pasadena Department of Water and Power [b]	800168	X	X					
Phillips 66 Co/LA Refinery Wilmington Plant [b]	171107		X	X				
Phillips 66 Company/Los Angeles Refinery [b]	171109		X					VRRP approved as ATIR
Plains West Coast Terminals	800417							See Appendix A.35
Robertson's Ready Mix – Redlands	42623							See Appendix A.36
Robertson's Ready Mix – Gardena	134112							See Appendix A.37
San Diego Gas & Electric	4242							See Appendix A.38
SFPP, L.P [b]	800278							See Appendix A.39
So Cal Edison Co [b]	4477		X	X				
So Cal Gas Co./Playa del Rey Storage Facility	8582				X	X	X	Modified public notice posted on 01/02/2019. See facility entry in Appendix A.41.
So Cal Holding, LLC	169754				X			
Tesoro Refining & Marketing Co., LLC, Calciner [b]	174591		X					VRRP approved as ATIR
Tesoro Refining & Marketing Co., LLC (Sulfur Recovery Plant) [b]	151798		X					VRRP approved as ATIR
TST, Inc. [b]	43436	X	X					
Vista Metals Corporation [b]	14495							See Appendix A.50
Vorteq Pacific	191677							See Appendix A.51
Whittier Fertilizer	511	X	X	X				

Notes:

For ATIRs, HRAs, and RRPs: R=Report Received; A=Report Approved.

[a] Classified as Potentially High Risk Level Facility and under an Order for Abatement during 2018.

[b] Indicates facility notified to prepare either an ATIR or a VRRP. Facilities listed in this table elected to prepare an ATIR.

Table 2-4: Actions Taken in 2019 for Facilities in the Voluntary Risk Reduction Program

Facility Name	ID #	VRRP		Status
		R	A	
Chevron Products Co. (El Segundo Refinery)	800030		X	
Elite Comfort Solutions	182610	X		
Tesoro Refining & Marketing Co., LLC, Los Angeles Refinery	800436			See Appendix A.44
	174655			
	174694			
	174703			
Torrance Refining Company LLC	181667			See Appendix A.46
Ultramar Inc	800026			See Appendix A.49

Notes:

For VRRPs: R=Report Received; A=Report Approved.

A description of these activities for each facility in Tables 2-3 and 2-4 is listed in Appendix A

Air Monitoring Activities

In addition to the AB 2588 Program, South Coast AQMD also conducts other activities to address air toxics, including special monitoring projects. In 2013, South Coast AQMD staff began conducting an investigation into local sources of emissions, including initiating a local air sampling study after receiving a series of metallic odor complaints from local community members in the City of Paramount (Paramount) and surrounding areas. The purpose of these activities was to determine the source of emissions and potential air pollution control strategies. This investigation focused on two toxic metals of concern: nickel and hexavalent chromium. Monitoring efforts have been expanded and now includes West Rancho Dominguez.

Paramount

In July 2016, a larger number of samplers were deployed to allow South Coast AQMD to better measure spatial and temporal variations of hexavalent chromium in the area and identify its potential sources. In October 2016, South Coast AQMD initiated an extensive air monitoring campaign to assess levels of hexavalent chromium in the industrialized sections of Paramount. Highly elevated levels were found initially and additional efforts were conducted to identify and address sources of hexavalent chromium that were impacting nearby communities. Once potential sources were identified, the sampling strategy was adjusted to focus on specific facilities and on characterizing hexavalent chromium levels in the adjacent communities. As a result, several facilities made a range of improvements, some voluntary and some through rule changes and enforcement actions. These changes have substantially reduced ambient hexavalent chromium levels in Paramount and surrounding areas. As a result, South Coast AQMD is updating its air monitoring efforts in Paramount to focus on conducting studies to evaluate other potential sources of hexavalent chromium and also monitoring other areas of the Basin that may have higher potential for air toxics exposure.

Throughout this period, air monitoring in Paramount has occurred at a total of 38 locations as shown in Figure 2-4, and 12 schools. School sampling has been supported by CARB. Currently, South Coast AQMD collects air samples for hexavalent chromium analysis at 16 locations in the City of Paramount. Among these active monitoring locations, six are adjacent to facilities that are operated under an Order of Abatement during 2018 with South Coast AQMD's independent Hearing Board ("Compliance" sites; see Figure 2-4). The remaining monitoring sites are close to other potential sources or near residential areas and sensitive receptors of Paramount. Because hexavalent chromium levels in Paramount have been declining steadily and are now within the typical levels, the size of this monitoring network can be reduced to focus on other areas that have higher potential for air toxics exposure.

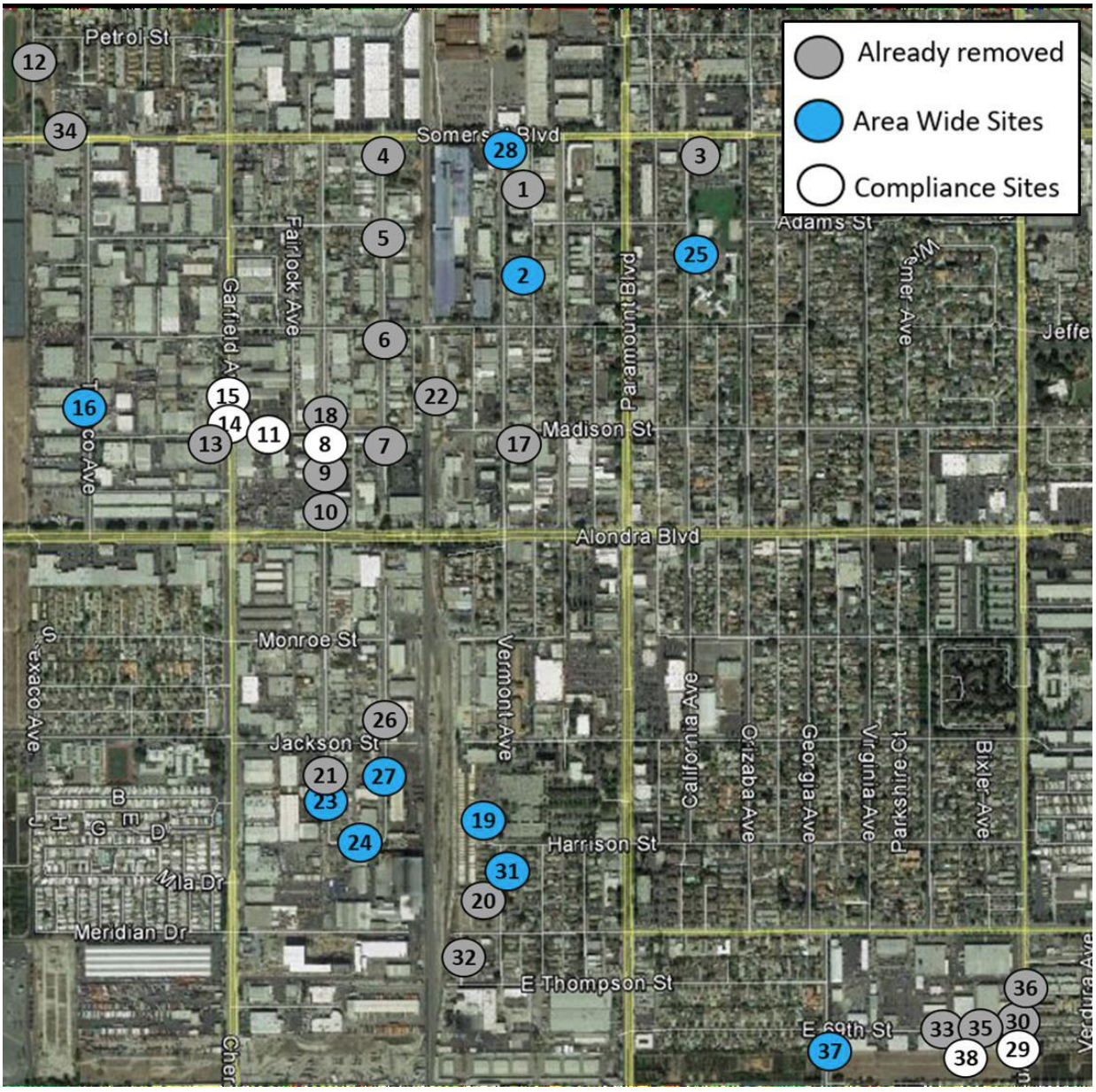


Figure 2-4: Location of the monitoring sites in the City of Paramount

Continued Air Toxics Monitoring in Communities

As a result of lessons learned during South Coast AQMD's investigation into air monitoring for sources of toxic metal emissions in Paramount and other areas, staff continues to investigate, identify and remediate any additional sources across our four-county region that may emit high levels of toxic air contaminants. South Coast AQMD will systematically identify and prioritize high-risk facilities, then use the latest air monitoring technology to confirm specific sources causing high emissions associated with metal-processing facilities. If identified, South Coast AQMD may seek Orders for Abatement from the independent South Coast AQMD Hearing Board to require these facilities to reduce their emissions to a level that does not pose an immediate threat to public health quickly. South Coast AQMD may also designate facilities as Potentially High Risk Level Facilities under Rule 1402.

The goal is to eliminate or minimize the release of hexavalent chromium into the environment associated with metal-processing facilities. This program is expected to be a seven-year, labor-intensive effort with the air monitoring portion costing approximately $6 million to $7 million annually. It will focus on a variety of metal processing facilities across South Coast AQMD's four-county jurisdiction with the potential to emit toxic metal contaminants including hexavalent chromium, lead, arsenic, cadmium and nickel.

As with the process in Paramount, South Coast AQMD staff will engage and communicate regularly about its work with residents, community groups, local governments and their elected officials, partner regulatory agencies, affected facilities and industry groups. South Coast AQMD will seek to leverage the regulatory authorities of other agencies to assist in swiftly curtailing emissions from high-emitting facilities.

West Rancho Dominguez

In June 2019, the South Coast AQMD staff began collecting hexavalent chromium air monitoring samples in West Rancho Dominguez, which is an industrial area within the AB 617 Wilmington, Carson, West Long Beach community. Sampling equipment was installed at 14 different locations within a two-block area and data collected from these locations showed elevated levels of hexavalent chromium. Figure 2-5 below shows the location of the various air monitors. South Coast AQMD has been collecting air samples at Sites #1 through Site #10 since June 5, 2019, while monitoring for Sites #11 through #14 began at the end of July.

South Coast AQMD has been investigating potential sources in the vicinity of these monitors and working with the facilities to identify voluntary actions that could be implemented to reduce hexavalent chromium emissions. These actions include improvements to building enclosures, operational changes, add-on controls, housekeeping measures in addition to new requirements under amended Rule 1469 for chromic acid anodizing and chrome plating facilities requiring additional pollution controls on certain tanks that were previously unregulated resulting in additional hexavalent chromium emissions reductions. South Coast AQMD continues to work with facilities in the area to identify and address additional potential sources of hexavalent chromium.

Monitoring efforts have continued in this area while investigation of potential sources within the vicinity of the monitoring network continues.

Figure 2-5: Location of the monitoring sites in the West Rancho Dominguez

Assembly Bill 617 (AB 617)

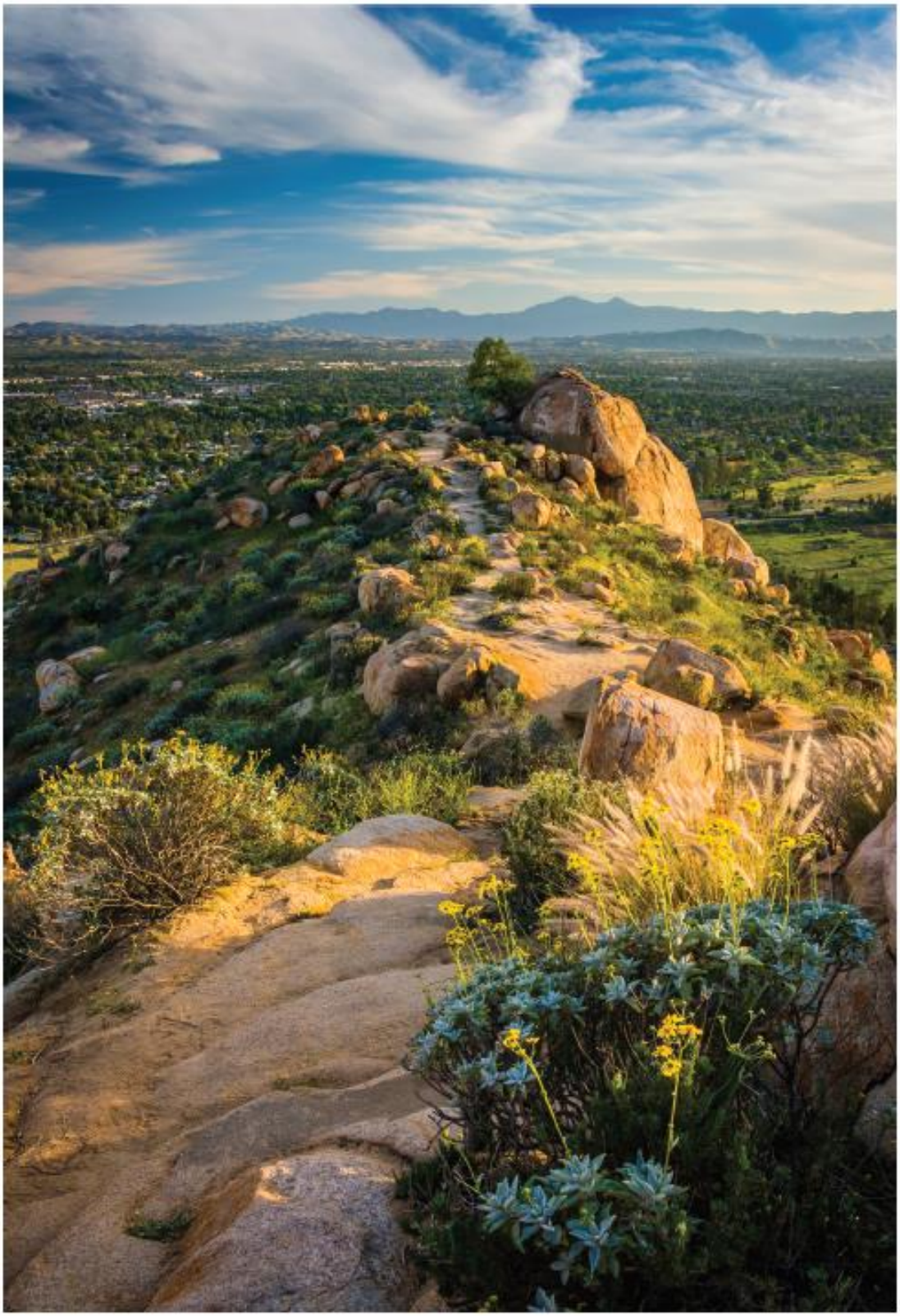
AB 617 was passed by the California legislature in 2017 and focuses on improving air quality and public health in environmental justice communities. This law first allows local residents to provide recommendations for the selection of the environmental justice communities. South Coast AQMD will use updated data to assess the communities most affected, to identify key sources of pollution and develop targeted emissions reduction plans to reduce community exposures to air pollution. Five communities have been selected for the first two years and other communities will be added over time.

For each selected community, South Coast AQMD will work with local stakeholders to evaluate their greatest air pollution concerns. Depending on the needs of each community, South Coast AQMD may conduct targeted community air monitoring and develop a tailored community air plan. South Coast AQMD will work with CARB, other agencies, and all stakeholders to implement these community air plans to reduce local air pollution emissions and benefit public health. CARB approved three communities in September 2018. In December 2019, CARB approved the following two communities in our region for the second year of this program:

- Southeast Los Angeles (including the cities of Bell Gardens, Huntington Park, Cudahy, and South Gate).
- Eastern Coachella Valley (including the cities of Mecca, Coachella, Indio, Thermal, North Shore, and Oasis).

South Coast AQMD has convened a Community Steering Committee in each of the two communities with the purpose of identifying specific community air quality concerns, discussing resolutions, and developing recommendations for improving the local air quality. These committees work closely with South Coast AQMD and CARB to discuss emissions reductions targets and strategies to inform a tailored community air plan that addresses the community's highest priority concerns. South Coast AQMD will deploy systems to monitor air quality in selected communities where this information is most needed. The analysis of the data collected will inform future community emissions reduction plans and will be used to track progress. This information will also be shared with the public and CARB.

Chapter 3
Streamlining Activities



AB 2588 staff continually aim to improve South Coast AQMD's AB 2588 program and to help affected facilities comply with rule requirements. This chapter covers streamlining efforts implemented by South Coast AQMD for the AB 2588 program as well as other streamlining activities to assist other departments within the South Coast AQMD.

Streamlining Activities

Background

South Coast AQMD has undertaken several efforts to help affected facilities comply with rule requirements and to interact with the public regarding general air quality-related issues. This chapter describes these efforts along with the services created to advance these efforts.

South Coast AQMD Guidelines and Procedures for AB 2588

Consolidated Emissions Reporting

As described earlier, core AB 2588 facilities are required to provide an update of their toxics emissions inventory to South Coast AQMD on a quadrennial basis. Beginning with the fiscal year 2000-01 reporting cycle, toxics emission reporting was incorporated into South Coast AQMD's Annual Emissions Reporting (AER) Program. This was the first step towards streamlining emissions reporting between criteria pollutants and toxics. In 2008, South Coast AQMD created a web-based reporting system for facilities. The reporting tool automatically identifies if a facility is in the AB 2588 Program and also informs a facility if a particular year is subject to a quadrennial update. These upgrades and consolidation efforts have made for a much more efficient system that benefits both facilities and South Coast AQMD staff.

Prioritization Procedures

South Coast AQMD has taken various steps over the years in streamlining prioritization procedures for the AB 2588 Program while maintaining consistency with the CAPCOA guidelines. In 2016, South Coast AQMD adopted the use of local meteorological stations and evaluated risks at actual closest receptor locations in addition to evaluating receptors in the worst case wind direction. Most recently in July 2018, the procedures were updated to incorporate the most recent meteorological data set and to simplify the calculation of a facility's non-cancer acute priority score. By using the South Coast AQMD Prioritization Procedure, fewer facilities are incorrectly categorized as high priority. [11] This streamlining is highly effective since less facilities are immediately notified each year.

The AB 2588 group also conducts a detailed audit of those facilities that are initially categorized as high priority to ensure proper designation. Certain steps may include confirming the correct use of emission factors, control efficiencies, source test methods, and relative proportions of toxic air contaminants. Additionally, staff confirms the correct distances to residential and worker receptors as well as any modifications to any equipment for the given quadrennial year and contacts the facility as needed for additional clarification. This additional information obtained through priority score auditing will often negate the need to require an ATIR and HRA. This process and use of this refined priority scoring methodology serves to reduce the number of facilities that are required to be notified and overall reduces unnecessary workload for the facilities and for staff.

[11] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-facility-prioritization-procedure-201809.pdf

Hotspots Analysis and Reporting Program (HARP)

The Hotspots Analysis and Reporting Program, commonly known as HARP, is a software suite developed by CARB that assists with the technical requirements of the AB 2588 Program. HARP consists of three independent modules: the Emissions Inventory Module, Air Dispersion Modeling and Risk Tool, and Risk Assessment Standalone Tool. South Coast AQMD requires the use of HARP for Rule 1402 related work such as ATIRs, VRRPs, and HRAs. The use of HARP by facility operators, and other individuals promotes consistency and a more efficient and cost-effective way to develop inventories and conduct HRAs.

General Supplemental Guidelines

The OEHHA HRA Guidance defers to local air districts for specific or additional requirements. The AB 2588 Supplemental Guidelines lists the specific instructions for preparing AB 2588-related documents in South Coast AQMD. By clearly indicating what is required from facilities and by periodically updating the document as needed, South Coast AQMD ensures that facilities have a clear and up to date understanding of all requirements. This will also minimize the amount of general inquiries and preliminary discussions, provided for a more efficient process.

Voluntary Risk Reduction Program

Another element streamlining the South Coast AB 2588 Program is the provision for the Voluntary Risk Reduction Program. We amended Rule 1402 to provide this option in response to industry interest in a mechanism to voluntarily reduce health risks from their facilities in return for modified public notification requirements. A facility may participate in the Voluntary Risk Reduction Program only if it has a previously approved HRA that is below the Action Risk Level and is not a Potentially High Risk Level facility. This program provides a more expeditious risk reduction program than the traditional pathway under state requirements, and also reduces notification requirements and other process for participating facilities. Under the traditional program, facilities are required to reduce cancer risk below 25 chances in-one-million. To successfully participate in the Voluntary Risk Reduction Program, risks from the participating facility must be reduced below 10 chances in-one-million, which is up to 60% reduction in cancer risk. To further expand the use of the Voluntary Risk Reduction Program and assist facilities, the AB 2588 staff developed guidelines that describe the requirements of a VRRP in September 2018.[12]

Air Dispersion Modeling

Modeling Guidance

The United States Environmental Protection Agency's (U.S EPA) air quality dispersion model AERMOD is required for use to estimate concentrations of toxic air contaminants for risk assessments conducted pursuant to Rules 1401 and 1402. The AERMOD model is a steady-state Gaussian plume model capable of estimating pollutant concentrations from a wide variety of

[12] *South Coast AQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program*, September 2018. http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-vrrp-guidelines-201809.pdf

sources that are typically present at a facility. It is a stand-alone application, but has also been incorporated into the CARB-developed HARP program as well as other programs from third party developers. South Coast AQMD has developed guidance regarding the use of AERMOD to assist modelers such as the use of regulatory defaults, averaging times, receptor grids and elevation data.[13] The AB 2588 Program staff has provided specific guidance regarding the required parameters in the HARP program. This guidance not only increases the quality of submissions but also decreases the amount of time spent by staff to answer basic questions.

Meteorological Data

South Coast AQMD has prepared meteorological data from 24 stations throughout the South Coast Air Basin for download. The South Coast AQMD website includes a map showing the locations of each of these meteorological stations along with the corresponding most recent five years of meteorological data for each station. The meteorological station that best represents the facility's meteorological conditions (such as prevailing winds), terrain, and surrounding land use should be used in all modeling analyses. In many cases, this would be the nearest located station. South Coast AQMD staff are available to provide assistance to modelers to ensure the most representative station is used.

Other Streamlining Activities

Rule 1401 Guidance

Rule 1401 requires any new, modified, or relocated permit units which emit toxic air contaminants to comply with certain allowable limits. South Coast AQMD has developed the Rule 1401 Risk Assessment Procedures[14] to assist applicants as well as staff to evaluate Rule 1401 and 1401.1 compliance. The guidance document provides four tiers to determine health risk for Rule 1401 risk assessment, ranging from a quick look up table that uses very conservative health-protective values, to instructions to conduct detailed risk assessments involving air quality dispersion modeling analysis. By allowing permit applicants to utilize this tiered option to demonstrate compliance with risk limits, this often times leads to an expedited analysis since detailed risk assessments often are not necessary for most permit applications. The document also provides detailed sample calculations and instructions for each tier, allowing facilities to have a more thorough understanding of the risk assessment process associated with Rule 1401.

Web Tools

South Coast AQMD has also developed web tools such as the Facility Information Detail (F.I.N.D) tool that allows a user to search for public information about South Coast AQMD-regulated facilities. Some of the facility information that can be found using F.I.N.D include: general facility

[13] South Coast AQMD modeling guidance is available at: http://www.aqmd.gov/home/air-quality/meteorological-data/modeling-guidance

[14] *Risk Assessment Procedures for Rules 1401, 1401.1 and 212, Version 8.1*, September 1, 2017, South Coast AQMD http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf

details, equipment lists, compliance history, emissions inventory (including toxic pollutants), and hearing board information. There are several existing web-based applications on South Coast AQMD's website that provide similar information, however, F.I.N.D makes the data available in a much more consolidated and user friendly way. Updates to the database are made at least once per week and the tool also includes a very useful interactive map with aerial imagery from the U.S Geological Service. [15]

Small Business Assistance

South Coast AQMD has a team of engineers and inspectors that are specifically designated to help small businesses (100 or fewer employees or an annual gross revenue up to $5 million) understand and comply with air quality rules and regulations. Whether it is assistance in understanding regulations that may apply to a facility, identifying equipment that may need a permit, assistance with permit applications, or even scheduling a no fault on-site inspection, the small business assistance unit act as advocates for these small businesses. Offering these services to smaller businesses serves to streamlines efforts to regulate air quality while also creating a positive open working relationship with small local businesses.

Public Assistance

The South Coast AQMD's AB 2588 Program provides public assistance services that includes both a hotline at (909) 396-3610 and email address (ab2588@aqmd.gov) to answer any program-related questions. Our website also includes a section specifically dedicated to the AB 2588 Program that provides up to date activities, including approved HRAs, RRPs, and public notices, and information on air toxics monitoring in local communities, such as in Paramount.

South Coast AQMD also provides several other services, such as a telephone number to answer fee-related questions, an online complaint system and telephone number where members of the public can notify staff of air quality problems, such as odor and visible emissions.[16] These services help to maintain good working relationships with facilities and to protect air quality and public health.

State Level Air Toxics Related Activities

OEHHA Updates

Toxic Program Impacts with New or Proposed Toxic Air Contaminants

As described previously, OEHHA is required to develop guidelines for conducting HRAs under the AB 2588 Program. In implementing this requirement, OEHHA develops new, revised, or proposed risk factors for many toxic air pollutants. South Coast AQMD staff monitor the progress for these changes closely. For any finalized changes in risk factors, staff performs a preliminary

[15] http://www.aqmd.gov/nav/FIND/facility-information-detail

[16] http://www3.aqmd.gov/webappl/complaintsystemonline/NewComplaint.aspx;
Telephone hotline: 1-800-CUT SMOG® (1-800-288-7664)

estimate of potential Rule 1402 program impacts. Notice is provided to the Governing Board and affected industries annually through this and other AB 2588 annual reports.

Toxic Air Contaminants with New or Proposed Health Values

OEHHA adopted new Reference Exposure Levels (RELs) for Hexamethylene Diisocyanate (HDI) (Monomer and Polydiisocyanates) in September 2019.[17] RELs are airborne concentrations of a chemical that are not anticipated to result in adverse non-cancer health effects for specified exposure durations in the general population, including sensitive subpopulations. HDI is used in hardeners for polyurethane paints, primers, sealers, and clear coats. HDI is also used in outdoor furniture, architectural finishing, adhesives, polyurethane foams, and home thermal insulators.

OEHHA also proposed new RELs for Toluene in May 2019.[18] Toluene is a solvent that is used in various industries including the production of coatings, cosmetics, cleaning agents, inks, adhesives, pharmaceuticals, and cosmetics. Toluene also occurs naturally as a component of crude oil and is produced in petroleum refining. Toluene is also a byproduct from combustion of fuels.

The proposed and adopted values are summarized in Table 3-1. The previous values are shown in parentheses below the current values; N/A within parentheses indicate no previous value existed.

Table 3-1: New or Proposed Health Values in 2019 from OEHHA

CAS #	Name	Chronic REL µg/m^3	8-Hour Chronic REL µg/m^3	Acute REL µg/m^3
822-06-0	Hexamethylene Diisocyanate Monomer	0.03 (N/A)	0.06 (N/A)	0.3 (N/A)
3779-63-3 4035-89-6	Hexamethylene Diisocyanate Polyisocyanate (Isocyanurate) (Biuret) (Uretidone)	0.4 (N/A)	0.8 (N/A)	4.5 (N/A)
108-88-3	Toluene	420 (300)	830 (N/A)	5000 (37,000)

Assessment of Impacts to Existing Facilities

HDI monomer is a previously listed pollutant and is subject to reporting by AB 2588 facilities every four years. Data from the 2015-2018 reporting years was used to account for facilities reporting HDI monomer in different reporting phases. 21 facilities reported annual emissions of

[17] https://oehha.ca.gov/air/crnr/notice-adoption-reference-exposure-levels-hexamethylene-diisocyanate

[18] https://oehha.ca.gov/air/crnr/draft-document-summarizing-toxicity-and-derivation-reference-exposure-levels-rels-toluene

HDI monomer. A breakdown of the types of facilities and the number of those types of facilities that reported HDI monomer emissions are presented in Table 3-2.

Table 3-2: 2015-2018 Summary of HDI Emitting Facilities

Facility Description	Number of Facilities
Aerospace	7
Entertainment	1
Military Base	1
Other Industrial/Manufacturing	4
Petroleum Refinery	1
Schools and Educational Institutions	2
Airports	1
Furniture/Household Products	1
Other Institutional/Commercial	1
Harbors	1
Metals and Alloys Products	1
Total:	21

Fourteen of the 21 facilities have previously approved HRAs. The HRAs for these facilities were approved between 1993 and 2019. Although not reported in every HRA (no HRA approved before 2000 had HDI reported), HDI monomer did not have significant risk factors when reported in a HRA. HDI monomer is required to be reported on a quadrennial cycle and therefore is examined when screening and prioritization occurs in accordance with program requirements.

HDI polyisocyanates are newly added pollutants with no prior reporting requirements and are not currently required to be reported by AB 2588 facilities

Staff will continue to monitor the status of the proposed RELs for toluene. Adoption of the proposed RELs for toluene has a potential to affect most if not all facilities due to the widespread use of toluene as a solvent and as a byproduct from combustion of fuels.

Chapter 4
Future Activities

AB 2588 staff will conduct AB 2588 related activities such as prioritizing facilities, review and approval of Air Toxic Inventory Reports, Health Risk Assessments, host public notification meetings, and continue to review and update guidance documents. AB 2588 staff will also continue to provide support to other South Coast AQMD departments and work with CARB to improve the implementation of the AB 2588 program.

Future Activities

AB 2588 Activities

In 2020, staff will prioritize approximately 128 facilities, and notify those with high priority scores to prepare ATIRs or VRRPs, if eligible, and HRAs and RRPs, if necessary. There are a substantial number of ATIRs and VRRPs that are expected to be reviewed in 2020. Public notification, and public meetings as necessary, will also occur for multiple facilities including Lubeco, Inc. (ID 41229), Phillips 66 Company, Los Angeles Refinery – Wilmington Plant (ID 171107), Equilon Enterprises (ID 800372), MM West Covina (ID 113873), and Southern California Edison, Pebbly Beach (ID 4477). Staff will also update AB 2588 guidance documents to provide additional clarification on the process and requirements of the AB 2588 program including the following:

- Facility Prioritization Procedures for the AB 2588 Program
- AB 2588 and Rule 1402 Supplemental Guidelines
- South Coast AQMD Public Notification Procedures for Facilities under AB 2588 and Rule 1402
- AB 2588 Quadrennial Air Toxics Emission Inventory Reporting Procedures

Other Support Activities

In addition to the AB 2588 Program implementation activities, staff will:

- Continue to provide support to rulemaking staff;
- Work with CARB and through the CAPCOA Toxics and Risk Managers Committee (TARMAC) to update CARB AB 2588 Guidelines, including review of draft list of chemicals;
- Continue to work with CARB and through CAPCOA-TARMAC to develop HRA guidelines for the industry-wide categories of gasoline dispensing facilities, diesel internal combustion engines, auto body shops, and providing training to South Coast AQMD personnel and the regulated community;
- Train new staff on the expanded emissions reporting under amended Rule 301 and AB 617; and
- Track development of potential REL revisions by OEHHA.

Appendix A — Description of Facilities/Projects

A.1. ACE Clearwater Enterprises (ID 17325) – Paramount

ACE Clearwater Enterprise (ACE) manufactures aerospace parts and is located in the city of Paramount. ACE currently operates two melting furnaces which are vented to a Donaldson Torit dust collector equipped with High Efficiency Particulate Air (HEPA) filters to control particulate matter and toxic emissions.

The facility had an approved Rule 1420.2 Monitoring and Sampling Plan from August 2017. The facility conducted ambient air monitoring for a year and demonstrated that the 30 consecutive day average ambient air lead concentration was 0.07 mg/m3 for the entire duration of ambient air monitoring activities onsite which is below Rule 1420.2 concentration limits. The facility submitted a Rule 1420.2 Ambient Monitoring Relief Plan in December 2018 pursuant to Rule 1420.2 (o)(1). Upon review of the modeling files in January 2019, South Coast AQMD staff found that the original source test submitted with the plan was not conclusive. The facility conducted a new source test which was approved in December 2018 and submitted to South Coast AQMD staff in February 2019. South Coast AQMD completed review of the modeling files in April 2019 and found that the project complied with the limits of Rule 1420.2 (o)(1)(A).

A.2. Aerocraft Heat Treating Co. Inc. (ID 23752) – Paramount

Aerocraft Heat Treating Company (Aerocraft) operates a facility in the City of Paramount that processes forgings, castings, bar, plate and rough-machined parts. The facility uses various heat treating furnaces, quench tanks, and metal grinding equipment, as well as plasma cutting operations. Based on ambient monitoring conducted near Aeroccraft which showed elevatedlevels of hexavalent chromium, Aerocraft was officially designated as a Potentially High Risk Level Facility on December 14, 2016. As part of this designation, Aerocraft was required to submit an Early Action Reduction Plan by March 14, 2017, an ATIR by May 16, 2017, aHRA and a RRP by June 13, 2017. Additional details regarding the ambient monitoring in Paramount and near Aerocraft and events that led up to the designation of Aerocraft as a Potentially High Risk Facility are discussed on South Coast AQMD's website.[19]

The Early Action Reduction Plan was received on March 13, 2017 and after South Coast AQMD's staff review, a comment letter was sent on April 26, 2017 requesting revisions and resubmittal. Subsequently, on May 4, 2017, a revised Early Action Reduction Plan was received.

On May 16, 2017, Aerocraft submitted an ATIR, and the HRA and RRP were submitted on June 13, 2017, in accordance with the required deadlines. Conditional approval of the revised Early Action Reduction Plan was granted on May 31, 2017. On February 9, 2018, South Coast AQMD staff provided Aerocraft with comments and recommendations on the submitted ATIR, HRA, and RRP, and requested revision and resubmittal of those respective documents. After technical

[19] Information regarding Aerocraft and compliance-related activities in Paramount can be found at the following link: https://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities/facilities---order-for-abatement/aerocraft

conference calls with Aerocraft representatives, South Coast AQMD staff received the Revised ATIR on March 29, 2018. The Revised ATIR was approved on May 9, 2018.

The Revised HRA and Revised RRP were received on May 17, 2018. The Revised HRA was approved by South Coast AQMD staff and OEHHA on October 9, 2018. The revised HRA representing the 2016 inventory year indicated that Aerocraft posed a maximum cancer risk of 1,900 chances in-one-million for a residential receptor located at the corner of Madison Street and Illinois Avenue, based on a 30 year residential exposure, and 350 chances in-one-million for the worker receptor located immediately south of Aerocraft, based on a 25 year worker exposure. The cancer risk was mainly due to hexavalent chromium emissions from furnaces and rack welding operations. A cancer burden of 11 was estimated, based on a 70 year lifetime exposure.

The maximum non-cancer chronic hazard indices of 0.10 and 0.15 were projected for residential and non-residential receptors, respectively. The maximum non-cancer 8-hour chronic hazard index is less than 0.01 and the maximum non-cancer acute hazard index was 2.9 at Aerocraft's property boundary.

Since the HRA results were above the Significant Risk Level in Rule 1402, Aerocraft was required to notify the public about the health risk in addition to conducting annual public notification meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notices of the public notification meeting were sent out to over 35,000 people in the area of impact. South Coast AQMD staff held a public notification meeting at the Progress Park Community Center on December 1, 2018 to explain the impact of Aerocraft's emissions on public health and to discuss how risks will be reduced. South Coast AQMD conditionally approved the Revised RRP on April 24, 2019 requiring Aerocraft to construct permanent total enclosures with associated baghouses and Ultra Low Particulate Air (ULPA) filters for Buildings 2 and 3 by December 20, 2019. While these controls have been constructed and installed, source testing to confirm the control efficiency has not yet occurred at the end of 2019. The first annual progress report is due in April 2020. Staff continues to work with the facility to ensure the Revised RRP is fully implemented.

A.3. ***Air Liquide Large Industries U.S., LP (ID 148236) – El Segundo***

Air Liquide Large Industries U.S., LP (Air Liquide) is a hydrogen plant located within the Chevron El Segundo Refinery facility on land leased from Chevron. Air Liquide and Chevron are independent parties and share no common ownership or employees. The plant began operations in 2004 and was originally part of Chevron before separating in 2008. The plant produces up to 90 million standard cubic feet of hydrogen per day and 227,000 pounds of steam per hour. Air Liquide receives its feed streams which include refinery fuel gas and natural gas from Chevron and sends its products of hydrogen and steam back to Chevron. Hydrogen is used in various aspects of petroleum refining.

On January 25, 2019, South Coast AQMD staff sent a letter requiring Air Liquide to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2016 emissions. The main toxic air contaminants contributing to the priority score are arsenic and arsenic compounds, nickel and nickel compounds, and cadmium and cadmium compounds. The main sources of emissions are from the reformer heater.

Air Liquide submitted its ATIR on June 25, 2019. The ATIR was in review as of the end of 2019.

A.4. ***All American Asphalt (ID 114264) – Irwindale***

All American Asphalt is an asphalt plant located in Irwindale, that blends various ingredients to manufacture hot mix asphalt, also known as asphaltic concrete. This asphalt is then transported out of the facility to support construction projects.

On August 23, 2019, South Coast AQMD staff sent a letter requesting All American Asphalt to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions, with hexavalent chromium being the main air toxic contributor to the high priority score. Hexavalent chromium emissions were due primarily to the Rotary Dryer. On September 19, 2019, All American Asphalt submitted the Initial Information for the ATIR. The ATIR is due on January 21, 2020.

A.5. ***All American Asphalt (ID 148146) – Perris***

All American Asphalt is an asphalt plant located in Perris, that blends various ingredients to manufacture hot mix asphalt, also known as asphaltic concrete. This asphalt is then transported out of the facility to support construction projects.

On August 23, 2019, South Coast AQMD staff sent a letter requesting All American Asphalt to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions, with hexavalent chromium being the main air toxic contributor to the high priority score. Hexavalent chromium emissions were due primarily to the Rotary Dryer. On September 19, 2019, All American Asphalt submitted the Initial Information for the ATIR. The ATIR is due on January 21, 2020.

A.6. ***Anaplex Corp (ID 16951) - Paramount***

Anaplex Corporation (Anaplex) operates a metal processing and finishing company in the City of Paramount. The facility processes parts for commercial and defense aerospace applications. The processes include anodizing and plating process lines which use hexavalent chromium, nickel, and cadmium. Additional details regarding the ambient monitoring in Paramount and near Anaplex and events that led up to the designation of Anaplex as a Potentially High Risk Facility are discussed on South Coast AQMD's website.[20]

Based on ambient monitoring in December 14, 2016, South Coast AQMD staff designated Anaplex as a Potentially High Risk Level Facility specifically based on high levels of hexavalent chromium found at monitors adjacent to Anaplex. As part of this designation, Anaplex was required to submit an Early Action Reduction Plan by March 14, 2017, an ATIR by May 16, 2017, a HRA and a RRP by June 13, 2017. Following litigation in Superior Court, the Hearing Board granted a Stipulated Order for Abatement on January 18, 2017.

Anaplex submitted an Early Action Reduction Plan on March 13, 2017. South Coast AQMD staff provided comments on April 26, 2017 and requested revisions and resubmittal of the Early

[20] http://www.aqmd.gov/home/news-events/community-investigations/air-monitoring-activities/facilities---order-for-abatement/anaplex-corp

Action Reduction Plan. Anaplex submitted a revised Early Action Reduction Plan on May 11, 2017 which was conditionally approved on May 31, 2017.

On May 15, 2017, Anaplex submitted an ATIR and a HRA and RRP on June 13, 2017. South Coast AQMD staff provided written comments regarding all three documents on December 8, 2017, and requested revisions and resubmittal of each document. On December 8, 2017, South Coast AQMD staff provided Anaplex with comments and recommendations on the submitted ATIR, HRA and RRP, and requested revision and resubmittal of those respective documents. After numerous technical conference calls and meetings with Anaplex representatives, South Coast AQMD staff received the Revised ATIR on May 1, 2018 and the Revised HRA and RRP on May 17, 2018. After review, South Coast AQMD staff requested another revision and resubmittal of the HRA and RRP. Anaplex submitted the Revised HRA and Revised RRP on September 26, 2018. The revised ATIR was approved on October 9, 2018.

The Revised HRA submitted by Anaplex contained alternate HRA scenarios in the main HRA report, which was not consistent with South Coast AQMD's AB 2588 Supplemental Guidelines. In the interest of time and pursuant to Rule 1402 (e)(2)(D), South Coast AQMD staff modified the Revised HRA resubmitted on September 26, 2018 to follow Appendix B of South Coast AQMD's AB 2588 and Rule 1402 Guidelines[21]. The HRA relied upon results of one of the scenarios contained in Anaplex's resubmitted Revised HRA, and presented the information consistent with South Coast AQMD's AB 2588 Supplemental Guidelines. Anaplex's modified HRA was conditionally approved on October 9, 2018 and was submitted to OEHHA for their review. The HRA results representing the 2016 inventory year indicated that Anaplex posed a maximum cancer risk of 931 chances in-one-million for a residential receptor located at the corner of Madison Street and Illinois Avenue, based on a 30 year residential exposure, and 2,836 chances in-one-million for a worker receptor located immediately south of Anaplex, based on a 25 year worker exposure. The cancer risk was mainly due to hexavalent chromium emissions from spray booth operations. A cancer burden of 9.73 was estimated, based on a 70 year lifetime exposure.

The maximum non-cancer chronic hazard indices of 0.06 and 2.02 were projected for residential and non-residential receptors, respectively. The maximum non-cancer 8-hour chronic hazard index was 0.11 and the maximum non-cancer acute hazard index was 23.84 at Anaplex's property boundary.

Since the HRA results were above the Significant Risk Level in Rule 1402, Anaplex was required to notify the public about the health risk in addition to conducting annual public notification meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notices of the public notification meeting were sent out to over 35,000 people in the area of impact. South Coast AQMD staff held a public notification meeting at the Progress Park Community Center on December 1, 2018 to explain the impact of Anaplex's emissions on public health and to discuss how to reduce risks.

On April 24, 2019, South Coast AQMD rejected the September 26, 2018 Revised RRP. Anaplex submitted a set of revised risk reduction measures on July 12, 2019. A follow-up comment letter

[21] http://www.aqmd.gov/docs/default-source/planning/risk-assessment/ab-2588-supplemental-guidelines-201809.pdf

was sent to Anaplex on September 6, 2019 which detailed remaining concerns on certain risk reduction measures. On October 31, 2019, Anaplex submitted a request letter for RRP approval that detailed the disputed risk reduction measures; however, South Coast AQMD staff required additional supporting documentation to complete the review. Anaplex submitted a revised RRP for approval on December 18, 2019, which was under review by South Coast AQMD as of the end of 2019.

A.7. Arconic Global Fasteners & Rings, Inc. (ID 134931) – Fullerton

Arconic Global Fasteners & Rings, Inc. (Arconic) manufactures precision fastening systems and components for the aerospace industry. They operate plating lines, ovens and abrasive blasting equipment.

This facility has a HRA that was approved in November 1997 with elevated cancer risks requiring risk reduction. The RRP was submitted in February 2001 and approved March 2001. The RRP involved eliminating use of perchloroethylene as a cleaning solvent, and installing scrubbers to control emissions of various metals from plating operations. This RRP was fully implemented and approved in October 2003. However, the resulting acute hazard index was greater than 1.0 due to use of sodium hydroxide as part of the plating operations.

The facility voluntarily submitted an HRA to demonstrate that the acute hazard index is no longer greater than 1.0. Upon review of the HRA, South Coast AQMD staff found that certain emissions were not included in the HRA. In response, the facility indicated that some permitted sources were no longer operated at the facility, but still listed on the facility's Permits to Operate. Staff informed the facility that emissions from those sources cannot be excluded unless modifications to the facility permits are done and those sources are inactivated. Staff is currently working with the facility to resolve the outstanding issues.

A.8. Ascon Landfill (ID 43819) – Huntington Beach

Ascon Landfill is a waste disposal site in the city of Huntington Beach that handled mostly waste from oil drilling operations as well as inert solid wastes until 1984 when the site stopped commercially receiving waste. In 2003 the California Department of Toxic Substances Control (DTSC) notified the site's responsible parties about cleanup responsibilities at Ascon Landfill. The responsible parties requested that South Coast AQMD staff review information to approve alternative Rule 1466 provisions for remedial activities including a proposed PM10 limit of 50 $\mu g/m^3$ instead of 25 $\mu g/m^3$ as required in subparagraph (d)(2).

Staff was required to evaluate the health risks associated with toxic air emissions which was calculated by multiplying PM10 speciation profiles from the facility by the proposed alternative Rule 1466 PM10 limits. To do so, staff reviewed a DTSC HRA prepared in 2013 and identified missing information needed to complete the review. This information was sent to South Coast AQMD staff on November 15, 2018 and additional missing information was submitted on January 16, 2019. Staff concluded there was no correlation between the submitted data and the proposed alternative Rule 1466 provisions based on the information submitted. Supplemental information was requested and received on February 14, 2019. Staff performed risk analysis on the toxic air emissions calculated with the new information and concluded that the alternative provisions were

approvable on March 6, 2019.

A.9. ***Chevron Products Co. (El Segundo Refinery) (ID 800030) – El Segundo***

Chevron Products Co. (Chevron) is a 1,000 acre petroleum oil refinery in the City of El Segundo with a 290,000 barrels of crude oil per day processing capacity. Chevron has approximately 20% of the gasoline market share in Southern California and is one of the largest refineries on the West Coast. The main products of the refinery are transportation fuels, such as gasoline, jet fuel, and diesel fuel.

On October 14, 2016, South Coast AQMD staff sent a letter requiring Chevron to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with furans, polycyclic aromatic hydrocarbons, arsenic, cadmium, and related compounds as the main air toxics contributing to the high priority score. Chevron elected to participate in the Voluntary Risk Reduction Program and submitted a VRRP on March 27, 2017. Reductions of diesel particulate matter (DPM) from unpermitted internal combustion engines along with reductions of hexavalent chromium from unpermitted welding are elements of the VRRP. In 2018, staff have worked with the permitting teams to evaluate options for incorporating these requirements so that they are enforceable. The VRRP was approved on April 24, 2019. Chevron will submit annual progress reports on the status of their voluntary risk reduction measures as well as a Final Implementation Report once all voluntary risk reduction measures are implemented.

A.10. ***City of Cerritos, Water Division (ID 74396) - Cerritos***

The City of Cerritos, Water Division draws groundwater from three deep wells. The facility operates two natural gas fired engines. The well on Artesia has one main engine that draws well water and one emergency engine for backup electricity.

On August 23, 2019, South Coast AQMD staff sent City of Cerritos, Water Division a notice to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory. Their primary pollutants and risk drivers are formaldehyde and 1,3-butadiene. The ATIR is due on January 21, 2020.

A.11. ***Eco Services Operations Corp. (ID 180908) – Carson***

Eco Services Operations in Carson regenerates spent sulfuric acid from refineries. In addition to the sulfuric acid plant, Eco Services Operations operates an alum manufacturing system and other equipment associated with storage and handling of spent sulfuric acid and other raw materials.

On December 10 2019, South Coast AQMD staff sent a letter requiring Eco Services Operations to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory with sulfuric acid as the main contributor to the high priority score. The main source of emissions is from their primary furnace. Eco Services Operations elected to submit an ATIR. The ATIR is due May 8, 2020.

A.12. Eisenhower Medical Center (ID 3671) – Rancho Mirage

Eisenhower Medical Center is a hospital based in Rancho Mirage, California serving the Coachella Valley region.

On June 12, 2018, South Coast AQMD staff sent a letter requiring Eisenhower Medical Center to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2014 annual emissions inventory, with formaldehyde from the cogeneration units as the main air toxics contributing to the high priority score.

On November 9, 2018, Eisenhower Medical Center submitted an ATIR. South Coast AQMD staff reviewed the submittal and worked with the facility to make some necessary revisions such as building and stack coordinates in addition to emission estimation methods. Based on results from preliminary analysis of the ATIR and discussion with the facility, Eisenhower Medical Center submitted a request to source test both cogeneration units for formaldehyde, 1-3 butadiene, and acetaldehyde.

Source testing of both cogeneration units took place starting on February 19, 2019. The source test report was approved by South Coast AQMD on June 27, 2019 and the results were initially determined to not be acceptable for emissions calculations. South Coast AQMD staff later received clarification that the source test results could indeed be used for emissions calculations. Eisenhower Medical Center submitted a revised ATIR on August 9, 2019. Upon review, South Coast AQMD determined that Eisenhower Medical Center's updated priority score was below one, and a letter was sent on August 16, 2019 informing the facility that it would be exempt from the AB 2588 program.

A.13. Elite Comfort Solutions (ID 182610) – Commerce

Elite Comfort Solutions (Elite) operates a facility in city of Commerce and manufactures polyurethane foam for bedding, furniture, packaging, automotive, and medical industries.

On January 31, 2018, South Coast AQMD staff sent a letter requiring Elite to either prepare an ATIR or VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions inventory, with toluene diisocyanates as the main air toxic contributor to the high priority score.

Elite elected to participate in the Voluntary Risk Reduction Program and submitted the VRRP on June 22, 2018. Following review, staff required Elite to provide missing information and to make several revisions. Elite provided information and a revised submittal on November 7, 2018. However, in reviewing this submittal, South Coast AQMD staff found that additional risk reduction measures were needed in order to meet the Voluntary Risk Reduction Threshold. In response, the facility had to submit revisions to the VRRP on December 3, 2018, and another one on December 17, 2018. After further review, staff discovered additional issues regarding receptor exposure, cost & feasibility of risk reduction measures and hours of operation and requested revision and resubmission of VRRP. Elite submitted several VRRP revisions from February 12 to November 27, 2019. A final revision addressing all staff comments is due on January 8, 2020.

A.14. ***Equilon Enter. LLC, Shell Oil Prod. US (ID 800372) – Carson***

Equilon Enterprises LLC (Equilon) operates a petrochemical product distribution terminal in the City of Carson which is comprised of loading racks, storage tanks, and product pipeline. The products are transported by pipeline, trucks, or rail.

On October 10, 2017, South Coast AQMD staff sent a letter requiring Equilon to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with benzene, ethyl benzene, and naphthalene emissions as the main air toxics contributing to the high priority score. Equilon elected to prepare an ATIR and submitted it on March 9, 2018. After review and subsequent revisions, South Coast AQMD sent a letter to Equilon on May 30, 2018 approving the ATIR and requiring the preparation of an HRA.

On August 28, 2018, Equilon submitted an HRA. After review, staff discovered several discrepancies with the HRA such as variable emission rates, terrain characterization and risk values and subsequently required revision and resubmission. Equilon provided HRA revisions on September 14, 2018, April 4, 2019, and two more revisions on November 2019. A minor revision to the HRA Summary page was submitted on December 6, 2019. South Coast AQMD staff found no other issues with the HRA and is in the process of approving it.

A.15. ***Evonik Corporation (ID 183926) – Los Angeles***

Evonik Corporation is a facility in Los Angeles that is one of many locations for the multinational company Evonik Industries, a specialty chemicals company.

On December 6, 2019, South Coast AQMD staff sent a letter requesting Evonik Corporation to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2016 annual emissions with 4,4'-methylenedianiline (MDA). MDA emissions came primarily from fugitive components. The initial information submittal is due in January 2020.

A.16. ***Gerdau/TAMCO (ID 18931) – Rancho Cucamonga[22]***

Gerdau/TAMCO (Gerdau) is located in the City of Rancho Cucamonga and was acquired by TAMCO steel mini mill in October 2010. The facility produces steel reinforcing bars that are commonly used in construction. Ferrous steel scrap is recycled and delivered to the facility by trucks and rail, and then melted in an electric arc furnace to produce steel billets. The billets are reheated in a reheat furnace to form concrete reinforcing bar (rebar). The primary pollutants for this facility are hexavalent chromium, nickel, manganese, mercury, and arsenic.

Gerdau was directed to submit an ATIR and HRA based on significantly high levels of cadmium reported in its 2011 annual emissions reporting. The HRA was approved on October 8, 2015 based on the 2015 OEHHA Risk Assessment Guidelines. Several health risks in the approved HRA exceeded levels specified in Rule 1402 and Gerdau was therefore required to notify the public regarding the results of its HRA, and also submit a RRP. Notices of the public notification meeting were sent out to 1,523 people in the area where the health risks were above the levels established in Rule 1402. South Coast AQMD staff held a public notification meeting on

[22] http://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/gerdau

November 30, 2015 to explain the impact of Gerdau's emissions on public health and to discuss next steps.

Gerdau submitted its first RRP on April 5, 2016. After review of the RRP and several meetings with facility representatives, South Coast AQMD staff provided comments on the RRP and on July 1, 2016, Gerdau submitted a revised RRP. However, the revised RRP did not account for hexavalent chromium emissions from ladle heaters, billet reheat furnace, and spray chamber stack. South Coast AQMD staff added these emissions which resulted in a projected potential maximum residential cancer risk of 8.7 chances in-one-million. The cancer burden and acute and chronic HI remain below 1, so after making these revisions, South Coast AQMD staff conditionally approved Gerdau's RRP on July 5, 2016. The RRP consisted of ten risk reduction measures to be completed by January 5, 2019.

On July 5, 2017, Gerdau submitted a progress report to update South Coast AQMD on the status of its risk reduction measures. On January 25, 2018, Gerdau submitted an amendment to the RRP to specify plans to pave vehicle travel paths, which South Coast AQMD staff approved. On July 13, 2018, Gerdau submitted their second progress report indicating that they implemented seven of the ten risk reduction measures, while three of the measures are still in process. A public notice of risk reduction activities by Gerdau was mailed out to the notification area on September 18, 2018. South Coast AQMD staff continues to monitor the progress of the RRP and anticipates all risk reduction measures to be implemented within specified timeframes.

A.17. ***Glendale City, Glendale Water & Power (ID 800327) – Glendale***

Glendale Water & Power (GWP) is a municipal power plant owned and operated by the City of Glendale. GWP consists of three utility boilers and eight stationary combustion turbines with a combined 238 MW generation capacity. These units combust natural gas which is supplemented by landfill gas from a Class III landfill.

On March 1, 2017, South Coast AQMD staff sent a letter requesting GWP to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions with dioxins and furans, hexavalent chromium, and arsenic as the main air toxics contributing to the high priority score.

GWP elected to prepare an ATIR and submitted it on July 28, 2017. On March 22, 2018, the ATIR was approved and the facility notified to prepare an HRA. The HRA was submitted on July 18, 2018. After requesting and receiving several revisions from GWP, South Coast AQMD staff approved the HRA on January 22, 2019. The HRA results representing the 2015 inventory year indicated that GWP posed a maximum cancer risk of 179.5 chances in-one-million and a maximum chronic hazard index of 1.69, based on a 30 year residential exposure. The cancer risk was mainly due to dioxins and furans from landfill gas combustion. A cancer burden of 4.97 was estimated, based on a 70 year lifetime exposure.

Since the HRA results were above the Notification Risk Level in Rule 1402, GWP was required to notify the public about the health risk. Notices of the public notification meeting were sent out to over 7,700 people in the area of impact. South Coast AQMD staff held a public notification

meeting at the Glendale Downtown Central Library on June 26, 2019 to explain the impact of GWP's emissions on public health and to discuss next steps.

Since the HRA results were above the Action Risk Level in Rule 1402, GWP was required to prepare a RRP, which was received on October 9, 2019. As of the end of 2019, South Coast AQMD staff was reviewing the RRP.

A.18. ***Hixson Metal Finishing (ID 11818) - Newport Beach*** [23]

Hixson Metal Finishing (Hixson) located in the City of Newport Beach, is a metal finishing facility that conducts anodizing, testing, plating, coating, and painting operations on various parts for use in the aerospace and defense industries. Some of the potential onsite sources of emissions include the chrome anodizing line, nickel and cadmium plating, curing and drying ovens, paint spray booths, abrasive blasting equipment, wastewater treatment system and miscellaneous natural gas combustion sources. The major source of concern with Hixson's operation is fugitive dust containing hexavalent chromium. On April 3, 2014, South Coast AQMD staff required Hixson to prepare and submit a HRA and a RRP, in conjunction with a Stipulated Order for Abatement approved by South Coast AQMD's Hearing Board that limited Hixson's activities, and required shutdown of certain operations using hexavalent chromium if monitored ambient levels exceeded specified hexavalent chromium levels.

Hixson submitted their HRA to South Coast AQMD on November 13, 2014. Upon detailed review and use of the 2015 OEHHA Risk Assessment Guidelines, South Coast AQMD staff finalized the submitted HRA on May 8, 2015. The approved HRA found a maximum residential cancer risk of 1,502 chances in-one-million mainly from hexavalent chromium emissions. The estimated cancer risk was based on emissions occurring before the facility instituted various control measures and current level of risk is substantially lower. Since the HRA results were above the Significant Risk Level in Rule 1402, Hixson was required to notify the public about the health risk in addition to conducting annual public notification meetings until the Rule 1402 Action Risk Level was achieved pursuant to Rule 1402(p). Notice of the public notification meeting was sent out to over 7,300 people in the area of impact. South Coast AQMD staff held a public notification meeting at the Hoag Conference Center on June 18, 2015.

Hixson submitted its first RRP on March 2, 2015. On May 8, 2015, South Coast AQMD staff rejected Hixson's first RRP and required resubmittal. Hixson subsequently submitted a second RRP on June 5, 2015. On June 26, 2015, South Coast AQMD staff rejected Hixson's second RRP due to its failure to demonstrate that the proposed controls reduce risks below Rule 1402 thresholds. Hixson resubmitted a revised RRP on July 1, 2015, and South Coast AQMD staff conditionally approved it on July 24, 2015. The associated permits to construct implementing the RRP were approved on December 11, 2015 and a second public notification meeting was held on February 11, 2016 at the Hoag Conference Center to inform interested parties regarding the key activities surrounding the RRP. In the 2016 Annual Report for the AB 2588 Program, staff incorrectly stated that the RRP was fully implemented as of December 31, 2016. The Order for Abatement expired on December 31, 2016, as Hixson had constructed all the measures contained in the RRP. However, one of the risk reduction measures requires all emissions from Building 2 to

[23] http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/hixson-metal-finishing

be captured and routed through a dry scrubber followed by ULPA filters. The existing chromic acid anodizing tank (Tank 70) is located in Building 2 and currently has a control system that includes an ULPA filtration system. As part of the modifications to Building 2, existing Tank 70 is being replaced with a new chromic acid anodizing tank (also designated Tank 70) vented to the new Building 2 control system, which also includes ULPA filtration. However, there was an issue with the temperature controls for the new Tank 70, which has delayed its operation. Since the existing Tank 70 is already being controlled by an ULPA filtration system, there are no additional emissions expected from the continued operation of existing Tank 70 compared to new Tank 70, as proposed in the RRP. Ambient monitoring for hexavalent chromium continues in the vicinity of Hixson. As of the end of 2018, construction of the new Tank 70 and the new air pollution control system was complete, and the facility conducted a source test in June 2018. However, it was discovered that there were moisture problems and additional mesh pads were needed. The facility conducted another source test in December 2019 to demonstrate compliance.

A.19. ***Holliday Rock Co., Inc. (ID 41580) – Rialto***

Holliday Rock Co., Inc. (Holliday Rock) is a hot mix asphalt plant located in Rialto. There are multiple locations of Holliday Rock in the South Coast air basin. It is one of the largest independent producers of aggregate, ready mix concrete, and hot mix asphalt in the United States.

On December 20, 2018, South Coast AQMD staff sent a letter requiring Holliday Rock to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory. The main toxic air contaminants contributing to the priority score are manganese and manganese compounds, mercury and mercury compounds, and nickel and nickel compounds. The main sources of emissions were from cement silos and loadout hoppers.

Holliday Rock submitted its ATIR on May 21, 2019. Holliday Rock stated that several devices and emissions from Holliday Trucking (ID 12036), a nearby facility also owned by Holliday Rock, had been mistakenly included in the 2017 AER. The devices in question were permitted under Holliday Trucking and were therefore not included in Holliday Rock's ATIR. After requesting and receiving several revisions from Holliday Rock, South Coast AQMD staff approved the ATIR on December 6, 2019. Since Holliday Rock's revised priority score was less than 10, the facility was not subject to HRA requirements.

A.20. ***Industrial Battery Engineering Inc. (ID 3277) – Sun Valley***

Industrial Battery Engineering (IBE) operates a battery manufacturing plant in Sun Valley and manufactures large batteries for forklifts and other industrial equipment. They operate various equipment at the facility including a lead melting pot, spray booth, lead oxide mixing system, lead oxide storage bin, and associated air pollution control equipment such as baghouses.

South Coast AQMD staff received the request to review the modeling files for a 1420.2 Monitoring and Sampling Plan in February 2019. Staff completed review of the modeling files in June 2019 and concurred with the monitoring locations proposed by the facility. South Coast AQMD staff also proposed to add a sampling location to represent upwind or background concentrations.

A.21. ***Kirkhill Inc (ID 187823) – Brea***

Kirkhill Inc (Kirkhill) is a rubber manufacturing facility located in Brea. Kirkhill produces multiple types of rubbers for industries including aerospace and medical manufacturing. The rubber manufacturing process includes raw material mixing, milling, pressing, and various types of curing.

On January 31, 2018, South Coast AQMD staff sent a letter requiring Kirkhill to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory. The main air toxic contributing to the priority score is hexavalent chromium from mixers, mills, presses, ovens, autoclave, and roto-curing devices.

Kirkhill elected to prepare an ATIR and submitted it on July 3, 2018. On October 19, 2018, South Coast AQMD staff sent a letter to the facility approving the ATIR and requiring the preparation of an HRA based on the approved ATIR. Kirkhill submitted the HRA on January 17, 2019. After requesting and receiving several revisions from Kirkhill, South Coast AQMD staff approved the HRA on September 19, 2019. The HRA results representing the 2015 inventory year indicated that Kirkhill posed a maximum cancer risk of 18.8 chances in-one-million based on a 30 year residential exposure and a maximum cancer risk of 15.9 chances in-one-million based on a 25 year worker exposure. The cancer risk was mainly due to hexavalent chromium from coloring dyes in the rubber manufacturing process.

Since the HRA results were above the Notification Risk Level in Rule 1402, Kirkhill was required to notify the public about the health risk. Notices of the public notification meeting were sent out to over 900 people in the area of impact. South Coast AQMD staff held a public notification meeting at Brea Junior High School on November 13, 2019 to explain the impact of Kirkhill's emissions on public health and to discuss actions taken by the facility to reduce risk.

Since the HRA results were below the Action Risk Level in Rule 1402, Kirkhill was not required to take action to reduce its health risks. However, Kirkhill voluntarily ceased usage of coloring dyes containing chromium in its rubber manufacturing process and submitted permit applications for several of its previously Rule 219 exempt devices to allow South Coast AQMD to enforce the reduction. By ceasing usage of coloring dyes containing chromium, Kirkhill reduced its risk even further to under the Notification Risk Level in Rule 1402.

A.22. ***LA City, Sanitation Bureau (Hyperion Treatment Plant) (ID 800214) – Playa del Rey***

The City of Los Angeles owns and operates the Hyperion Water Reclamation Plant (Hyperion) in the Playa del Rey community. Hyperion is a publicly owned wastewater treatment plant with over 275 million gallon capacity with primary and full secondary treatment processes. As part of the treatment process, more than 885,000 pounds of solid and organic materials are removed daily and treated through anaerobic digestion.

On October 28, 2016, South Coast AQMD staff sent a letter requiring Hyperion to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory with perchloroethylene and arsenic as the main air toxics contributing to the high priority score.

On November 23, 2016, Hyperion elected to participate in the Voluntary Risk Reduction Program and submitted a VRRP on January 24, 2017. Throughout 2018, South Coast AQMD and Hyperion staff have been working to resolve various issues regarding electronic format of the emissions inventory, the use of unapproved source tests, the distribution of emissions, and receptor grid spacing. Comments were provided to Hyperion on February 9, 2018 and the facility submitted revisions to the EIM files on March 14, 2018. Upon review, South Coast AQMD staff found additional errors and requested revisions on September 4, 2018. Hyperion submitted revised EIM files on December 19, 2018. South Coast AQMD staff completed its review of the VRRP EIM files and provided comments to Hyperion on January 31, 2019. The facility made the requested changes and submitted revised EIM files on February 19, 2019. South Coast AQMD staff approved the VRRP as an ATIR on April 3, 2019.

A.23. ***LA City, Street Maintenance Bureau Department of Public Works (ID 25196) – North Hollywood***

LA City, Street Maintenance Bureau Department of Public Works (LA City, Street Maintenance) is an hot mix asphalt plant in North Hollywood. The facility is a city owned public utility that provides maintenance work on city streets in Los Angeles. The plant includes equipment such as silos, dryers, asphalt tanks, and associated air pollution control equipment.

On September 4, 2019, South Coast AQMD staff sent a letter requiring LA City, Street Maintenance to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory. The risk driver for this facility is polycyclic aromatic hydrocarbons (PAHs) from the hot mix asphalt plant.

LA City, Street Maintenance elected to submit an amendment to their 2017 quadrennial emissions report. As of the end of 2019, the amendment was under review. The ATIR is due in February 2020.

A.24. ***Light Metals (ID 83102) – City of Industry***

Light Metals Inc. (Light Metals) is located in the City of Industry and produces secondary aluminum alloy by processing recycled aluminum into ingot for the metal casting industry. On August 2, 2019, South Coast AQMD staff sent a letter requiring Light Metals to submit an ATIR or VRRP due to the facility having a priority score greater than 10 based on it's 2017 annual emissions inventory with polychlorinated dibenzofurans as the main air toxic contributing to the high priority score. Light Metals chose the ATIR option and submitted their ATIR on December 31, 2019.

A.25. ***Los Angeles By-Products (ID 60384) – Sun Valley***

Los Angeles By-Products (LA By-Products) operates a landfill gas collection system and flares for combustion of the landfill gas and is located in Sun Valley, California.

On August 23, 2019, South Coast AQMD staff sent a letter requiring LA By-Products to submit an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory, with polycyclic aromatic hydrocarbons (PAHs) and formaldehyde as the

main air toxics contributing to the high priority score. The ATIR is due in January 2020.

A.26. ***Lubeco Inc (ID 41229) – Long Beach***

Lubeco, Inc. (Lubeco) is a metal finishing company operating in Long Beach near the southern border of the City of Paramount. Lubeco's primary operations involve painting, surface preparation, anodizing, sealing and coating of metals for the aerospace industry. Ancillary operations include abrasive blasting, wastewater treatment, and operation of a natural gas-fired boiler and ovens.

Lubeco utilizes baking and drying ovens, spray booths, tanks for chromic acid anodizing, aqueous solutions, and acid surface preparations. These processes can potentially generate hexavalent chromium emissions.

Beginning in October 2016, through expanded monitoring efforts in the City of Paramount, South Coast AQMD staff found high concentrations of hexavalent chromium in the vicinity of Lubeco. As a result, Lubeco was selected as a host facility for testing of hexavalent chromium emissions from a heated sodium dichromate seal tank due to elevated ambient monitoring readings in the nearby south Paramount area. On April 27, 2017, South Coast AQMD staff conducted source tests for hexavalent chromium emissions from the sodium dichromate seal tank with the main objective of determining an emission factor to calculate emissions from such tanks used in plating operations. The results of the source tests showed the heated sodium dichromate tank to be a source of hexavalent chromium. The second objective of this testing was to identify potential sources of hexavalent chromium emissions as measured by South Coast AQMD ambient air monitors in the nearby south Paramount area. South Coast AQMD subsequently filed a petition for Order for Abatement with the Hearing Board. Following the hearings on August 17 and August 23, 2017, the Hearing Board granted South Coast AQMD permission to install ambient monitors and a meteorological station on the facility property and permission to conduct additional source tests.

Because of the ambient measurements, South Coast AQMD staff notified Lubeco on September 8, 2017 that the facility may be designated as a Potentially High Risk Level Facility. Lubeco representatives and South Coast AQMD staff met on September 22, 2017 to discuss the monitoring results that had led to the notification. On September 28, 2017, Lubeco was officially designated as a Potentially High Risk Level Facility. As part of this designation, Lubeco was required to expeditiously reduce risks and to submit an Early Action Reduction Plan by December 27, 2017, an ATIR by February 27, 2018, a HRA and a RRP by March 27, 2018. The Early Action Reduction Plan was submitted on December 8, 2017. On March 29, 2018, 2018, South Coast AQMD sent Lubeco an approval letter for the Early Action Reduction Plan. On February 9, 2018, Lubeco submitted an ATIR followed by a HRA and RRP on March 27, 2018.

South Coast AQMD staff reviewed the submitted ATIR and HRA and determined that the meteorological data from the Compton station was more representative of the site conditions at Lubeco than that used in the facility's HRA. Lubeco submitted a revised HRA in March 2019. Staff also found that Lubeco used non-default assumptions in their emission calculations for the sodium dichromate seal tank and requested for supporting documentation which was submitted in July 2019. Upon review of the submitted information, Staff determined that the facility had

understated the operating hours and requested for an updated ATIR and HRA to reflect the increase in operating hours and emissions for the dichromate seal tank in August 2019.

Lubeco submitted a revised HRA on September 16, 2019. The Revised HRA representing the 2015 inventory year indicated that Lubeco posed a maximum cancer risk of 129 chances in-one-million for a residential receptor, based on a 30 year residential exposure, and 39 chances in-one-million for the worker receptor, based on a 25 year worker exposure. South Coast AQMD approved the ATIR and HRA on September 27, 2019.

Since the HRA results were above Rule 1402 Notification Risk Levels, a public meeting to notify the public about the health risk was required. Staff also reviewed the Risk Reduction Plan and found that some of the proposed risk reduction measures were inconsistent with recent permit applications. As a result, on October 24, 2019, staff requested revision and resubmission of the Risk Reduction Plan. On November 8, 2019, Lubeco submitted an updated Risk Reduction Plan on November 8, 2019 and a subsequent revised Risk Reduction Plan on December 20, 2019. A public notification meeting is scheduled to occur in 2020.

A.27. MM West Covina LLC (ID 113873) – WestCovina

MM West Covina is a cogeneration facility located on the BKK Landfill in the City of West Covina. Landfill gas from the inactive BKK Landfill, which received Class I and Class III waste, is combusted in the facility's steam generator. The steam powers a 7,100 kW capacity steam turbine to produce electricity.

On January 11, 2017, South Coast AQMD staff sent a letter requiring MM West Covina to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2014 annual emissions inventory with dioxins and hexavalent chromium being the main air toxic contributors to the high priority score. On February 15, 2017, MM West Covina elected to prepare an ATIR. The ATIR was submitted on June 13, 2017. South Coast AQMD staff provided comments on August 17, 2017 requiring revisions to the ATIR which was provided on August 29, 2017. South Coast AQMD staff approved the ATIR on March 27, 2018, and notified the facility to prepare and submit a HRA by June 26, 2018.

MM West Covina submitted an HRA on July 2, 2018. After review, on August 1, 2018, South Coast AQMD staff informed the facility that HRA did not include all of the emissions, specifically dioxins and furans, from the approved ATIR and therefore rejected the HRA. MM West Covina opted to conduct a source test to address the accuracy of the inventory of dioxin and furans in the ATIR. A revised HRA was submitted on October 5, 2018 which again utilized an inventory that was not consistent with the approved ATIR. On July 9, 2019, South Coast AQMD sent a letter to MM West Covina requiring a revision of the HRA while allowing the source test results to be utilized in an alternate HRA. On August 16, 2019, MM West Covina submitted a revised HRA which also included an alternate HRA. At the end of 2019, South Coast AQMD had provided additional comments on the HRA and was working with MM West Covina to finalize the HRA.

A.28. Motion Picture & Television Fund (ID 16211) – Woodland Hills

Motion Picture & Television Fund (MPTF) is a service organization that provides healthcare and retirement living services to members of the entertainment industry community. MPTF operates a

facility in Woodlands Hills and has cogeneration units powered by internal combustion engines which generate formaldehyde, 1,3-butadiene, and benzene emissions.

On December 6, 2019, South Coast AQMD staff sent a letter requiring MPTF to prepare an ATIR due to the facility having a priority score greater than 10 based on 2017 annual emissions inventory. The high priority score was mostly due to internal combustion engine emissions.

A.29. ***PABCO Bldg Products LCC (ID 45746) – Vernon***

PABCO Bldg Products LLC (PABCO) is a paper mill operation located in Vernon that manufactures drywall board liner paper from recycled paper stock. The facility operates a paper conveying system, three boilers, one process unit hot air heater, a plasma arc cutter, and Rule 219 equipment including space heaters and a propane tank.

On December 6, 2019, South Coast AQMD staff sent a letter requiring PABCO to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2016 annual emissions inventory. The main toxic air contaminant contributing to the priority score was sodium hydroxide. The main sources of emissions were from boiler water treatment and from caustic felt wash processes.

On December 18, 2019, PABCO provided sodium hydroxide emission revisions along with documentation to substantiate their revisions. As of the end of 2019, South Coast AQMD staff was reviewing PABCO's sodium hydroxide emission revisions.

A.30. ***Pac Rancho, Inc. (ID 140871) – Rancho Cucamonga***

Pac Rancho Inc. located in the city of Rancho Cucamonga, manufactures highly-engineered components and sub-assemblies. The Company uses green sand, dry sand and permanent mold castings in aluminum and magnesium alloys, investment castings in numerous ferrous, non-ferrous, and super alloys.

On September 4, 2019, South Coast AQMD staff sent a letter requiring Pac Rancho, Inc. to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2018 annual emissions inventory. The facility submitted the Initial Information for the ATIR in November 2019. South Coast AQMD staff has reviewed the initial information. The ATIR is due in March 2020.

A.31. ***Pacific Clay Products, Inc. (ID 17953) – Lake Elsinore***

Pacific Clay Products in Lakes Elsinore manufactures bricks and other clay products. The facility operates various equipment including dryers, kilns, conveyors, silos, crushers, and other miscellaneous clay processing equipment and associated baghouses.

On August 23, 2019, South Coast AQMD staff sent a letter requiring Pacific Clay Products to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory. The main toxic air contaminant contributing to the priority score are polycyclic aromatic hydrocarbons which comes from the heating of diesel which is used as a non-stick lubricant to ease the bricks from their molds. The facility also operates dryers, kiln, conveyors, silos, screens, crushes, and other miscellaneous clay processing equipment and

associated baghouses. The facility provided the initial information for the ATIR on September 26, 2019. The ATIR is due on February 11, 2020.

A.32. Pasadena Department of Water and Power (ID 800168) - Pasadena

The City of Pasadena, Departments of Water and Power (Pasadena DWP) owns and operates a power plant in Pasadena, California. This facility operates several gas turbines to provide electricity to residents in the surrounding area.

On January 16, 2019, South Coast AQMD staff sent a letter requiring Pasadena DWP to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2016 annual emissions inventory with polycyclic aromatic hydrocarbons (PAHs) and formaldehyde as the main air toxics contributing to the priority score. Pasadena DWP elected to prepare a VRRP, and on April 2, 2019, conducted a source test on one of the gas turbines for the air toxics PAHs, formaldehyde, and benzene.

On June 14, 2019 Pasadena DWP submitted a VRRP. Upon review, South Coast AQMD notified Pasadena DWP of some preliminary issues with the submittal. A revised VRRP was then submitted on June 28, 2019. South Coast AQMD continued discussions with Pasadena DWP to correct any further errors with the VRRP and received an additional inventory revision on September 6, 2019. A final VRRP submittal was received on September 26, 2019. On November 5, 2019, South Coast AQMD approved the submittal as an ATIR since facility risks were below the Rule 1402 Voluntary Risk Thresholds.

A.33. Phillips 66 Co/LA Refinery Wilmington Plant (ID 171107) – Wilmington

The Phillips 66 Company, LA Willmington Plant (Wilmington Refinery) operates two linked facilities, five miles apart, in Carson and Wilmington. The Wilmington Refinery was built in 1919 and is situated on approximately 424 acres. This facility receives and processes intermediate product from the Carson facility and produces petroleum fuels as well as fuel-grade petroleum coke. Air toxic emissions are generated from fluid catalytic cracking, steam generation, electricity generation, and sulfuric acid production processes.

On March 1, 2017, South Coast AQMD staff sent a letter requiring Wilmington Refinery to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory with hexavalent chromium and polycyclic aromatic hydrocarbons being the main air toxic contributors to the high priority score.

Wilmington Refinery elected to prepare an ATIR, and submitted the ATIR on August 1, 2017. Following review, South Coast AQMD staff found several deficiencies. Revisions were submitted by Wilmington Refinery staff on November 10, and December 20, 2017. Staff subsequently requested calculations and supporting data Wilmington Refinery submitted a revision on December 19, 2018.

Upon review of the revision, South Coast AQMD staff found issues with the facility's modeling of the wastewater treatment system. The facility was also required to conduct source testing that had not been completed at the time of review. Further, the facility's calculation methodology for

welding emissions were not consistent with South Coast AQMD's methodology. Wilmington Refinery submitted revised calculations in April 2019. The ATIR was conditionally approved in May 2019 provided that the facility completes the required source testing. Wilmington Refinery submitted the HRA and modeling files in September 2019 and source test protocols for the required source test in October 2019. The source tests were tentatively scheduled for December 2019. South Coast AQMD staff reviewed the HRA submittal and found that the facility did not utilize the most recent meteorological data in the model, and on November 22, 2019, requested that the HRA be revised using the updated meteorological dataset. South Coast AQMD staff review is pending results from the source test and a revised HRA submittal.

A.34. ***Phillips 66 Company/Los Angeles Refinery (ID 171109) - Carson***

The Phillips 66 Company operates two facilities, five miles apart, in Carson and Wilmington. The Phillips 66 Carson Refinery (Carson Refinery) was built in 1923 and is situated on approximately 235 acres. The refinery processes mainly heavy, high-sulfur crude oil, which is received by pipeline and at a terminal in the Port of Long Beach. The Carson Refinery produces intermediate product, which is then sent to the Phillips 66 Wilmington Refinery for further processing to produce petroleum fuels and fuel-grade petroleum coke. These facilities have fluid catalytic cracking, alkylation, hydrocracking, coking and naphtha reforming units.

On March 1, 2017, South Coast AQMD staff sent a letter requesting Carson Refinery to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions inventory with arsenic and sulfuric acid being the main contributors to the high priority score. These emissions were mainly from crude distillation, hydro-treating, and steam generation processes at the facility.

Carson Refinery elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on August 1, 2017. Following review, South Coast AQMD staff noted several deficiencies. Revisions and clarifications were provided by Carson Refinery staff on multiple instances in 2017 and 2018. South Coast AQMD staff reviewed the latest submittal from September 11, 2018 and requested the facility revise sulfuric acid emissions, modeling discrepancies, and arsenic emission calculations among other issues. The HRA was then modeled and South Coast AQMD staff determined that the facility health risks did not exceed the Rule 1402 Voluntary Risk Thresholds and approved the submittal as an ATIR instead of a VRRP. Approval was given on January 9, 2019.

A.35. ***Plains West Coast Terminals (ID 800417) - Compton***

Plains West Coast Terminals (Plains West Coast) is a petroleum storage facility located in Compton. On December 6, 2019, South Coast AQMD staff sent a letter requiring Plains West Coast to submit an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory, with benzene from storage tanks as the main air toxics contributing to the high priority score. South Coast AQMD staff was awaiting the submittal of the ATIR from Plains West Coast at the end of 2019.

A.36. Robertson's Ready Mix (ID 42623) – Redlands

Robertson's Ready Mix (RRM Redlands) owns and operates several aggregate processing plants in Southern California and Nevada. RRM Redlands has a plant in the city of Redlands where arsenic, nickel, and manganese emissions are produced from crushing and screening operations as well as an on-site quarry.

On August 23, 2019, South Coast AQMD staff sent a letter requiring RRM Redlands to submit an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory. Staff's review of the Initial Information for the ATIR revealed that the facility was not using an approvable method for calculating speciated PM emissions. As a result, RRM Redlands proposed a sampling plan for speciating PM dust emissions on November 8, 2019. The plan was being reviewed by South Coast AQMD staff at the end of 2019.

A.37. Robertson's Ready Mix (ID 134112) – Gardena

Robertson's Ready Mix (RRM Gardena) owns and operates several ready-mix concrete batch plants in California and Nevada. The Gardena plant utilizes fly ash and cement as well as aggregate delivered by train from a quarry in Cabazon.

On December 06, 2019, South Coast AQMD staff sent a letter requiring RRM Gardena to submit an ATIR due to the facility having a priority score greater than 10 based on its 2016 annual emissions inventory, with arsenic and manganese emissions as the main air toxics contributing to the high priority score. The facility's Initial Information for the ATIR was pending review at the end of 2019.

A.38. San Diego Gas & Electric (ID 4242) – Moreno Valley

San Diego Gas & Electric (SDG&E) owns and Southern California Gas Company (SoCalGas) operates the Moreno Valley Compressor Station located at in Moreno Valley.

On September 12, 2019, South Coast AQMD staff sent a letter requiring SoCalGas to submit an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory, with formaldehyde emissions as the main air toxic contributing to the high priority score. The facility submitted the initial information on October 11, 2019. The ATIR is due on February 9, 2020.

A.39. SFPP, L.P (ID 800278) – Carson

The SFPP facility in Carson is also known as the Kinder Morgan, Watson station. This tank farm receives and distributes various petroleum products through various pipelines.

On August 23, 2019, South Coast AQMD staff sent a letter requiring SFPP to submit an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory. The primary air toxic contributing to the high priority score is benzene which comes from the fugitive losses from their 25 storage tanks. Since the facility failed to provide a response by the specified deadline, SFPP was required to submit an ATIR. The ATIR is due on February 28, 2020.

A.40. ***So Cal Edison Co (ID 4477) – Pebbly Beach***

So Cal Edison Co (SCE Pebbly Beach) is the primary producer of electric power for Santa Catalina Island and is located approximately one mile southeast of the city of Avalon. Electricity is generated using six diesel-fired engines. There is also a diesel-fired backup generator and 23 microturbines. Diesel fuel and liquefied petroleum gas (LPG) are periodically shipped in and stored at the facility. LPG is vaporized to produce a petroleum gas and air mixture to form a natural gas surrogate, where it is sent to either local residents or combusted in the microturbines.

On June 13, 2018, South Coast AQMD staff sent a letter requiring SCE Pebbly Beach to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory. The main air toxic contributing to the priority score is DPM from the six diesel-fired internal combustion engines.

SCE Pebbly Beach elected to prepare an ATIR and submitted it on November 13, 2018. On January 23, 2019, South Coast AQMD staff sent a letter to the facility approving the ATIR and requiring the preparation of an HRA based on the approved ATIR. SCE Pebbly Beach submitted the HRA on April 23, 2019. As of the end of 2019, the HRA is still in review.

A.41. ***So Cal Gas Co./Playa del Rey Storage Facility (ID 8582) – Playa del Rey***

Southern California Gas Company (So Cal Gas) is a public utilities company that owns and operates a natural gas storage facility in the Playa del Rey community in the City of Los Angeles. Natural gas is compressed and stored in underground reservoirs. Transmission pipelines distribute natural gas to and from the facility. Primary equipment at the facility include three natural gas internal combustion engines driving air compressors to facilitate storage of natural gas.

On May 31, 2017, South Coast AQMD staff sent a letter requiring So Cal Gas to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory with formaldehyde, 1,3-butadiene and benzene being the main air toxic contributors to the high priority score. On October 31, 2017, the ATIR was submitted.

On March 22, 2018, the ATIR was approved and So Cal Gas was required to submit an HRA based on the approved ATIR. The HRA was submitted on June 7, 2018. Following review, South Coast AQMD staff noted some deficiencies and required revision and resubmission of the HRA. So Cal Gas provided revisions on July 17, August 17, and a final revision on October 16, 2018. January 2, 2019, the HRA was approved with a predicted acute non-cancer hazard index of 7.28 which exceeded the public notification and risk reduction thresholds of Rule 1402. Since the risk isopleths covered an area of the Ballona Wetlands which is normally restricted to individuals who obtain a permit from the California Department of Fish and Wildlife, a modified public notice was done in lieu of a regular public meeting on January 10, 2019. So Cal Gas submitted an RRP on April 26, 2019 which was approved on December 6, 2019. The RRP proposed rerouting natural gas venting and using carbon adsorbers to control emissions and permit applications were required to be submitted within 180 days after approval of the RRP. South Coast AQMD staff will continue to monitor the implementation of So Cal Gas' Risk Reduction Plan in 2020.

A.42. ***So Cal Holding, LLC (ID 169754) – Huntington Beach***

SoCal Holding, LLC (SoCal Holding) is a subsidiary of California Resources Corporation, an oil and natural gas exploration and production company. SoCal Holding leases and operates oil production wells, mainly in Huntington Beach with some wells located offshore on a platform approximately 1.5 miles from shore. Recovered field gas is either sold to AES Huntington Beach, combusted in microturbines or flared. The liquid product is stored in tanks linked to truck loading or pipeline.

On October 11, 2017, South Coast AQMD sent a letter requiring SoCal Holding to prepare an ATIR due to the facility having a priority score greater than 10 based on 2015 annual emissions inventory with polycyclic aromatic hydrocarbons and benzene being the main air toxic contributors to the high priority score. The source for polycyclic aromatic hydrocarbons emissions was a flare located on a leased property northwest of the intersection of Goldenwest Street and Pacific Coast Highway. Benzene emissions were reported as fugitive leaks throughout the facility. The ATIR was received on March 13, 2018. Following review, staff found errors and requested corrections to the ATIR. The corrected ATIR was submitted on July 13, 2018. On July 25, 2018, the corrected ATIR was approved and South Coast AQMD staff directed So Cal Holding to prepare and submit an HRA. The HRA was submitted on October 23, 2018. South Coast AQMD staff requested corrections on the HRA forms on January 17, 2019. On January 25, 2019, So Cal Holding submitted a revised HRA report. The risks were found to be below the notification risk thresholds in Rule 1402 and the HRA was subsequently approved on February 14, 2019.

A.43. ***Tesoro Refining & Marketing Co., LLC, Calciner (ID 174591) – Wilmington***

Tesoro Refining & Marketing Co., LLC, Calciner (Tesoro Calciner) located in Wilmington, produces calcined petroleum coke, or raw or "green" petroleum coke heated to high temperatures so that volatile hydrocarbon compounds and excess moisture are heated out of the coke. Equipment in Tesoro Calciner's operations include a rotary kiln, baghouses, conveyor belts, receiver and separator vessels, an afterburner, surge bins, boiler, bucket elevators, loading and unloading stations, shakers, and storage silos.

On April 28, 2017, South Coast AQMD staff sent a letter requiring Tesoro Calciner to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2016 annual emissions inventory with sulfuric acid, arsenic, manganese, and nickel as the main air toxic contributors to the high priority score. On May 25, 2017, Tesoro Calciner elected to participate in the Voluntary Risk Reduction Program, and subsequently submitted the VRRP on September 21, 2017.

After review of the VRRP, South Coast AQMD staff found several deficiencies and on January 31, 2018, a letter requesting revision and resubmittal of the VRRP was sent. Tesoro Calciner identified diesel particulate matter (DPM) emissions as another source of emissions and submitted a revised VRRP on February 26, 2018. South Coast AQMD staff subsequently reviewed the VRRP and requested information on calculations and supporting documentation. In addition, Tesoro Calciner had proposed to use a 2011 source test to estimate emissions of dioxins from the rotary kiln. However, since the source test was not acceptable, Tesoro Calciner was

required to use previously approved source tests to estimate emissions. After several discussions with staff and revisions to the VRRP, Tesoro submitted an updated VRRP addressing the DPM and rotary kiln emission calculations on September 7, 2018.

Upon further review of the submittal, South Coast AQMD staff found that the welding emissions were not estimated properly and requested welding emissions be recalculated following U.S.EPA guidance. Tesoro Calciner provided updated calculations to the welding emissions on April 11, 2019 and refined DPM calculations on April 16, 2019.

On May 8, 2019, Tesoro Calciner submitted the final emissions inventory files reflecting the changes in diesel and welding emissions. Staff found that all health risks were below both Notification Risk Levels and the Voluntary Risk Threshold in Rule 1402, and therefore risk reduction measures were not required. South Coast AQMD staff approved the VRRP as an ATIR for Tesoro Calciner on August 9, 2019. To ensure emissions of DPM from the engines and emissions from welding emissions are calculated accurately, Tesoro Calciner is required to maintain and provide thorough records for diesel and welding emissions during the next and future quadrennial reports as specified in the approval letter.

A.44. ***Tesoro Refining & Marketing Co., LLC, Los Angeles Refinery (ID 800436, 174655, 174694, 174703) – Carson and Wilmington***

The Tesoro Los Angeles Refinery (Tesoro Refinery) is located along the city border between the cities of Carson and Wilmington in south Los Angeles County. The Tesoro Refinery was originally two adjacent non-contiguous refineries but has been undergoing consolidation through the Los Angeles Refinery Integration and Compliance Project.[24] The Tesoro Refinery will be comprised of approximately 930 acres with a processing capacity of approximately 380,000 barrels per day. In 2017, the Tesoro Corporation underwent a name change to Andeavor.

On December 22, 2016, South Coast AQMD staff sent a letter requiring Tesoro Refinery to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory with polycyclic aromatic hydrocarbons, hexavalent chromium, arsenic, naphthalene, benzene, and cadmium as the main air toxic contributors to the high priority score.

Tesoro Refinery elected to participate in the Voluntary Risk Reduction Program, and submitted their VRRP on May 23, 2017. After initial review, South Coast AQMD staff required Tesoro Refinery to make several revisions. Both South Coast AQMD staff and Tesoro Refinery representatives have met several times regarding the revisions and risk reduction measures proposed. South Coast AQMD staff is currently waiting for the necessary revisions to be submitted before continuing the review of the VRRP. At the end of 2018, South Coast AQMD staff identified heaters located at Carson for source testing with the intention of establishing a representative emission profile for heaters located at Carson.

On February 19, 2019, South Coast AQMD sent Tesoro Refinery a letter requesting for EIM files and identifying equipment that required source testing. Tesoro submitted EIM files on March 7,

[24] http://www.aqmd.gov/docs/default-source/ceqa/documents/permit-projects/2017/tesorolaric/tesoro_feir.pdf

2019 and the source test protocols for the three heaters on March 7, March 15, and April 11, 2019. South Coast AQMD staff approved these protocols on March 20, May 22, and May 29, 2019, respectively. Tesoro completed the source tests on June 28, 2019, and submitted the final report on August 20, 2019. The final source test report is currently under review.

A.45. ***Tesoro Refining & Marketing Co., LLC (Sulfur Recovery Plant) (ID 151798) – Carson***

Tesoro Sulfur Recovery Plant (Tesoro SRP) is located in Carson east of the Tesoro Los Angeles Refinery. The facility supports petroleum refinery operations by utilizing the Claus process to recover sulfur in the form of hydrogen sulfide from the byproduct gases of refining crude oil. The facility operates boilers, incinerators, condensers, absorbers, storage tanks, sumps, and sulfur pits.

On December 22, 2016, South Coast AQMD staff sent a letter requiring Tesoro SRP to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory with arsenic, polycyclic aromatic hydrocarbons, hexavalent chromium, and formaldehyde as the main air toxic contributors to the high priority score.

Tesoro SRP elected to participate in the Voluntary Risk Reduction Program, and submitted the VRRP on May 23, 2017. After review, on February 15, 2018, South Coast AQMD staff sent a letter requesting revisions and resubmittal of the VRRP. Ongoing communication with Tesoro SRP has occurred to develop the most representative emission estimation methodology. On November 9, 2018, a finalized emissions inventory was submitted by Tesoro SRP for South Coast AQMD staff review. On March 13, 2019, South Coast AQMD approved the VRRP submittal as an ATIR since facility risks were below the Rule 1402 Voluntary Risk Thresholds.

A.46. ***Torrance Refining Company LLC (ID 181667) – Torrance***

Torrance Refining Company LLC (Torrance Refining) is a subsidiary of PBF Energy, an independent petroleum refiner and supplier of unbranded transportation fuels, heating oils, petrochemical feedstocks, lubricants, and other petroleum products. The Torrance Refining sits on 750 acres in the City of Torrance and has a 155,000 barrels per day of crude oil processing capacity. The refinery produces various petroleum productions along with coke, and sulfur. On January 11, 2017, South Coast AQMD staff sent a letter requiring Torrance Refining to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2015 annual emissions inventory with polycyclic aromatic hydrocarbons, arsenic, benzene, and cadmium being the main air toxic contributors to the high priority score.

Torrance Refining elected to participate in the Voluntary Risk Reduction Program and was prepared to submit the VRRP on August 24, 2017 for the 2015 inventory year. However, due to an explosion that had occurred at the facility's fluid catalytic cracking unit during 2015, the facility had limited operations during that year. As a result, South Coast AQMD staff decided that 2016 would be more representative of the facility's routine operations and, required Torrance Refining to use 2016 as the inventory year for their VRRP.

The facility submitted the VRRP on August 24, 2017. After review, on October 19, 2017, South Coast AQMD staff sent a comment letter requesting revisions and resubmittal of the VRRP.

The revised VRRP was received on November 2, 2017. However, a few issues and information regarding calculations and reference documentation required more revisions. VRRP files were requested and received in various stages up to May 8, 2018.

Upon review, South Coast AQMD staff determined the VRRP to be sufficient. However, on July 12, 2018, Torrance Refining informed South Coast AQMD that the permit application for the first risk reduction measure was withdrawn and requested to submit another revised VRRP utilizing a change in operating condition instead of the previous risk reduction measure. The revised VRRP was submitted on August 3, 2018. This VRRP also included changes to the emission inventory for diesel particulate matter emissions. Based on a meeting on August 9, 2018 and subsequent review, the change in operating condition was found acceptable as a risk reduction measure. Policies on diesel particulate matter emissions were reviewed for all refineries, and subsequently the emissions inventory was also accepted.

South Coast AQMD staff instructed Torrance Refining to submit a permit application for a change in operating condition, which was submitted on November 9, 2018. South Coast AQMD also requested revisions to the VRRP language for the second and third risk reduction measure. The second measure was revised completely, incorporating an emission limit rather than a fuel usage limit. By December 5, 2018, Torrance Refining submitted language for risk reduction measures along with VRRP files incorporating the changes. South Coast AQMD staff confirmed that the measures would still reduce risk below 10 chances in-one-million. The VRRP then began pending approval, as South Coast AQMD staff needed to determine the logistics of compliance plans for the second and third risk reduction measures and whether fees would be charged for such plans.

Before the VRRP was approved, South Coast AQMD staff adopted a new methodology for calculating welding emissions. Staff requested all facilities with welding calculations that were inconsistent with the methodology to revise their emissions. Torrance Refining was notified on March 15, 2019. After an initial submittal on March 25, 2019, the facility's proposal of an alternative methodology on April 4, 2019, and a question regarding exemptions to welding done to repair an FCC unit, Torrance Refining submitted satisfactory calculations on April 24, 2019. An updated HARP database was submitted on April 26, 2019. South Coast AQMD staff requested Torrance Refining to model the new risk numbers and to begin incorporating additional measures in the VRRP to offset the increase in risk. Torrance Refining calculated the additional risk and submitted a VRRP with additional risk reduction measures on June 12, 2019. However, this submittal calculated risk by considering proposed emissions over a five-year period. Torrance Refining was required to revise the VRRP to calculate risk based on emissions over a one-year period only. This revised VRRP was submitted on June 26, 2019.

Upon review, staff had many questions regarding recordkeeping for diesel engines. A revision to risk reduction measure language was submitted on July 16, 2019. Staff submitted comments on this language on August 7, 2019, requesting that recordkeeping for diesel engines and welding emissions be described in better detail. After further discussion, Torrance Refining submitted another revision to risk reduction measure language on August 27, 2019. Staff provided comments on this revision on September 4, 2019. More discussion took place, and Torrance Refining submitted another revision to risk reduction measure language on September 13, 2019. Staff reviewed and discussed concerns again, then requested specific changes to the language on October 2, 2019. Torrance Refining again submitted risk reduction measure language on October

29, 2019. Staff identified a gap in diesel recordkeeping and discovered that language had been unintentionally removed, thus, revised reduction measure language was once again submitted on December 4, 2019.

During further discussion that occurred in November 2019, staff found that Torrance Refining was not open to suggestions regarding welding and also disagreed with the enforceability of the proposed risk reduction measures. Torrance Refining requested a face to face meeting, which was held on December 12, 2019. Torrance Refining explained their position regarding limitations on certain recordkeeping methods. Staff requested changes such as a standard method to record welding usage and more assurance for accurate fueling meters. A revised VRRP is expected in January 2020.

A.47. ***Trojan Battery Company (ID 21872) – Santa Fe Springs***

Trojan Battery Company (Trojan Battery) manufacturers, markets, and distributes industrial deep-cycle batteries for motive and stationary power markets. Trojan Battery operates two facilities in the city of Santa Fe Springs: The Ann Street facility (ID 21872) performs initial manufacturing activities and the Clark Street facility performs final product manufacturing activities. The Ann Street facility that performs metal melting operations of primary pure lead in quantities exceeding 100 tons per year and is therefore subject to Rule 1420.2 for ambient monitoring and reporting.

Trojan Battery had a previous 1420.2 Monitoring and Sampling Plan which was approved in August 2017. Several changes were made by the facility and the original plan was revised due to the changes on the stack parameters (e.g. increased stack height, re-orienting to vertical stacks, removal of rain caps, etc.) and relocation of existing monitors. Trojan Battery submitted a revised plan in March 2018. However, due to additional changes, an updated modeling report was submitted in March 2019 and a revised compliance plan was submitted in April 2019. Staff completed review of the modeling report and compliance plan in September 2019. South Coast AQMD staff found that exceedances of ambient air quality standards for lead were not expected based on normal operating conditions and source testing results. Further, existing monitor locations should be retained.

A.48. ***TST, Inc. (ID 43436) – Fontana***

TST Inc. (TST) located in Fontana, conducts secondary aluminum refining of scrap metal which consists of two primary operations: producing aluminum ingots from scrap metal and producing billets. Aluminum chips and borings are received in scrap barrels and bins and dumped into a receiving hopper. The chips and borings are crushed and, if necessary, passed through a dryer to remove any oils or coatings. The aluminum is then sent to furnaces where the dross is used to create the billets and ingots.

On April 20, 2018, South Coast AQMD staff sent a letter requiring TST to prepare either an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2014 annual emissions inventory with nickel and arsenic as the main air toxics contributing to the high priority score. On May 22, 2018, TST elected to prepare an ATIR and also submitted the initial information for the ATIR. In accordance with Rule 1402(d)(2)(A), TST was required to submit an ATIR within 150 days of the initial notification date. TST failed to meet the required deadline and was issued a Notice to Comply on October 10, 2018. In response, TST submitted an ATIR on October 24, 2018.

South Coast AQMD staff reviewed the ATIR and found errors and required resubmittal. A revised ATIR was submitted on November 30, 2018. TST submitted another revised ATIR on January 22, 2019 to address additional comments from South Coast AQMD Staff. After review, South Coast AQMD sent a letter to TST on March 22, 2019 to inform them that their priority score had been revised to be below 10 and no further action was required for the 2014 inventory year.

A.49. ***Ultramar Inc (ID 800026) – Wilmington***

Ultramar Refining Company (Ultramar) is a subsidiary of Valero Energy Corporation and operates a 135,000 barrel per day crude oil processing capacity petroleum refinery facility in Wilmington.

On March 29, 2017, South Coast AQMD staff sent a letter requiring Ultramar to either prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on 2015 annual emissions inventory with polycyclic aromatic hydrocarbons emissions as the main air toxic contributor to the high priority score.

Ultramar elected to participate in the Voluntary Risk Reduction Program and submitted the VRRP on August 25, 2017. After review by South Coast AQMD staff, items were found to be missing, which included throughput data, emission factors, calculation basis, and certain devices and device descriptions. Ultramar subsequently provided the missing information on September 15 and October 26, 2017. Ultramar provided information on emission factor reference sources on February 26, 2018. However, review indicated that the VRRP still had an incomplete emissions inventory, among other issues. From March 22, 2018 thru the end of the year, staff provided comments to the facility regarding unaccounted emissions and continued deficiencies in the submitted files. Upon review of revised files received on December 13, 2018, South Coast AQMD staff determined that the facility once again failed to provide all the requested information and another resubmission was required.

Staff sent multiple emails and held conference calls with Ultramar regarding issues with the VRRP language, welding rod emission calculations, sulfuric acid emission calculations, and other various issues from January 3, until March, 2019. Although Ultramar indicated during a conference call on March 28, 2019 that all revisions would be submitted to South Coast AQMD, after multiple follow-ups in April, Ultramar still had not provided the revisions. Ultramar submitted the revisions on May 31, 2019 after South Coast AQMD staff notified the facility that the VRRP would be rejected since the facility had failed to submit the revisions. Issues remained with the welding emissions calculations and subsequent revisions were submitted on June 28, 2019 and November 5, 2019. South Coast AQMD staff found additional issues and worked with Ultramar to correct them for the rest of the year.

A.50. ***Vista Metals Corporation (ID 14495) – Fontana***

Vista Metals Corporation (Vista Metals) is a secondary aluminum smelter located in Fontana manufacturing specialty aluminum alloy ingots, plates, and slabs used primarily by aerospace and automotive manufacturers. The facility operates melting furnaces, homogenizing heat treat furnaces, chip dryers, a service station, and numerous Rule 219 exempt equipment.

On August 23, 2019, South Coast AQMD staff sent a letter requiring Vista Metals to prepare an ATIR or a VRRP due to the facility having a priority score greater than 10 based on its 2018 annual

emissions inventory. The main toxic air contaminants contributing to the priority score are dioxins and furans from furnace melting operations and rotary dryer processes. Vista Metals' ATIR is due on January 21, 2020.

A.51. ***Vorteq Pacific (ID 191677) – Rancho Cucamonga***

Vorteq Pacific is a producer of coated aluminum and steel products in Rancho Cucamonga. The facility coats metal sheets and slits metal coils made of aluminum, steel, and stainless steel. Major operations include metal surface preparation, coating, and wastewater treatment. The facility was previously known as Western Metal Decorating Co. (ID 17956) before being acquired by Vorteq Coil on October 18, 2019.

On August 23, 2019, South Coast AQMD staff sent a letter requiring Western Metal Decorating to prepare an ATIR due to the facility having a priority score greater than 10 based on its 2018 annual emissions inventory. The main toxic air contaminants contributing to the priority score are polycyclic aromatic hydrocarbons from coating operations. Western Metal Decorating's ATIR is due on January 21, 2020.

A.52. ***Whittier Fertilizer (ID 511) – Pico Rivera***

Whittier Fertilizer Co. (Whittier Fertilizer) is a fertilizer manufacturing and green waste composting facility located in Pico Rivera. The facility manufactures a variety of products such as fertilizers, composts, soil amendments, mulch, and decorative rocks. After receiving raw materials, these materials are further processed through grinders, screens, shredders, and bagging systems.

On January 25, 2019, South Coast AQMD staff sent a letter requiring Whittier Fertilizer to submit an ATIR due to the facility having a priority score greater than 10 based on its 2017 annual emissions inventory, with Polycyclic Aromatic Hydrocarbons (PAHs) from diesel engine combustion as the main air toxics contributing to the high priority score. Speciated diesel components, including PAHs, were appropriately grouped as diesel particulate matter (DPM) upon submittal of the ATIR. On June 20, 2019, Whittier submitted an ATIR to the South Coast AQMD. South Coast AQMD staff approved the ATIR on August 9, 2019 and notified the facility to prepare and submit a HRA by November 12, 2019.

Whittier Fertilizer submitted an HRA to the South Coast AQMD on October 29, 2019. During review of the submitted HRA, it was determined that emissions from the diesel engines were overestimated. On December 10, 2019, South Coast AQMD staff notified Whittier Fertilizer that a revision to the emissions inventory and subsequently the HRA was necessary. As of the end of 2019, South Coast AQMD staff was working on finalizing the HRA.

Appendix B — Summary of Toxic Air Contaminants in the South Coast Air Basin

In addition to South Coast AQMD's periodic Multiple Air Toxics Exposure Studies (MATES), CARB has maintained a long-term continuous toxics monitoring network since the late 1980's.[25] In this chapter, trends in cancer risks are illustrated for sites in the South Coast Air Basin. Health risk levels for the most recent three-year period (i.e., 2016 to 2018) are also shown for the air toxics which are monitored. CARB's monitoring network does not include DPM, which contributes significantly to cancer risks in the Basin. Since this is ambient air quality data, both mobile and stationary emission sources are captured in the health risk levels provided here. Looking at this historical data set illustrates the benefits of past regulatory control efforts.

Four of the approximately 16 current active sites in CARB's statewide toxics monitoring network are in or near the Basin as shown in Figure B-1. CARB's long-term sites are located in Azusa, Los Angeles, and Riverside-Rubidoux. Simi Valley is included in this analysis since it is just outside the western edge of the Basin and represents conditions at the western end of San Fernando Valley. The measurements consist of 24-hour integrated samples collected once every 12 days. Table B-1 lists the toxic air contaminants that are monitored with the carcinogenic compounds identified with an asterisk.

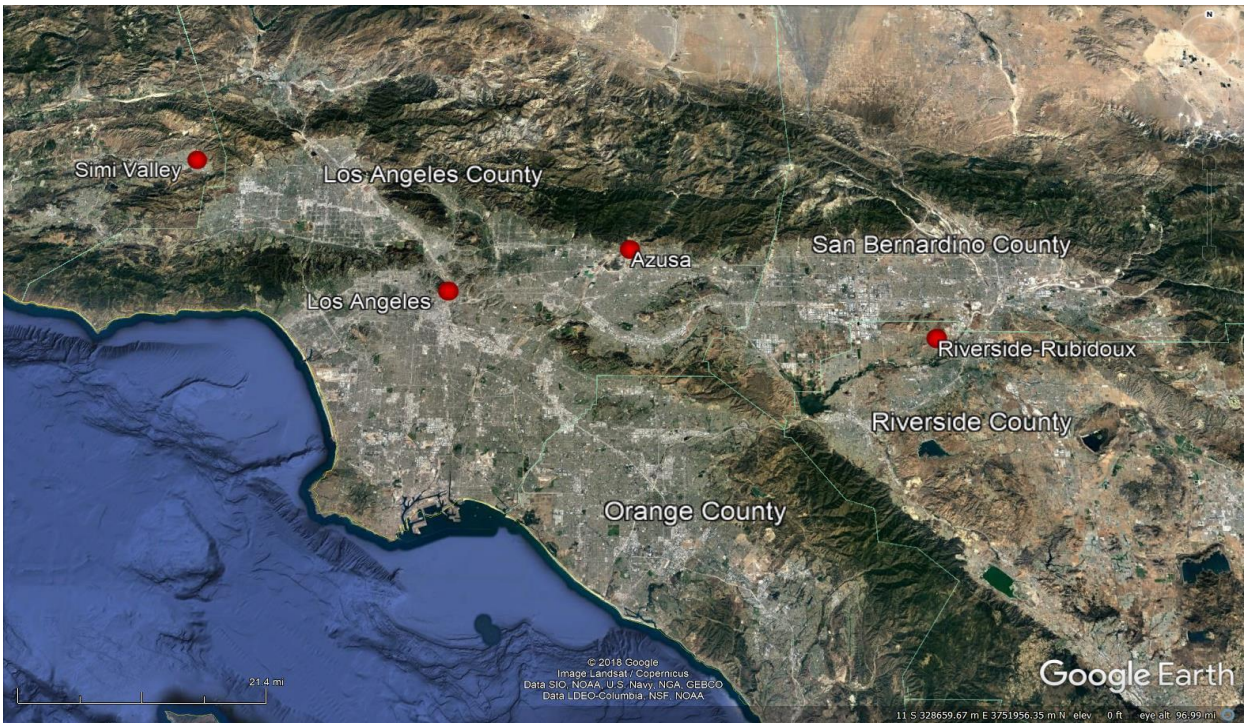


Figure B-1 — CARB toxic monitoring sites in the South Coast Air Basin

[25] Information about and data from CARB's toxic monitoring data are available at: http://www.arb.ca.gov/adam/toxics/toxics.html

Table B-1 — Toxic Air Contaminants Monitored

Toxic VOC		Toxic PM
Acetaldehyde*	**Methyl Bromide**	**Hexavalent Chromium***
Acrolein	**Methyl Chloroform**	**Lead***
Benzene*	**Methyl Ethyl Ketone**	**Manganese**
1,3-Butadiene*	**Methylene Chloride***	**Nickel***
Carbon Tetrachloride*	**Perchloroethylene***	**Selenium**
Chloroform*	**Styrene**	
Ethyl Benzene*	**Toluene**	
Formaldehyde*	**Trichloroethylene***	

* Carcinogen

The 2015 OEHHA Risk Assessment Guidelines incorporates age sensitivity and exposure factors which increase cancer health risk estimates to residential and sensitive receptors by approximately three times, and more than three times in some cases depending on whether the toxic air contaminant has multiple pathways of exposure in addition to the inhalation pathway. Under the 2015 OEHHA Risk Assessment Guidelines, even though the toxic pollutant concentrations may not have increased, the estimated cancer risk to a residential receptor will increase.

Figure B-2 presents health risk trends using the 2015 OEHHA Risk Assessment Guidelines.[26] The inhalation cancer risk shown is estimated based on a 30-year exposure. Inhalation cancer health risks have decreased significantly at all stations since 1990. Cancer risks have decreased by 75, 85, and 80 percent at Riverside, Los Angeles, and Simi Valley, respectively.[27] Azusa station shows a decrease in cancer risk by 46 percent since 2000.

Note that the Riverside station showed an increase in cancer risk for 2016. This was solely due to higher measured concentrations of methylene chloride for 2016, which were more than 30 times higher than the previous year. The readings for 2017 and 2018, however, dropped to a level that is more consistent with 2015 and earlier data Figure B-3 shows the monitored methylene chloride concentrations at the Riverside station from 2000 to 2018, averaged by quarter.

Further, it was discovered that there were leaks in the VOC sampling manifolds for the Los Angeles and Riverside. Data for the Los Angeles station was impacted during the period of August 17, 2018 to April 25, 2019. Data for Riverside station was impacted during the period of September 22, 2017 to February 19, 2019. The leaks in the manifold resulted in atypical readings for acetaldehydes and formaldehyde. The data was ultimately invalidated, and insufficient data was available for 2018 for those two compounds. Therefore, readings from 2017 were used for acetaldehyde and formaldehyde. Although readings for other organic compounds were also invalidated when necessary, there was enough data to be representative of 2018.

[26] Excluding cancer risks from DPM.

[27] Some concentrations were not available for certain years. In order to avoid under-representing the total cancer risk from all toxic compounds, values are interpolated between years where possible. If data for a certain toxic compound is unavailable for the latest year, the available data point from the most recent prior year is used in its place.

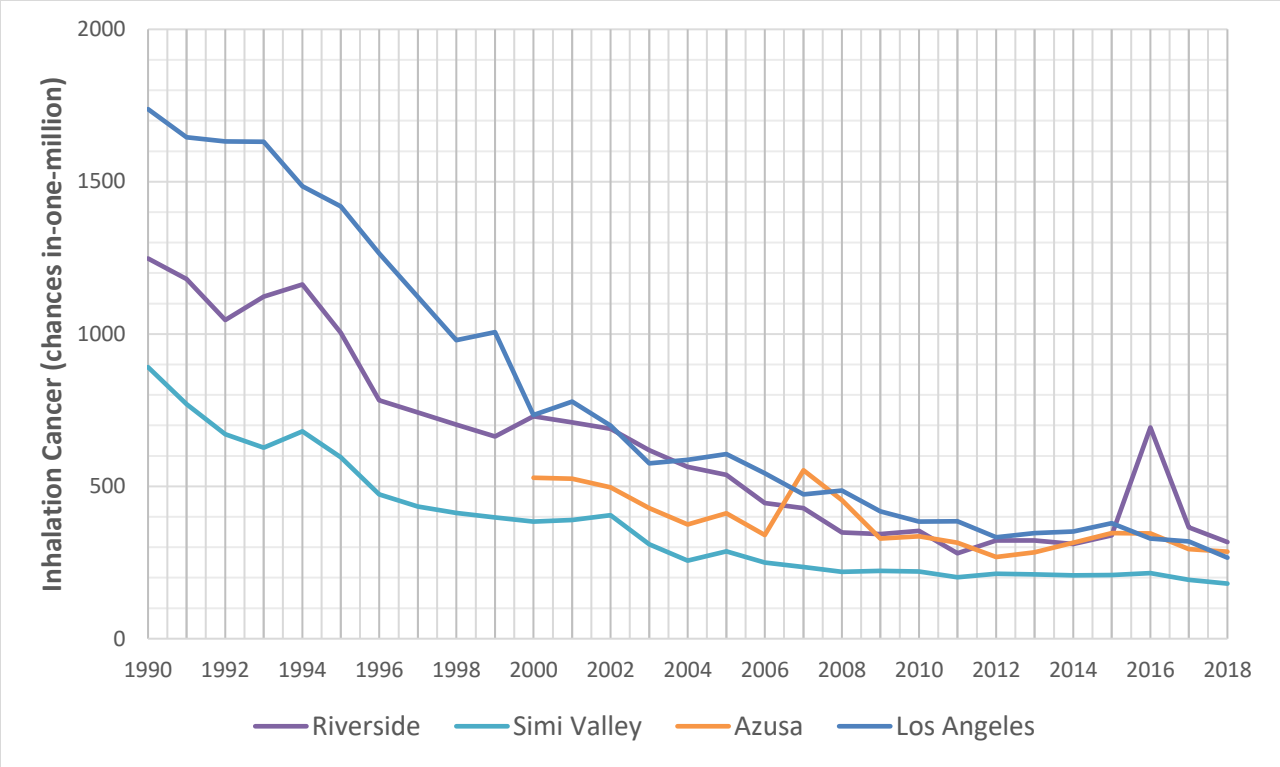


Figure B-2 — Trends in Inhalation Cancer Risks in the Basin (1990-2018)

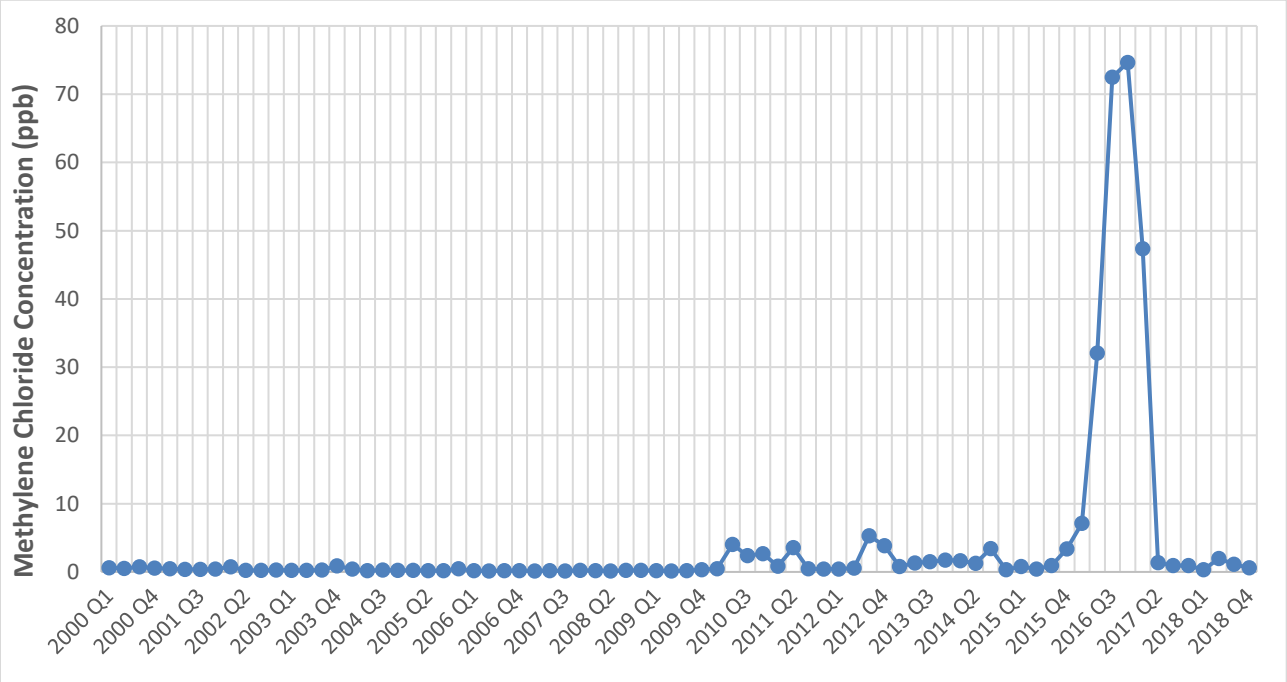


Figure B-3 — Methylene Chloride Monitored Concentrations at Riverside Station, Averaged by Quarter (2000 to 2018)

Azusa station started in 1995 as one of the Photochemical Assessment Monitoring Stations (PAMS) network aimed at determining speciated hydrocarbon ozone precursor compounds in ambient air. On October 17, 2006, U.S. EPA issued final amendments to PAMS monitoring requirements in 40 CFR Code 58. On July 1, 2009, to address these amendments, and with site-specific observations from the PAMS network assessment project, Azusa station was reclassified from Type 3 (maximum ozone concentration site) to Type 2 (maximum ozone precursor emissions impact site or above 8-hour ozone). The proposed change addressed the National PAMS Network Assessment that Azusa has high Volatile Organic Compounds (VOC) and Oxides of Nitrogen (NOX) concentrations, with lower ozone concentrations. The site now more closely resembles a Type 2 ozone precursor site.

The reduction in cancer risk at the Azusa station is primarily from reductions in ambient concentrations of benzene and 1,3-butadiene. Benzene accounts for 42 percent of the cancer risk reduction and 1,3-butadiene accounts for 45 percent of the cancer risk reduction.

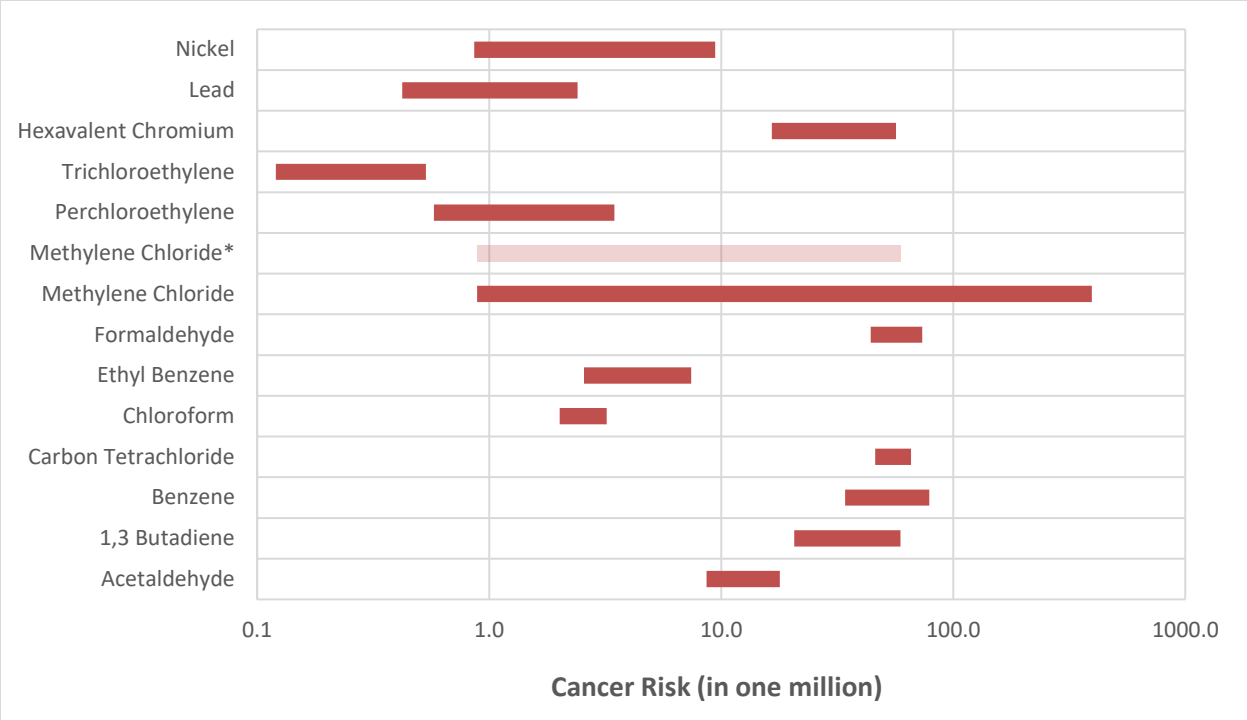
The cancer risk reductions shown in Figure B-2 occurred despite significant increases in population and vehicle activity. As shown in Table B-2, the population increased by 41 percent since 1990 and daily vehicle miles traveled), vehicle population, and daily fuel consumption increased by 45, 57, and 34 percent, respectively.

Table B-2 — Change in Population and Vehicle Activity in the Basin Since 1990

Activity Variable	1990	2019	Percentage Increase
Population	**13,083,594**	**18,458,605**	**41.1%**
Daily Vehicle Miles Traveled (1,000 mile per day)	**282,561**	**410,251**	**45.2%**
Vehicle Population	**7,547,354**	**11,833,320**	**56.8%**
Daily Fuel Consumption (1,000 gal per day)	**18,338**	**24,482**	**33.5%**

Source: http://www.arb.ca.gov/app/emsinv/trends/ems_trends.php.

The relative importance of each of the toxics at the four monitoring stations is illustrated in Figure B-4 below. These ranges do not represent all potential exposures, and some areas near facilities with toxic air contaminant emissions may have higher cancer risks. The range of cancer risks for the four sites analyzed here are shown for the most recently available three-year period (2016 to 2018). As mentioned previously, the range of inhalation cancer risk includes the high measurements for methylene chloride from 2016 at the Riverside station that are inconsistent with all other readings taken at this station. To better demonstrate the effect, methylene chloride is shown in the charts twice: inclusive of all readings, and exclusive of the high Riverside readings.



* Excludes peak readings from Riverside station in 2016

Figure B-4 — Inhalation Cancer Risks in the Basin (2016 to 2018) (excluding DPM)

Benzene, 1,3-butadiene, formaldehyde, carbon tetrachloride, hexavalent chromium, methylene chloride, acetaldehyde, and ethyl benzene are the largest contributors to the inhalation cancer risks, contributing individually from approximately 0.5 to 396 chances in-one-million. The ambient carbon tetrachloride concentrations observed in the Basin are not from a local source of emissions but represent background conditions. Note that there is little variability in cancer risks attributable to carbon tetrachloride as indicated by its short bar in Figure B-4. In fact, there is little variability statewide in carbon tetrachloride concentrations, with concentrations varying by less than ten percent. Perchloroethylene, chloroform, and nickel each contribute between approximately 0.6 and 9.4 chances in-one-million and trichloroethylene and lead contribute on average about two chances in-one-million to the inhalation cancer risks.

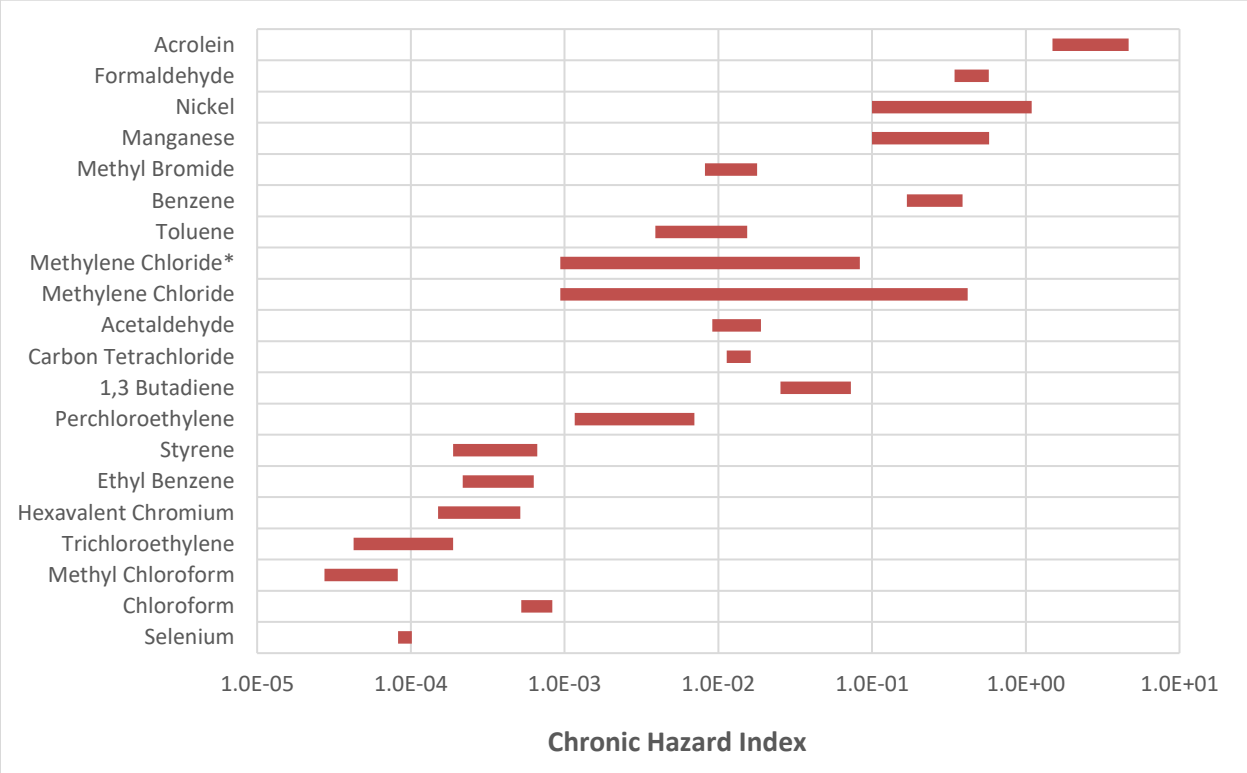
As demonstrated in the series of MATES conducted by South Coast AQMD staff, DPM is by far the largest contributor to inhalation cancer risks observed in the Basin. The MATES IV study attributed about 68 percent of the inhalation cancer risks to DPM based on emissions from 2012,[28] compared to 84 percent in MATES III based on emissions in 2005.[29] The total cancer risks shown

[28] See page ES-2 of the MATES IV Executive Summary which is available at: http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15

[29] See page ES-3 of the MATES III Executive Summary which is available at: http://www.aqmd.gov/home/air-quality/air-quality-studies/health-studies/mates-iii/mates-iii-final-report

in Figures B-2 and B-4 therefore represent only about 32 percent of the population weighted inhalation cancer risks found in the MATES IV study.

The range of non-cancer chronic risks for the four sites analyzed here are shown in Figure B-5 for the most recently available three-year period (2016 to 2018). Similar to the cancer risk analysis, an additional Methylene Chloride data entry (denoted with an asterisk) was added to remove the high readings recorded at the Riverside monitor. For each toxic air contaminant, the ratio of the observed concentration to the pollutant's chronic REL is shown. Ratios less than one indicate that the observed concentrations are less than OEHHA's defined RELs, and are not anticipated to result in adverse non-cancer health effects in the general population, including sensitive subpopulations. Ratios greater than one indicate the potential for adverse health effects. This concentration to REL ratio is also referred to as the Hazard Index (HI).



* Excludes peak readings from Riverside station in 2016

Figure B-5 — Non-cancer Chronic Risks in the Basin (2016 to 2018)

Note that acrolein, a respiratory irritant, is the only toxic air contaminant in which ambient concentrations are above its REL throughout the state and thus may partially reflect general background conditions. However, it should be noted that acrolein is well known to be difficult to measure with current techniques, and therefore, there is considerable uncertainty and data quality

issues associated with these measurements.[30] At best, acrolein monitoring data should be considered as a rough indicator, not accurate enough to be compared to health benchmarks. Acrolein emissions can better be estimated using computer modeling methods.

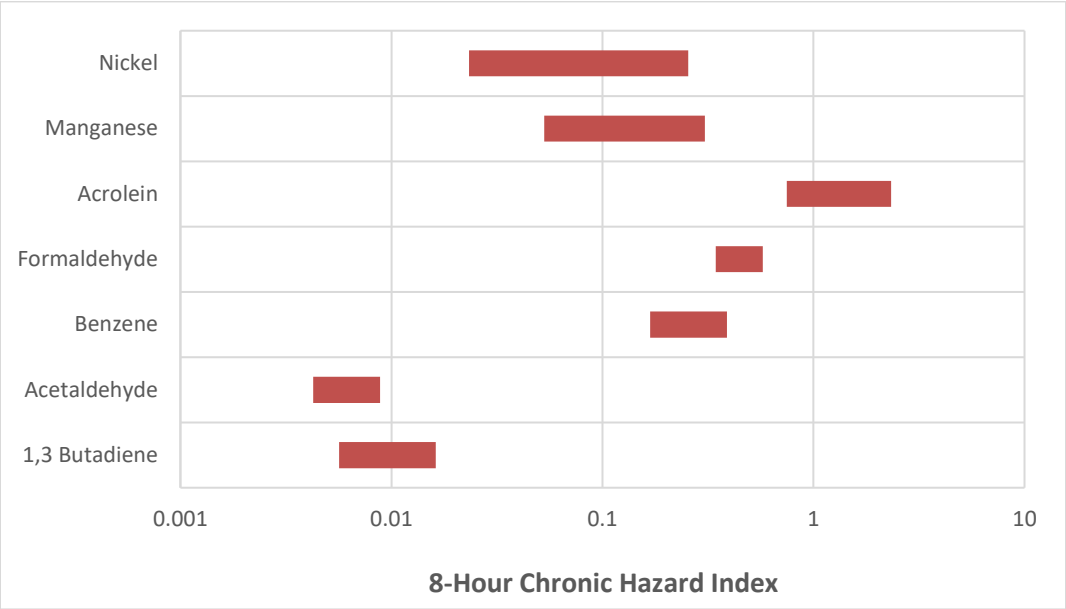


Figure B-6 — Non-cancer 8-Hour Chronic Risks in the Basin (2016 to 2018)

The 2015 OEHHA Risk Assessment Guidelines includes methodology for estimating an 8-hour chronic HI using 8-hour REL developed for this purpose. The 8-hour RELs were developed only for repeated, chronic daily 8-hour exposures (e.g. a typical worker or resident exposed to a facility that operates equal to or more than 8 hours per day and 5 days per week). The 8-hour chronic HI is based upon the daily average 8-hour exposure only for those chemicals with 8-hour chronic RELs. The range of non-cancer 8-hour chronic health risks for the four sites analyzed here are shown above in Figure B-6 for the most recently available three-year period (2016 to 2018). Methylene chloride does not have an 8-hour REL as defined by OEHHA and does not affect the 8-hour chronic hazard index.

As stated above, acrolein is the only toxic air contaminant in which ambient concentrations are above its REL. It should be noted that the ambient concentrations of acrolein are above its REL throughout the state and thus may partially reflect general background conditions.

[30] R. Schulte-Ladbeck, et al. "Characterization of chemical interferences in the determination of unsaturated aldehydes using aromatic hydrazine reagents and liquid chromatography." J. Environ. Monit., 2001, 3, 306–310.
Ho, S.S.H., et al. "Unsuitability of using the DNPH-coated solid sorbent cartridge for determination of airborne unsaturated carbonyls." Atmospheric Environment. 2011 45, 261-265.
Herrington, J.S., et al. "Concerns regarding 24-h sampling for formaldehyde, acetaldehyde, and acrolein using 2,4- dinitrophenylhydrazine (DNPH)-coated solid sorbents." Atmospheric Environment 2012, 55, 179-184.
Grosjean, D., "Ambient Levels of Formaldehyde, Acetaldehyde, and Formic Acid in Southern California: Results of a One- Year Base-Line Study," Environmental Science & Technology, Vol 25, 1991, pp. 710–715.

Appendix C — Health Risks from Facilities with an Approved HRA

The tables in Appendix C list the facilities and the health risks identified in their HRAs or RRPs as reviewed and approved by South Coast AQMD staff. Risks presented in these tables were calculated based on guidance that was available from OEHHA at the time of HRA approval. For example, the health risks presented in this appendix for facilities with HRA approval date prior to 2015 do not include the health risk calculation methodologies (2015 OEHHA Risk Assessment Guidelines) that account for the differences in children's breathing rates and place greater emphasis on their susceptibility to cancer risk in comparison to adults. The health risks in all HRAs finalized by South Coast AQMD staff in 2015 were recalculated to reflect the 2015 OEHHA Risk Assessment Guidelines. Additionally, facilities that have elected to participate in the Voluntary Risk Reduction Program and have an approved VRRP are listed in Table D-2.

Table C-1 lists the facilities in order of their cancer risks and Table C-2 lists the facilities ordered by facility ID. The listed health risks are from an approved HRA, unless an approved RRP has been fully implemented. In those instances, the listed health risks reflect the health risks after the implementation of the RRP. Appendix D lists the status of the facility's RRP and is presented by facility ID. Attention should also be given to the footnotes for this appendix which denote facilities with updated HRAs pending approval and facilities with health risks including emergency diesel internal combustion engines. It also provides the last known status of each facility as follows:

"A" – Active (note that facilities with this status may not be in operation currently)

"O" – Out of business or inactive

"Out of business or inactive" facilities have been retained for historical purposes since staff occasionally receives public inquiries regarding these facilities. Facilities may undergo change of ownership could have different name and facility ID numbers. The following thresholds are identified in South Coast AQMD Rule 1402 — Control of Toxic Air Contaminants from Existing Sources:

Thresholds	Cancer Risk in MM	Acute, Chronic HI	Cancer Burden
Significant Risk Level	≥ 100	≥ 5.0	N/A
Action Risk Level	≥ 25	≥ 3.0	≥ 0.5
Notification Risk Level	≥ 10	≥ 1.0	N/A
Voluntary Risk Threshold	≥ 10	≥ 1.0	N/A
Exemption Level	< 1	< 0.1	N/A

Table C-1

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
16951	A	ANAPLEX CORP	PARAMOUNT	2836.0	9.73	23.84	2.02	2018
23752	A	AEROCRAFT HEAT TREATING CO INC	PARAMOUNT	1900.0	11.00	2.90	0.15	2018
11818	A	HIXSON METAL FINISHING	NEWPORT BEACH	1502.0	1.09	0.20	0.10	2015
800327	A	GLENDALE CITY, GLENDALE WATER & POWER	GLENDALE	179.5	4.97	0.80	1.69	2019
41229	A	LUBECO INC	LONG BEACH	128.6	0.08	0.18	0.45	2019
18931	A	TAMCO	RANCHO CUCAMONGA	52.7	3.08	3.04	3.19	2015
171107	A	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	WILMINGTON	23.2	0.29	0.10	0.70	2013
122822	O	CONSOLIDATED FILM INDUSTRIES, LLC	HOLLYWOOD	21.0	ND	0.10	0.40	2000
181426	A	OC WASTE & RECYCLING, COYOTE	NEWPORT COAST	20.1	0.18	0.60	0.30	2009
14495	A	VISTA METALS CORPORATION	FONTANA	19.8	0.06	0.00	0.30	2008
165192	A	TRIUMPH AEROSTRUCTURES, LLC	HAWTHORNE	19.7	ND	0.64	0.24	1999
187823	A	KIRKHILL INC	BREA	18.8	0.07	0.06	0.11	2019
11142	A	KEYSOR-CENTURY CORP	SAUGUS	17.0	ND	0.50	0.10	2000
18989	A	BOWMAN PLATING CO INC	COMPTON	17.0	0.00	0.01	0.01	2015
22911	A	CARLTON FORGE WORKS	PARAMOUNT	15.4	ND	1.76	1.04	2016
35302	A	OWENS CORNING ROOFING AND ASPHALT, LLC	COMPTON	14.0	0.02	0.10	0.10	2000
180631	A	STCDARA, LLC	LA PUENTE	13.8	0.02	0.01	0.74	2001
23907	A	JOHNS MANVILLE CORP	CORONA	13.0	ND	0.40	2.70	1999
18648	O	CROWN CITY PLATING CO.	EL MONTE	12.0	ND	0.40	0.10	2000
800436	A	TESORO REFINING AND MARKETING CO, LLC	WILMINGTON	10.7	0.37	0.30	0.40	2013
106797	A	SAINT-GOBAIN CONTAINERS, INC.	LOS ANGELES	9.9	ND	0.00	0.10	2000
101380	O	GENERAL DYNAMICS OTS (DOWNEY) INC	DOWNEY	9.8	ND	0.00	0.10	2000
148925	A	CHERRY AEROSPACE	SANTA ANA	9.7	ND	0.10	0.20	1999
800373	A	LAKELAND DEVELOPMENT COMPANY	SANTA FE SPRINGS	9.7	ND	0.30	0.10	2000
187165	A	ALTAIR PARAMOUNT, LLC	PARAMOUNT	9.6	ND	0.00	0.00	2002
15504	A	SCHLOSSER FORGE COMPANY	RANCHO CUCAMONGA	9.5	0.07	1.59	1.11	2002

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800149	A	US BORAX INC	WILMINGTON	9.5	ND	0.00	0.00	2000
800318	A	GRISWOLD INDUSTRIES	COSTA MESA	9.5	0.01	0.10	0.00	2001
10510	A	GREGG INDUSTRIES INC	EL MONTE	9.4	ND	0.60	0.60	2008
62897	A	NORTHROP GRUMMAN CORP, MASD	PICO RIVERA	9.4	ND	1.00	0.50	2000
155828	A	GARRETT AVN. SVCS. LLC DBA STANDARD AERO	LOS ANGELES	9.3	ND	0.19	0.25	2002
8582	A	SO CAL GAS CO/PLAYA DEL REY STORAGE FAC	PLAYA DEL REY	9.2	0.02	7.28	0.02	2019
42922	A	CMC PRINTED BAG INC	WHITTIER	9.0	ND	0.00	0.00	1995
174710	A	TESORO LOGISTICS, VINVALE TERMINAL	SOUTH GATE	9.0	ND	0.00	0.00	1994
169990	A	SPS TECHNOLOGIES, LLC	GARDENA	8.9	ND	0.10	0.10	1999
800184	A	GOLDEN WEST REF CO	SANTA FE SPRINGS	8.8	ND	0.20	0.10	1997
175124	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	8.7	ND	0.00	0.00	1995
2680	A	LA CO., SANITATION DISTRICT	WHITTIER	8.6	ND	0.00	0.00	1999
44454	A	STRUCTURAL COMPOSITES IND	POMONA	8.6	0.00	0.00	0.20	2002
7203	A	HESSCO IND INC	LA HABRA	8.6	ND	0.00	0.00	1995
15736	A	HENRY CO	HUNTINGTON PARK	8.5	ND	0.00	0.00	2000
800057	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	CARSON	8.5	ND	0.00	0.10	1999
800079	A	PETRO DIAMOND TERMINAL CO	LONG BEACH	8.3	ND	0.00	0.20	1998
125281	O	ALCO CAD-NICKEL PLATING, MODERN PLATING	LOS ANGELES	8.2	ND	0.10	0.00	1995
21615	O	PERKINELMER OPTOELECTRONICS SC, INC	AZUSA	8.1	ND	0.20	0.10	1998
800054	A	GATX RAIL CORP	SAN PEDRO	8.0	ND	0.30	0.50	1997
7730	A	CARPENTER CO	RIVERSIDE	8.0	ND	0.03	1.34	2003
3609	A	AL'S PLATING CO INC	LOS ANGELES	7.8	ND	0.30	0.20	1999
37603	A	SGL TECHNIC LLC	VALENCIA	7.8	ND	0.00	0.40	1998
800182	A	RIVERSIDE CEMENT CO	RIVERSIDE	7.8	0.11	0.10	0.10	2001
13920	A	SAINT JOSEPH HOSPITAL	ORANGE	7.7	0.00	0.80	0.30	2008
181667	A	TORRANCE REFINING COMPANY LLC	TORRANCE	7.7	0.15	0.20	0.50	2013
169754	A	SO CAL HOLDING, LLC	HUNTINGTON BEACH	7.6	0.02	0.02	0.04	2019

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
18294	A	NORTHROP GRUMMAN SYSTEMS CORP	EL SEGUNDO	7.6	ND	0.13	0.05	1999
113170	A	SANTA MONICA - UCLA MEDICAL CENTER	SANTA MONICA	7.6	0.14	0.20	0.00	1997
800214	A	LA CITY, SANITATION BUREAU (HTP)	PLAYA DEL REY	7.6	ND	0.10	0.00	1999
20197	A	LAC/USC MEDICAL CENTER	LOS ANGELES	7.5	ND	0.70	0.40	2007
800032	A	CHEVRON USA INC	MONTEBELLO	7.5	0.14	0.00	0.20	1999
800150	A	US GOVT, AF DEPT, MARCH AIR RESERVE BASE	RIVERSIDE	7.4	0.02	0.30	0.00	2008
108701	A	SAINT-GOBAIN CONTAINERS, INC.	EL MONTE	7.3	ND	0.10	0.10	2000
800117	A	SHELL OIL CO (EIS USE)	WILMINGTON	7.3	ND	0.00	0.10	1998
174655	A	TESORO REFINING & MARKETING CO, LLC	CARSON	7.3	ND	0.30	0.10	2000
800026	A	ULTRAMAR INC	WILMINGTON	7.2	0.18	0.70	0.20	2012
800113	A	ROHR, INC.	RIVERSIDE	7.2	0.01	0.90	0.00	2007
800236	A	LA CO. SANITATION DIST	CARSON	7.2	ND	0.20	0.10	2007
8547	A	QUEMETCO INC	CITY OF INDUSTRY	7.1	0.45	0.09	0.69	2016
27343	O	CON AGRA INC, GILROY FOODS DBA	SANTA ANA	7.1	ND	0.20	0.10	1995
49387	A	UNIV CAL, RIVERSIDE	RIVERSIDE	7.1	ND	0.00	0.00	2018
166587	A	THE BOEING COMPANY	HUNTINGTON BEACH	7.0	ND	0.00	0.00	1995
800209	A	BKK CORP (EIS USE)	WEST COVINA	6.9	ND	0.00	0.10	2000
800372	A	EQUILON ENTER. LLC, SHELL OIL PROD. US	CARSON	6.9	ND	0.40	0.10	2001
20280	A	METAL SURFACES INTERNATIONAL, LLC	BELL GARDENS	6.8	0.00	0.90	0.30	2011
5723	A	DUCOMMUN AEROSTRUCTURES INC	ORANGE	6.7	ND	0.00	0.10	1999
118998	O	CYTEC FIBERITE INC	CULVER CITY	6.6	ND	0.00	0.20	1997
171109	A	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	CARSON	6.6	0.11	0.00	0.30	2011
186519	A	EMBEE PROCESSING	SANTA ANA	6.6	ND	0.21	0.58	2000
6643	A	TECHNICOLOR INC	NORTH HOLLYWOOD	6.5	ND	0.00	0.10	2007
11726	A	GE ENGINE SERVICES	ONTARIO	6.5	ND	0.10	0.60	1999
34764	A	CADDOCK ELECTRONICS INC	RIVERSIDE	6.5	ND	0.00	0.10	2002
168088	A	POLYNT COMPOSITES USA INC	LYNWOOD	6.5	ND	0.10	1.60	1995

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
1073	A	BORAL ROOFING LLC	CORONA	6.4	0.00	0.51	2.72	2018
2852	A	THE WALT DISNEY COMPANY	BURBANK	6.4	0.03	0.00	0.00	1997
16660	A	THE BOEING COMPANY	HUNTINGTON BEACH	6.4	0.02	0.01	0.08	2015
800066	A	HITCO CARBON COMPOSITES INC	GARDENA	6.4	ND	0.30	0.00	1995
183567	A	GS II, INC.	WILMINGTON	6.3	0.04	1.82	0.19	2018
4477	A	SO CAL EDISON CO	AVALON	6.3	0.02	0.00	0.00	2012
1226	A	HYATT DIE CAST & ENGINEERING CORP	CYPRESS	6.2	ND	0.00	0.10	1996
45262	A	LA COUNTY SANITATION DIST SCHOLL CANYON	GLENDALE	6.2	ND	0.00	0.10	1998
800180	A	UNOCAL CORP, UNOCAL CHEM DIV (EIS USE)	LA MIRADA	6.2	ND	0.50	0.80	1999
800067	A	THE BOEING COMPANY	EL SEGUNDO	6.2	ND	0.00	0.10	2000
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	GARDEN GROVE	6.0	ND	0.00	0.50	1996
800022	A	CALNEV PIPE LINE, LLC	BLOOMINGTON	5.9	ND	0.00	0.10	1999
800047	O	FLETCHER OIL & REF CO	CARSON	5.9	ND	0.00	0.00	1998
800198	A	ULTRAMAR INC	WILMINGTON	5.9	ND	0.00	0.10	1999
800279	A	SFPP, L.P. (NSR USE ONLY)	ORANGE	5.9	ND	0.00	0.20	1999
8578	A	ASSOCIATED CONCRETE PROD. INC	SANTA ANA	5.8	ND	0.10	0.60	1999
800129	A	SFPP, L.P.	BLOOMINGTON	5.8	ND	0.00	0.00	1996
136148	A	E/M COATING SERVICES	NORTH HOLLYWOOD	5.8	ND	0.30	0.60	1998
164864	A	ARROWHEAD BRASS & PLUMBING	LOS ANGELES	5.7	ND	0.30	0.00	1995
22410	O	PALACE PLATING	LOS ANGELES	5.6	ND	0.73	0.38	2004
38971	A	RICOH ELECTRONICS INC	IRVINE	5.6	ND	0.00	0.40	1995
800288	A	UNIV CAL IRVINE (NSR USE ONLY)	IRVINE	5.6	ND	0.00	0.10	1996
14146	A	MAC GREGOR YACHT CORP	COSTA MESA	5.5	ND	0.00	0.10	1998
185352	A	SNOW SUMMIT, LLC.	BIG BEAR LAKE	5.5	ND	0.20	0.00	2007
54424	A	L&L CUSTOM SHUTTERS INC,ALLWOOD SHUTTERS	PLACENTIA	5.5	ND	0.20	0.20	2001
800409	A	NORTHROP GRUMMAN SYSTEMS CORPORATION	REDONDO BEACH	5.5	ND	0.50	0.20	1998
800196	A	AMERICAN AIRLINES, INC,	LOS ANGELES	5.4	0.19	0.86	0.08	2002

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
182752	A	TORRANCE LOGISTICS COMPANY LLC	VERNON	5.3	ND	0.10	0.00	1997
134018	A	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	5.2	ND	0.60	0.20	2000
109198	A	TORCH OPERATING COMPANY	BREA	5.0	ND	0.00	0.00	2001
103888	O	SARGENT FLETCHER INC	EL MONTE	4.9	ND	0.20	0.00	1999
800037	A	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	COMPTON	4.9	0.01	0.01	0.02	2009
11192	A	HI-SHEAR CORPORATION	TORRANCE	4.8	ND	0.00	0.00	2008
190377	A	GCC LONG BEACH C/O GOODMAN	LONG BEACH	4.8	ND	0.20	0.10	1999
190051	A	BRIDGE POINT LONG BEACH LLC	LONG BEACH	4.8	0.00	0.00	0.00	2002
101977	A	SIGNAL HILL PETROLEUM INC	SIGNAL HILL	4.7	ND	0.60	1.00	1998
3950	A	CROWN CORK & SEAL CO INC	LA MIRADA	4.6	ND	0.00	0.10	1997
83102	A	LIGHT METALS INC	CITY OF INDUSTRY	4.5	0.01	0.00	2.70	2002
157451	A	BENDER CCP INC	VERNON	4.4	0.00	1.00	0.00	2002
800041	A	DOW CHEM U.S.A.	TORRANCE	4.4	ND	0.10	0.00	2000
93346	A	WAYMIRE DRUM CO,INC.,S EL MONTE FACILITY	SOUTH EL MONTE	4.3	ND	0.10	0.20	1997
174591	A	TESORO REF & MKTG CO LLC,CALCINER	LONG BEACH	4.3	ND	0.10	0.20	1995
177042	A	SOLVAY USA, INC	LONG BEACH	4.3	ND	0.30	0.00	2001
124506	A	THE BOEING COMPANY	TORRANCE	4.2	ND	0.50	0.10	1995
6459	O	HONEYWELL INTERNATIONAL INC	VERNON	4.1	ND	0.00	0.00	1999
7533	A	SIMS HUGO NEU WEST	TERMINAL ISLAND	4.1	ND	1.30	0.10	2003
18439	O	ACE PLATING CO INC	LOS ANGELES	4.1	ND	0.60	0.20	1998
45489	A	ABBOTT CARDIOVASCULAR SYSTEMS, INC.	TEMECULA	3.8	0.01	1.30	0.00	2002
126060	A	STERIGENICS US, LLC	ONTARIO	3.8	0.00	0.00	0.00	2007
8820	A	REULAND ELECTRIC CO, H.BRITTON LEES	CITY OF INDUSTRY	3.7	ND	0.00	0.00	1996
9114	O	SOMITEX PRINTS OF CAL INC	CITY OF INDUSTRY	3.7	ND	0.10	0.00	1996
17325	A	ACE CLEARWATER ENTERPRISES	PARAMOUNT	3.7	ND	0.00	0.00	2002
106838	A	VALLEY-TODECO, INC	SYLMAR	3.7	ND	0.20	0.20	2000
7427	A	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	3.6	ND	0.01	0.06	1999

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
105598	A	SENIOR AEROSPACE SSP	BURBANK	3.6	ND	1.00	0.50	2001
126197	A	STERIGENICS US, INC.	LOS ANGELES	3.6	ND	0.00	0.00	1996
800007	A	ALLIED SIGNAL INC (NSR USE ONLY)	EL SEGUNDO	3.6	ND	0.00	0.50	2000
8015	A	ANADITE INC	SOUTH GATE	3.5	ND	0.63	0.78	1998
127568	A	ENGINEERED POLYMER SOLUTION, VALSPAR	MONTEBELLO	3.5	ND	0.10	0.50	2000
140811	A	DUCOMMUN AEROSTRUCTURES INC	MONROVIA	3.5	0.01	0.00	0.00	2002
151899	A	CALIFORNIA RESOURCES PRODUCTION CORP	NEWHALL	3.5	ND	0.00	0.20	2000
9163	A	INLAND EMPIRE UTL AGEN, A MUN WATER DIS	ONTARIO	3.4	ND	0.30	0.00	2007
57329	O	KWIKSET CORP	ANAHEIM	3.4	ND	0.00	0.10	2000
185575	A	BRIDGE ENERGY, LLC	BREA	3.4	ND	0.00	0.00	1999
800204	O	SIMPSON PAPER CO	POMONA	3.4	ND	0.00	0.00	1996
126191	A	STERIGENICS US, INC.	LOS ANGELES	3.3	ND	0.00	0.00	1996
153546	A	HUCK INTERNATIONAL INC	CARSON	3.3	ND	0.00	0.00	1999
800063	A	GROVER PROD. CO (EIS USE)	LOS ANGELES	3.3	0.04	0.88	0.07	2001
800189	A	DISNEYLAND RESORT	ANAHEIM	3.3	0.03	0.10	0.10	2009
18396	A	SPRAYLAT CORP	LOS ANGELES	3.2	0.00	0.70	0.00	2012
6384	A	LA CO., RANCHO LOS AMIGOS NAT. REHAB CTR	DOWNEY	3.1	ND	0.00	0.10	1999
10005	A	ELECTRONIC CHROME GRINDING CO, INC	SANTA FE SPRINGS	3.0	0.01	0.20	0.10	2001
11435	A	PQ CORPORATION	SOUTH GATE	3.0	ND	0.00	0.00	1998
113676	A	VICKERS	LOS ANGELES	3.0	ND	0.00	0.00	1995
174703	A	TESORO LOGISTICS,CARSON PROD TERMINAL	CARSON	3.0	ND	0.00	0.00	1994
2613	A	U.S.GVT,NAVY,NAVAL WEAPONS STN SEAL BCH	SEAL BEACH	2.9	ND	0.10	0.00	2002
18452	A	UNIVERSITY OF CALIFORNIA, LOS ANGELES	LOS ANGELES	2.9	ND	0.00	0.10	1999
52517	A	REXAM BEVERAGE CAN COMPANY	CHATSWORTH	2.9	0.01	0.70	0.10	2009
116868	A	EQUILON ENTER. LLC, SHELL OIL PROD. U S	BLOOMINGTON	2.9	ND	0.00	0.00	1999
48274	A	FENDER MUSICAL INST	CORONA	2.8	ND	0.00	0.40	1997
151798	A	TESORO REFINING AND MARKETING CO, LLC	CARSON	2.8	ND	0.10	0.00	1999

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
167981	A	TESORO LOGISTICS, WILMINGTON TERMINAL	WILMINGTON	2.8	ND	0.00	0.00	2000
800035	A	CONTINENTAL AIRLINES INC (NSR USE ONLY)	LOS ANGELES	2.8	ND	0.00	0.10	1995
5887	A	NEXGEN PHARMA INC	IRVINE	2.7	ND	0.00	0.00	1997
16642	A	ANHEUSER-BUSCH LLC., (LA BREWERY)	VAN NUYS	2.7	ND	0.00	0.10	1999
25440	A	INVENSYS CLIMATE CONTROLS	LONG BEACH	2.7	ND	0.00	1.00	1998
27701	O	CADDOCK ELECTRONIC	RIVERSIDE	2.7	ND	0.00	0.10	2002
46268	A	CALIFORNIA STEEL INDUSTRIES INC	FONTANA	2.7	0.02	0.20	0.00	1995
800224	A	SO CAL EDISON CO	ETIWANDA	2.7	ND	0.00	0.20	2000
184301	A	SENTINEL PEAK RESOURCES CALIFORNIA, LLC	LOS ANGELES	2.7	ND	0.00	0.10	1997
800030	A	CHEVRON PRODUCTS CO.	EL SEGUNDO	2.7	0.28	0.30	0.10	2001
35483	A	WARNER BROTHERS STUDIO FACILITIES	BURBANK	2.6	ND	0.10	0.30	1997
37507	A	TROJAN BATTERY COMPANY, LLC	SANTA FE SPRINGS	2.6	0.00	1.10	1.30	2012
134943	A	ARCONIC GLOBAL FASTENERS & RINGS INC	TORRANCE	2.6	ND	0.60	0.00	2008
185059	A	CUSTOM FIBREGLASS MFG. CO DBA SNUGTOP	LONG BEACH	2.5	ND	0.00	0.00	1995
183926	A	EVONIK CORPORATION	LOS ANGELES	2.4	ND	0.10	0.80	1999
800278	A	SFPP, L.P. (NSR USE)	CARSON	2.4	ND	0.00	0.10	1999
79682	A	RAMCAR BATTERIES INC	COMMERCE	2.4	1.00	0.00	0.20	1998
133405	A	BODYCOTE THERMAL PROCESSING	LOS ANGELES	2.4	ND	0.00	0.20	1999
172878	A	TESORO LOGISTICS LONG BEACH TERMINAL	LONG BEACH	2.4	ND	0.00	0.00	1999
800039	O	DOUGLAS PRODUCTS DIVISION	TORRANCE	2.4	ND	0.00	0.00	1996
800202	A	UNIVERSAL CITY STUDIOS, LLC.	UNIVERSAL CITY	2.4	ND	0.00	0.00	1996
800387	A	CAL INST OF TECH	PASADENA	2.4	ND	0.10	0.00	2007
1208	A	MICROSEMI CORP	SANTA ANA	2.3	ND	0.00	0.00	2001
90546	O	SORIN BIOMEDICAL INC	IRVINE	2.3	ND	0.00	0.00	1996
160437	A	SOUTHERN CALIFORNIA EDISON	REDLANDS	2.3	0.00	0.00	0.00	2013
800056	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	WILMINGTON	2.3	0.01	0.00	0.00	1997
800111	O	THE BOEING COMPANY	DOWNEY	2.3	ND	0.00	0.10	1996

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
99773	A	CYTEC ENGINEERED MATERIALS INC	ANAHEIM	2.2	0.00	0.00	0.20	2000
103659	A	ASCENT MEDIA MANAGEMENT SERVICES INC	BURBANK	2.2	ND	0.60	0.00	2004
9668	A	DELUXE LABORATORIES	HOLLYWOOD	2.1	ND	0.00	0.00	2000
800413	A	HAWKER PACIFIC AEROSPACE	SUN VALLEY	2.1	0.00	0.00	0.10	2009
2605	A	3M DRUG DELIVERY SYSTEMS	NORTHRIDGE	2.0	ND	0.40	0.40	1996
14502	A	VERNON PUBLIC UTILITIES	VERNON	2.0	0.00	0.00	0.00	2007
182610	A	ELITE COMFORT SOLUTIONS	COMMERCE	2.0	ND	0.00	0.50	1998
142267	A	FS PRECISION TECH LLC	COMPTON	2.0	ND	0.10	0.20	2001
800181	A	CALIFORNIA PORTLAND CEMENT CO	COLTON	2.0	ND	0.00	0.40	1996
800325	A	TIDELANDS OIL PRODUCTION CO	LONG BEACH	1.9	ND	0.10	0.60	1999
10245	A	LA CITY, TERMINAL ISLAND TREATMENT PLANT	SAN PEDRO	1.8	ND	0.00	0.00	2000
23559	A	JOHNSON CONTROLS BATTERY GROUP INC	FULLERTON	1.8	ND	0.00	0.10	2001
800003	A	HONEYWELL INTERNATIONAL INC	TORRANCE	1.8	ND	0.00	0.00	1999
8309	A	CAMBRO MANUFACTURING CO	HUNTINGTON BEACH	1.7	ND	0.00	0.10	2000
22467	A	LEFIELL MFG CO	SANTA FE SPRINGS	1.7	ND	0.70	0.20	2000
82512	A	BREA CANON OIL CO	WILMINGTON	1.7	ND	0.00	0.00	1996
185801	A	BERRY PETROLEUM COMPANY, LLC	SANTA CLARITA	1.6	ND	0.20	0.70	1999
119920	A	PECHINEY CAST PLATE INC	VERNON	1.6	ND	0.30	0.30	1996
132954	A	ALL AMERICAN ASPHALT	SAN FERNANDO	1.6	0.00	0.40	0.30	2017
133660	A	HAYDEN INDUSTRIAL PRODUCTS	CORONA	1.6	ND	0.80	0.40	1998
2638	A	OCCIDENTAL COLLEGE	LOS ANGELES	1.5	ND	0.10	0.00	2007
25070	A	LA CNTY SANITATION DISTRICT-PUENTE HILLS	CITY OF INDUSTRY	1.5	0.00	0.30	0.10	2009
107350	A	NATIONAL O-RINGS	DOWNEY	1.5	ND	0.00	0.00	2001
126536	A	CPP - POMONA	POMONA	1.5	ND	0.00	0.00	1999
3968	A	TABC, INC	LONG BEACH	1.4	ND	0.10	0.20	1999
82513	A	BREA CANON OIL COMPANY INC	HARBOR CITY	1.4	ND	0.00	0.00	1996
800408	A	NORTHROP GRUMMAN SYSTEMS	MANHATTAN BEACH	1.4	ND	0.90	0.10	1998

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
2526	A	CHEVRON USA INC	VAN NUYS	1.3	ND	0.00	0.00	1996
62679	O	KOP-COAT INC	LOS ANGELES	1.3	ND	0.00	0.50	1997
126544	A	PAC FOUNDRIES-INDUSTRY	CITY OF INDUSTRY	1.3	ND	0.60	0.10	1996
187348	A	HYDRO EXTRUDER, LLC	CITY OF INDUSTRY	1.3	ND	0.00	0.00	1999
800330	A	THUMS LONG BEACH	LONG BEACH	1.2	ND	0.00	0.00	2000
42633	A	LA COUNTY SANITATION DISTRICTS (SPADRA)	POMONA	1.2	ND	0.00	0.00	1996
185093	A	BEVERLY HILLS UNIFIED SCHOOL DISTRICT	BEVERLY HILLS	1.2	ND	0.00	0.00	2005
42514	A	LA COUNTY SANITATION DIST (CALABASAS)	AGOURA	1.1	0.00	0.10	0.00	2010
152054	A	LINN WESTERN OPERATING INC	BREA	1.1	ND	0.00	0.10	1996
20375	A	PRUDENTIAL OVERALL SUPPLY	RIVERSIDE	1.0	ND	0.00	0.10	1997
124806	O	EXIDE TECHNOLOGIES	CITY OF INDUSTRY	1.0	ND	0.00	0.00	1999
800127	A	SO CAL GAS CO	MONTEBELLO	1.0	0.00	0.00	0.00	2009
800301	A	ITT GILFILLAN	VAN NUYS	0.9	ND	0.10	0.20	1998
22808	O	PRICE PFISTER INC	PACOIMA	0.9	ND	0.20	0.10	1996
47056	A	MYERS CONTAINER CORP, IMACC CORP DIV	HUNTINGTON PARK	0.9	ND	0.20	2.00	2002
14544	O	SANTA FE ENAMELING & METAL FINISHING CO	SANTA FE SPRINGS	0.8	ND	0.00	0.40	1999
18378	A	GRUBER SYS INC	VALENCIA	0.8	ND	0.10	0.10	2004
111415	O	VAN CAN COMPANY	FONTANA	0.8	ND	0.00	0.10	1996
186899	A	ENERY HOLDINGS LLC	CARSON	0.8	ND	0.20	0.00	2007
150201	A	BREITBURN OPERATING LP	SANTA FE SPRINGS	0.8	ND	0.00	0.00	1998
126964	A	EDWARDS LIFESCIENCES LLC	IRVINE	0.8	ND	0.00	0.00	1995
174340	A	PRC DE SOTO INTERNATIONAL, INC.	IRVINE	0.7	ND	0.00	0.00	1995
182822	A	TORRANCE LOGISTICS COMPANY LLC	ANAHEIM	0.7	ND	0.00	0.00	1999
22373	A	SMURFIT-STONE CONTAINER ENTERPRISES, INC	LOS ANGELES	0.7	ND	0.00	0.00	1996
24060	A	AQUATIC COMPANY	ANAHEIM	0.7	ND	0.00	0.00	1996
15647	A	CUSTOM ENAMELERS INC	FOUNTAIN VALLEY	0.6	ND	0.10	0.00	2000
24756	A	CRANE CO, HYDRO-AIRE DIV	BURBANK	0.6	ND	0.00	0.10	1997

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
115394	A	AES ALAMITOS, LLC	LONG BEACH	0.6	ND	0.00	0.00	1999
134931	A	ARCONIC GLOBAL FASTENERS & RINGS, INC.	FULLERTON	0.6	ND	1.90	0.02	1997
1634	A	STEELCASE INC, WESTERN DIV	TUSTIN	0.5	ND	0.00	0.00	1995
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	SYLMAR	0.5	ND	0.00	0.00	1999
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	SANTA ANA	0.5	ND	0.00	0.00	1996
21895	A	AC PRODUCTS INC	PLACENTIA	0.5	ND	0.00	0.00	2003
61160	A	GE ENGINE SERVICES, LLC	ONTARIO	0.5	ND	0.70	0.01	2003
152501	A	PRECISION SPECIALTY METALS, INC.	LOS ANGELES	0.5	ND	0.40	0.20	2001
188380	A	VALENCE SURFACE TECHNOLOGIES - LYNWOOD	LYNWOOD	0.5	0.00	0.10	0.40	2012
12660	O	GOLDSHIELD FIBERGLASS, INC, PLANT #58	FONTANA	0.4	ND	0.00	0.00	1994
18990	A	LIFE PAINT CO	SANTA FE SPRINGS	0.4	ND	0.00	0.00	2001
43436	A	TST, INC.	FONTANA	0.4	0.11	0.00	0.40	1997
44577	A	LONG BEACH CITY, SERRF PROJECT	LONG BEACH	0.4	0.00	0.00	0.10	2011
115536	A	AES REDONDO BEACH, LLC	REDONDO BEACH	0.4	ND	0.00	0.00	1998
122295	A	FALCON FOAM, A DIV OF ATLAS ROOFING CORP	LOS ANGELES	0.4	ND	0.00	0.00	1999
550	A	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	0.3	ND	0.00	0.00	2008
19989	O	PARKER HANNIFIN AEROSPACE CORP	IRVINE	0.3	ND	0.00	0.00	1999
24520	A	LA CNTY SANITATION DISTRICT-PALOS VERDES	ROLLING HILLS ESTATES	0.3	ND	0.00	0.00	1998
25638	A	BURBANK CITY, BURBANK WATER & POWER	BURBANK	0.3	ND	0.30	0.00	1996
99119	A	INTERPLASTIC CORP	HAWTHORNE	0.3	ND	0.10	0.30	1999
107149	A	MARKLAND MANUFACTURING INC	SANTA ANA	0.3	ND	0.10	0.10	2007
112192	O	CONSOLIDATED DRUM RECONDITIONING CO INC	SOUTH GATE	0.3	ND	0.00	0.00	1997
115663	A	EL SEGUNDO ENERGY CENTER LLC	EL SEGUNDO	0.3	ND	0.00	0.00	2000
122300	A	BASF CORPORATION	COLTON	0.3	ND	0.60	0.00	2002
124805	A	EXIDE TECHNOLOGIES	COMMERCE	0.3	ND	0.00	0.00	2000
161142	A	FOAMEX INNOVATIONS, INC.	COMPTON	0.3	0.00	0.00	0.00	2010
800343	O	BOEING SATELLITE SYSTEMS, INC	EL SEGUNDO	0.3	ND	0.00	0.20	1996

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
16264	A	INTERNATIONAL COATINGS CO INC	CERRITOS	0.2	ND	0.00	0.00	1999
48300	A	PRECISION TUBE BENDING	SANTA FE SPRINGS	0.2	ND	0.00	0.00	2002
800074	A	LA CITY, DWP HAYNES GENERATING STATION	LONG BEACH	0.2	ND	0.00	0.00	2000
800168	A	PASADENA CITY, DWP	PASADENA	0.2	ND	0.70	0.00	1996
800193	A	LA CITY, DWP VALLEY GENERATING STATION	SUN VALLEY	0.2	ND	0.30	0.00	1999
180908	A	ECO SERVICES OPERATIONS CORP.	CARSON	0.1	ND	0.00	0.10	2006
1992	O	PRUDENTIAL OVERALL SUPPLY	VAN NUYS	0.1	ND	0.00	0.00	1997
7416	A	PRAXAIR INC	WILMINGTON	0.1	ND	0.00	0.00	2001
16044	A	SPECIALTY ORGANICS, INC.	IRWINDALE	0.1	ND	0.00	0.20	1997
24118	A	DEVOE COATINGS CO	RIVERSIDE	0.1	ND	0.30	0.10	1999
24812	A	FARMER BROS CO	TORRANCE	0.1	ND	0.00	0.00	1999
25012	A	AMADA AMERICA, INC.	LA MIRADA	0.1	ND	0.00	0.00	2002
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	COMMERCE	0.1	0.00	0.00	0.00	2010
42676	A	CES PLACERITA INC	NEWHALL	0.1	ND	0.10	0.00	2003
94872	A	METAL CONTAINER CORP	MIRA LOMA	0.1	ND	0.40	0.40	2002
20528	A	BRISTOL FIBERLITE IND	SANTA ANA	0.1	ND	0.00	0.00	1995
115389	A	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	0.1	ND	0.00	0.00	1999
156741	A	HARBOR COGENERATION CO, LLC	WILMINGTON	0.1	ND	0.00	0.00	2002
175126	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	0.0	ND	0.00	0.00	1996
6670	O	TRU CUT INC	LOS ANGELES	0.0	ND	0.00	0.00	2002
809	O	GARNER GLASS CO	CLAREMONT	0.0	ND	0.00	0.00	1996
1732	O	INTL ELECTRONIC RESEARCH CORP	BURBANK	0.0	ND	0.00	0.00	1996
1746	A	UNITED ALLOYS INC	LOS ANGELES	0.0	ND	0.00	0.00	1998
3084	A	CARDINAL INDUSTRIAL FINISHES INC	SOUTH EL MONTE	0.0	ND	0.00	0.00	1996
800018	A	BAXTER HEALTHCARE CORPORATION	IRVINE	0.0	ND	0.00	0.40	1994
3578	A	PRUDENTIAL OVERALL SUPPLY	CARSON	0.0	ND	0.00	0.00	1995
4616	O	SUPERIOR IND INTL INC	VAN NUYS	0.0	ND	0.00	0.40	1997

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
5125	A	UTILITY TRAILER MFG CO	CITY OF INDUSTRY	0.0	ND	0.00	0.30	1996
5645	O	STANDARD NICKEL CHROMIUM PLATING CO INC	LOS ANGELES	0.0	ND	0.00	0.00	1999
6163	A	OHLINE	GARDENA	0.0	ND	0.30	0.70	1996
6315	A	LMC ENTERPRISES, DBA FLO-KEM	RANCHO DOMINGUEZ	0.0	ND	0.00	0.60	1999
6362	O	JACUZZI WHIRLPOOL BATH INC	SANTA ANA	0.0	ND	0.00	0.00	1995
7010	A	PRUDENTIAL OVERALL SUPPLY	IRVINE	0.0	ND	0.00	0.00	1995
8560	A	PRUDENTIAL OVERALL SUPPLY CO	COMMERCE	0.0	ND	0.20	0.40	1995
8935	A	TRAIL RITE INC	SANTA ANA	0.0	ND	0.00	0.30	1996
10656	A	NEWPORT LAMINATES	SANTA ANA	0.0	ND	0.00	0.00	1996
12493	O	REMO INC	NORTH HOLLYWOOD	0.0	ND	0.00	0.00	1997
12879	O	CYTEC ENGINEERED MATERIALS, INC	SAUGUS	0.0	ND	0.00	0.00	1994
14191	O	NIKLOR CHEMICAL COMPANY INC	CARSON	0.0	ND	0.00	0.00	2002
14217	A	MODERN FAUCET MFG COMPANY	LOS ANGELES	0.0	ND	0.00	0.50	1996
19953	A	RISTON KELLER INC	IRVINE	0.0	ND	0.00	0.00	1996
20144	A	CANON BUSINESS MACHINES INC	COSTA MESA	0.0	ND	0.00	0.10	1999
800154	A	US GOVT, MARINE CORPS AIR STATION	TUSTIN	0.0	ND	0.00	0.00	2000
22092	A	WESTERN TUBE & CONDUIT CORP	LONG BEACH	0.0	ND	0.00	0.60	1997
22229	A	PROCESSES BY MARTIN INC (MARTIN METALS F	LYNWOOD	0.0	ND	0.00	0.00	2002
24647	A	J. B. I. INC	RANCHO DOMINGUEZ	0.0	ND	0.00	0.20	1999
40806	A	NEW BASIS	RIVERSIDE	0.0	ND	0.70	0.20	1997
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	COMPTON	0.0	ND	0.00	0.00	1999
47459	O	JACUZZI WHIRLPOOL BATH	IRVINE	0.0	ND	0.00	0.00	1995
800207	A	METRO ST HOSP (EIS USE)	NORWALK	0.0	ND	0.00	0.00	1996
189043	A	REVLINE DBA ELIMINATOR BOATS	MIRA LOMA	0.0	ND	0.00	0.00	1995
55711	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
55714	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
61209	O	AKZO NOBEL CHEM INC, FILTROL CORP SUB OF	LOS ANGELES	0.0	ND	0.00	0.00	1996

Table C-1 (cont'd)

Health Risks from Facilities with an Approved HRA

(Listed in descending order by cancer risk)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800009	A	AMERON PROTECTIVE COAT DIV (EIS&NSR USE)	BREA	0.0	ND	0.20	0.20	2000
70021	A	XERXES CORP (A DELAWARE CORP)	ANAHEIM	0.0	ND	0.00	0.00	1996
115586	A	SUNDANCE SPAS, INC	CHINO	0.0	ND	0.00	0.40	1996
800109	A	REYNOLDS METALS CO	TORRANCE	0.0	ND	0.20	0.90	2001
119127	O	PRC-DE SOTO INTERNATIONAL	GLENDALE	0.0	ND	0.00	0.00	2000
124016	O	CHEMETALL U,S., INC,	LA MIRADA	0.0	ND	0.10	0.10	2000
124838	A	EXIDE TECHNOLOGIES	VERNON	0.0	ND	0.00	0.00	2013
132343	A	SPECTRUM PAINT & POWDER, INC.	ANAHEIM	0.0	ND	0.20	0.70	1997
149241	A	REGAL CULTURED MARBLE	POMONA	0.0	ND	0.00	0.20	1995
185282	A	BKEP MATERIALS LLC - FONTANA	FONTANA	0.0	ND	0.30	0.00	1999
160916	A	FXI, INC.	ORANGE	0.0	ND	0.40	0.40	1994
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN	PLAYA DEL REY	0.0	ND	0.00	0.00	2000
800087	A	MENASCO MFG CO (EIS USE)	BURBANK	0.0	ND	0.00	0.00	1997
800273	O	CHEMOIL REF CORP (NSR USE ONLY)	SIGNAL HILL	0.0	ND	0.00	0.00	2000
800320	A	AMVAC CHEMICAL CORP	LOS ANGELES	0.0	ND	0.10	0.30	2004
800337	A	CHEVRON U.S.A., INC (NSR USE)	LA HABRA	0.0	ND	0.00	0.00	1996

Notes:

(a) "A" – Active (note that facilities with this status may not be in operation currently); O = Out of Business or Inactive

\

(b) All HRAs with HRA Approval Year dated 2015 and later have used the 2015 OEHHA Risk Assessment Guidelines for preparation of their HRA.

(c) ND = Not Determined

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
550	A	LA CO., INTERNAL SERVICE DEPT	LOS ANGELES	0.3	ND	0.00	0.00	2008
809	O	GARNER GLASS CO	CLAREMONT	0.0	ND	0.00	0.00	1996
1073	A	BORAL ROOFING LLC	CORONA	6.4	0.00	0.51	2.72	2018
1208	A	MICROSEMI CORP	SANTA ANA	2.3	ND	0.00	0.00	2001
1226	A	HYATT DIE CAST & ENGINEERING CORP	CYPRESS	6.2	ND	0.00	0.10	1996
1634	A	STEELCASE INC, WESTERN DIV	TUSTIN	0.5	ND	0.00	0.00	1995
1732	O	INTL ELECTRONIC RESEARCH CORP	BURBANK	0.0	ND	0.00	0.00	1996
1746	A	UNITED ALLOYS INC	LOS ANGELES	0.0	ND	0.00	0.00	1998
1992	O	PRUDENTIAL OVERALL SUPPLY	VAN NUYS	0.1	ND	0.00	0.00	1997
2526	A	CHEVRON USA INC	VAN NUYS	1.3	ND	0.00	0.00	1996
2605	A	3M DRUG DELIVERY SYSTEMS	NORTHRIDGE	2.0	ND	0.40	0.40	1996
2613	A	U.S.GVT,NAVY,NAVAL WEAPONS STN SEAL BCH	SEAL BEACH	2.9	ND	0.10	0.00	2002
2638	A	OCCIDENTAL COLLEGE	LOS ANGELES	1.5	ND	0.10	0.00	2007
2680	A	LA CO., SANITATION DISTRICT	WHITTIER	8.6	ND	0.00	0.00	1999
2852	A	THE WALT DISNEY COMPANY	BURBANK	6.4	0.03	0.00	0.00	1997
3084	A	CARDINAL INDUSTRIAL FINISHES INC	SOUTH EL MONTE	0.0	ND	0.00	0.00	1996
3093	A	LA CO., OLIVE VIEW/UCLA MEDICAL CENTER	SYLMAR	0.5	ND	0.00	0.00	1999
3578	A	PRUDENTIAL OVERALL SUPPLY	CARSON	0.0	ND	0.00	0.00	1995
3609	A	AL'S PLATING CO INC	LOS ANGELES	7.8	ND	0.30	0.20	1999
3950	A	CROWN CORK & SEAL CO INC	LA MIRADA	4.6	ND	0.00	0.10	1997
3968	A	TABC, INC	LONG BEACH	1.4	ND	0.10	0.20	1999
4477	A	SO CAL EDISON CO	AVALON	6.3	0.02	0.00	0.00	2012
4616	O	SUPERIOR IND INTL INC	VAN NUYS	0.0	ND	0.00	0.40	1997
5125	A	UTILITY TRAILER MFG CO	CITY OF INDUSTRY	0.0	ND	0.00	0.30	1996
5645	O	STANDARD NICKEL CHROMIUM PLATING CO INC	LOS ANGELES	0.0	ND	0.00	0.00	1999
5723	A	DUCOMMUN AEROSTRUCTURES INC	ORANGE	6.7	ND	0.00	0.10	1999
5887	A	NEXGEN PHARMA INC	IRVINE	2.7	ND	0.00	0.00	1997

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
6163	A	OHLINE	GARDENA	0.0	ND	0.30	0.70	1996
6281	A	US GOVT,MARINE CORPS AIR STATION,EL TORO	SANTA ANA	0.5	ND	0.00	0.00	1996
6315	A	LMC ENTERPRISES, DBA FLO-KEM	RANCHO DOMINGUEZ	0.0	ND	0.00	0.60	1999
6362	O	JACUZZI WHIRLPOOL BATH INC	SANTA ANA	0.0	ND	0.00	0.00	1995
6384	A	LA CO., RANCHO LOS AMIGOS NAT. REHAB CTR	DOWNEY	3.1	ND	0.00	0.10	1999
6459	O	HONEYWELL INTERNATIONAL INC	VERNON	4.1	ND	0.00	0.00	1999
6643	A	TECHNICOLOR INC	NORTH HOLLYWOOD	6.5	ND	0.00	0.10	2007
6670	O	TRU CUT INC	LOS ANGELES	0.0	ND	0.00	0.00	2002
7010	A	PRUDENTIAL OVERALL SUPPLY	IRVINE	0.0	ND	0.00	0.00	1995
7203	A	HESSCO IND INC	LA HABRA	8.6	ND	0.00	0.00	1995
7416	A	PRAXAIR INC	WILMINGTON	0.1	ND	0.00	0.00	2001
7427	A	OWENS-BROCKWAY GLASS CONTAINER INC	VERNON	3.6	ND	0.01	0.06	1999
7533	A	SIMS HUGO NEU WEST	TERMINAL ISLAND	4.1	ND	1.30	0.10	2003
7730	A	CARPENTER CO	RIVERSIDE	8.0	ND	0.03	1.34	2003
8015	A	ANADITE INC	SOUTH GATE	3.5	ND	0.63	0.78	1998
8309	A	CAMBRO MANUFACTURING CO	HUNTINGTON BEACH	1.7	ND	0.00	0.10	2000
8547	A	QUEMETCO INC	CITY OF INDUSTRY	7.1	0.45	0.09	0.69	2016
8560	A	PRUDENTIAL OVERALL SUPPLY CO	COMMERCE	0.0	ND	0.20	0.40	1995
8578	A	ASSOCIATED CONCRETE PROD. INC	SANTA ANA	5.8	ND	0.10	0.60	1999
8582	A	SO CAL GAS CO/PLAYA DEL REY STORAGE FAC	PLAYA DEL REY	9.2	0.02	7.28	0.02	2019
8820	A	REULAND ELECTRIC CO, H.BRITTON LEES	CITY OF INDUSTRY	3.7	ND	0.00	0.00	1996
8935	A	TRAIL RITE INC	SANTA ANA	0.0	ND	0.00	0.30	1996
9114	O	SOMITEX PRINTS OF CAL INC	CITY OF INDUSTRY	3.7	ND	0.10	0.00	1996
9163	A	INLAND EMPIRE UTL AGEN, A MUN WATER DIS	ONTARIO	3.4	ND	0.30	0.00	2007
9668	A	DELUXE LABORATORIES	HOLLYWOOD	2.1	ND	0.00	0.00	2000
10005	A	ELECTRONIC CHROME GRINDING CO, INC	SANTA FE SPRINGS	3.0	0.01	0.20	0.10	2001
10245	A	LA CITY, TERMINAL ISLAND TREATMENT PLANT	SAN PEDRO	1.8	ND	0.00	0.00	2000

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
10510	A	GREGG INDUSTRIES INC	EL MONTE	9.4	ND	0.60	0.60	2008
10656	A	NEWPORT LAMINATES	SANTA ANA	0.0	ND	0.00	0.00	1996
11142	A	KEYSOR-CENTURY CORP	SAUGUS	17.0	ND	0.50	0.10	2000
11192	A	HI-SHEAR CORPORATION	TORRANCE	4.8	ND	0.00	0.00	2008
11435	A	PQ CORPORATION	SOUTH GATE	3.0	ND	0.00	0.00	1998
11726	A	GE ENGINE SERVICES	ONTARIO	6.5	ND	0.10	0.60	1999
11818	A	HIXSON METAL FINISHING	NEWPORT BEACH	1502.0	1.09	0.20	0.10	2015
12493	O	REMO INC	NORTH HOLLYWOOD	0.0	ND	0.00	0.00	1997
12660	O	GOLDSHIELD FIBERGLASS, INC, PLANT #58	FONTANA	0.4	ND	0.00	0.00	1994
12879	O	CYTEC ENGINEERED MATERIALS, INC	SAUGUS	0.0	ND	0.00	0.00	1994
13920	A	SAINT JOSEPH HOSPITAL	ORANGE	7.7	0.00	0.80	0.30	2008
14146	A	MAC GREGOR YACHT CORP	COSTA MESA	5.5	ND	0.00	0.10	1998
14191	O	NIKLOR CHEMICAL COMPANY INC	CARSON	0.0	ND	0.00	0.00	2002
14217	A	MODERN FAUCET MFG COMPANY	LOS ANGELES	0.0	ND	0.00	0.50	1996
14495	A	VISTA METALS CORPORATION	FONTANA	19.8	0.06	0.00	0.30	2008
14502	A	VERNON PUBLIC UTILITIES	VERNON	2.0	0.00	0.00	0.00	2007
14544	O	SANTA FE ENAMELING & METAL FINISHING CO	SANTA FE SPRINGS	0.8	ND	0.00	0.40	1999
15504	A	SCHLOSSER FORGE COMPANY	RANCHO CUCAMONGA	9.5	0.07	1.59	1.11	2002
15647	A	CUSTOM ENAMELERS INC	FOUNTAIN VALLEY	0.6	ND	0.10	0.00	2000
15736	A	HENRY CO	HUNTINGTON PARK	8.5	ND	0.00	0.00	2000
16044	A	SPECIALTY ORGANICS, INC.	IRWINDALE	0.1	ND	0.00	0.20	1997
16264	A	INTERNATIONAL COATINGS CO INC	CERRITOS	0.2	ND	0.00	0.00	1999
16642	A	ANHEUSER-BUSCH LLC., (LA BREWERY)	VAN NUYS	2.7	ND	0.00	0.10	1999
16660	A	THE BOEING COMPANY	HUNTINGTON BEACH	6.4	0.02	0.01	0.08	2015
16951	A	ANAPLEX CORP	PARAMOUNT	2836.0	9.73	23.84	2.02	2018
17325	A	ACE CLEARWATER ENTERPRISES	PARAMOUNT	3.7	ND	0.00	0.00	2002
18294	A	NORTHROP GRUMMAN SYSTEMS CORP	EL SEGUNDO	7.6	ND	0.13	0.05	1999

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
18378	A	GRUBER SYS INC	VALENCIA	0.8	ND	0.10	0.10	2004
18396	A	SPRAYLAT CORP	LOS ANGELES	3.2	0.00	0.70	0.00	2012
18439	O	ACE PLATING CO INC	LOS ANGELES	4.1	ND	0.60	0.20	1998
18452	A	UNIVERSITY OF CALIFORNIA, LOS ANGELES	LOS ANGELES	2.9	ND	0.00	0.10	1999
18648	O	CROWN CITY PLATING CO.	EL MONTE	12.0	ND	0.40	0.10	2000
18931	A	TAMCO	RANCHO CUCAMONGA	52.7	3.08	3.04	3.19	2015
18989	A	BOWMAN PLATING CO INC	COMPTON	17.0	0.00	0.01	0.01	2015
18990	A	LIFE PAINT CO	SANTA FE SPRINGS	0.4	ND	0.00	0.00	2001
19953	A	RISTON KELLER INC	IRVINE	0.0	ND	0.00	0.00	1996
19989	O	PARKER HANNIFIN AEROSPACE CORP	IRVINE	0.3	ND	0.00	0.00	1999
20144	A	CANON BUSINESS MACHINES INC	COSTA MESA	0.0	ND	0.00	0.10	1999
20197	A	LAC/USC MEDICAL CENTER	LOS ANGELES	7.5	ND	0.70	0.40	2007
20280	A	METAL SURFACES INTERNATIONAL, LLC	BELL GARDENS	6.8	0.00	0.90	0.30	2011
20375	A	PRUDENTIAL OVERALL SUPPLY	RIVERSIDE	1.0	ND	0.00	0.10	1997
20528	A	BRISTOL FIBERLITE IND	SANTA ANA	0.1	ND	0.00	0.00	1995
21615	O	PERKINELMER OPTOELECTRONICS SC, INC	AZUSA	8.1	ND	0.20	0.10	1998
21895	A	AC PRODUCTS INC	PLACENTIA	0.5	ND	0.00	0.00	2003
22092	A	WESTERN TUBE & CONDUIT CORP	LONG BEACH	0.0	ND	0.00	0.60	1997
22229	A	PROCESSES BY MARTIN INC (MARTIN METALS F	LYNWOOD	0.0	ND	0.00	0.00	2002
22373	A	SMURFIT-STONE CONTAINER ENTERPRISES, INC	LOS ANGELES	0.7	ND	0.00	0.00	1996
22410	O	PALACE PLATING	LOS ANGELES	5.6	ND	0.73	0.38	2004
22467	A	LEFIELL MFG CO	SANTA FE SPRINGS	1.7	ND	0.70	0.20	2000
22808	O	PRICE PFISTER INC	PACOIMA	0.9	ND	0.20	0.10	1996
22911	A	CARLTON FORGE WORKS	PARAMOUNT	15.4	ND	1.76	1.04	2016
23559	A	JOHNSON CONTROLS BATTERY GROUP INC	FULLERTON	1.8	ND	0.00	0.10	2001
23752	A	AEROCRAFT HEAT TREATING CO INC	PARAMOUNT	1900.0	11.00	2.90	0.15	2018
23907	A	JOHNS MANVILLE CORP	CORONA	13.0	ND	0.40	2.70	1999

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
24060	A	AQUATIC COMPANY	ANAHEIM	0.7	ND	0.00	0.00	1996
24118	A	DEVOE COATINGS CO	RIVERSIDE	0.1	ND	0.30	0.10	1999
24520	A	LA CNTY SANITATION DISTRICT-PALOS VERDES	ROLLING HILLS ESTATES	0.3	ND	0.00	0.00	1998
24647	A	J. B. I. INC	RANCHO DOMINGUEZ	0.0	ND	0.00	0.20	1999
24756	A	CRANE CO, HYDRO-AIRE DIV	BURBANK	0.6	ND	0.00	0.10	1997
24812	A	FARMER BROS CO	TORRANCE	0.1	ND	0.00	0.00	1999
25012	A	AMADA AMERICA, INC.	LA MIRADA	0.1	ND	0.00	0.00	2002
25070	A	LA CNTY SANITATION DISTRICT-PUENTE HILLS	CITY OF INDUSTRY	1.5	0.00	0.30	0.10	2009
25440	A	INVENSYS CLIMATE CONTROLS	LONG BEACH	2.7	ND	0.00	1.00	1998
25638	A	BURBANK CITY, BURBANK WATER & POWER	BURBANK	0.3	ND	0.30	0.00	1996
27343	O	CON AGRA INC, GILROY FOODS DBA	SANTA ANA	7.1	ND	0.20	0.10	1995
27701	O	CADDOCK ELECTRONIC	RIVERSIDE	2.7	ND	0.00	0.10	2002
34764	A	CADDOCK ELECTRONICS INC	RIVERSIDE	6.5	ND	0.00	0.10	2002
35302	A	OWENS CORNING ROOFING AND ASPHALT, LLC	COMPTON	14.0	0.02	0.10	0.10	2000
35483	A	WARNER BROTHERS STUDIO FACILITIES	BURBANK	2.6	ND	0.10	0.30	1997
37336	A	COMMERCE REFUSE TO ENERGY FACILITY	COMMERCE	0.1	0.00	0.00	0.00	2010
37507	A	TROJAN BATTERY COMPANY, LLC	SANTA FE SPRINGS	2.6	0.00	1.10	1.30	2012
37603	A	SGL TECHNIC LLC	VALENCIA	7.8	ND	0.00	0.40	1998
38971	A	RICOH ELECTRONICS INC	IRVINE	5.6	ND	0.00	0.40	1995
40806	A	NEW BASIS	RIVERSIDE	0.0	ND	0.70	0.20	1997
41229	A	LUBECO INC	LONG BEACH	128.6	0.08	0.18	0.45	2019
42514	A	LA COUNTY SANITATION DIST (CALABASAS)	AGOURA	1.1	0.00	0.10	0.00	2010
42633	A	LA COUNTY SANITATION DISTRICTS (SPADRA)	POMONA	1.2	ND	0.00	0.00	1996
42676	A	CES PLACERITA INC	NEWHALL	0.1	ND	0.10	0.00	2003
42922	A	CMC PRINTED BAG INC	WHITTIER	9.0	ND	0.00	0.00	1995
43436	A	TST, INC.	FONTANA	0.4	0.11	0.00	0.40	1997
44454	A	STRUCTURAL COMPOSITES IND	POMONA	8.6	0.00	0.00	0.20	2002

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
44577	A	LONG BEACH CITY, SERRF PROJECT	LONG BEACH	0.4	0.00	0.00	0.10	2011
45262	A	LA COUNTY SANITATION DIST SCHOLL CANYON	GLENDALE	6.2	ND	0.00	0.10	1998
45489	A	ABBOTT CARDIOVASCULAR SYSTEMS, INC.	TEMECULA	3.8	0.01	1.30	0.00	2002
45938	A	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	COMPTON	0.0	ND	0.00	0.00	1999
46268	A	CALIFORNIA STEEL INDUSTRIES INC	FONTANA	2.7	0.02	0.20	0.00	1995
47056	A	MYERS CONTAINER CORP, IMACC CORP DIV	HUNTINGTON PARK	0.9	ND	0.20	2.00	2002
47459	O	JACUZZI WHIRLPOOL BATH	IRVINE	0.0	ND	0.00	0.00	1995
48274	A	FENDER MUSICAL INST	CORONA	2.8	ND	0.00	0.40	1997
48300	A	PRECISION TUBE BENDING	SANTA FE SPRINGS	0.2	ND	0.00	0.00	2002
49387	A	UNIV CAL, RIVERSIDE	RIVERSIDE	7.1	ND	0.00	0.00	2018
52517	A	REXAM BEVERAGE CAN COMPANY	CHATSWORTH	2.9	0.01	0.70	0.10	2009
54424	A	L&L CUSTOM SHUTTERS INC,ALLWOOD SHUTTERS	PLACENTIA	5.5	ND	0.20	0.20	2001
55711	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
55714	A	SUNLAW COGENERATION PARTNERS I	VERNON	0.0	ND	0.00	0.00	1996
57329	O	KWIKSET CORP	ANAHEIM	3.4	ND	0.00	0.10	2000
61160	A	GE ENGINE SERVICES, LLC	ONTARIO	0.5	ND	0.70	0.01	2003
61209	O	AKZO NOBEL CHEM INC, FILTROL CORP SUB OF	LOS ANGELES	0.0	ND	0.00	0.00	1996
62679	O	KOP-COAT INC	LOS ANGELES	1.3	ND	0.00	0.50	1997
62897	A	NORTHROP GRUMMAN CORP, MASD	PICO RIVERA	9.4	ND	1.00	0.50	2000
70021	A	XERXES CORP (A DELAWARE CORP)	ANAHEIM	0.0	ND	0.00	0.00	1996
79682	A	RAMCAR BATTERIES INC	COMMERCE	2.4	1.00	0.00	0.20	1998
82512	A	BREA CANON OIL CO	WILMINGTON	1.7	ND	0.00	0.00	1996
82513	A	BREA CANON OIL COMPANY INC	HARBOR CITY	1.4	ND	0.00	0.00	1996
83102	A	LIGHT METALS INC	CITY OF INDUSTRY	4.5	0.01	0.00	2.70	2002
90546	O	SORIN BIOMEDICAL INC	IRVINE	2.3	ND	0.00	0.00	1996
93346	A	WAYMIRE DRUM CO,INC.,S EL MONTE FACILITY	SOUTH EL MONTE	4.3	ND	0.10	0.20	1997
94872	A	METAL CONTAINER CORP	MIRA LOMA	0.1	ND	0.40	0.40	2002

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
99119	A	INTERPLASTIC CORP	HAWTHORNE	0.3	ND	0.10	0.30	1999
99773	A	CYTEC ENGINEERED MATERIALS INC	ANAHEIM	2.2	0.00	0.00	0.20	2000
101380	O	GENERAL DYNAMICS OTS (DOWNEY) INC	DOWNEY	9.8	ND	0.00	0.10	2000
101977	A	SIGNAL HILL PETROLEUM INC	SIGNAL HILL	4.7	ND	0.60	1.00	1998
103659	A	ASCENT MEDIA MANAGEMENT SERVICES INC	BURBANK	2.2	ND	0.60	0.00	2004
103888	O	SARGENT FLETCHER INC	EL MONTE	4.9	ND	0.20	0.00	1999
105598	A	SENIOR AEROSPACE SSP	BURBANK	3.6	ND	1.00	0.50	2001
106797	A	SAINT-GOBAIN CONTAINERS, INC.	LOS ANGELES	9.9	ND	0.00	0.10	2000
106838	A	VALLEY-TODECO, INC	SYLMAR	3.7	ND	0.20	0.20	2000
107149	A	MARKLAND MANUFACTURING INC	SANTA ANA	0.3	ND	0.10	0.10	2007
107350	A	NATIONAL O-RINGS	DOWNEY	1.5	ND	0.00	0.00	2001
108701	A	SAINT-GOBAIN CONTAINERS, INC.	EL MONTE	7.3	ND	0.10	0.10	2000
109198	A	TORCH OPERATING COMPANY	BREA	5.0	ND	0.00	0.00	2001
111415	O	VAN CAN COMPANY	FONTANA	0.8	ND	0.00	0.10	1996
112192	O	CONSOLIDATED DRUM RECONDITIONING CO INC	SOUTH GATE	0.3	ND	0.00	0.00	1997
113170	A	SANTA MONICA - UCLA MEDICAL CENTER	SANTA MONICA	7.6	0.14	0.20	0.00	1997
113676	A	VICKERS	LOS ANGELES	3.0	ND	0.00	0.00	1995
115389	A	AES HUNTINGTON BEACH, LLC	HUNTINGTON BEACH	0.1	ND	0.00	0.00	1999
115394	A	AES ALAMITOS, LLC	LONG BEACH	0.6	ND	0.00	0.00	1999
115536	A	AES REDONDO BEACH, LLC	REDONDO BEACH	0.4	ND	0.00	0.00	1998
115586	A	SUNDANCE SPAS, INC	CHINO	0.0	ND	0.00	0.40	1996
115663	A	EL SEGUNDO ENERGY CENTER LLC	EL SEGUNDO	0.3	ND	0.00	0.00	2000
116868	A	EQUILON ENTER. LLC, SHELL OIL PROD. U S	BLOOMINGTON	2.9	ND	0.00	0.00	1999
118998	O	CYTEC FIBERITE INC	CULVER CITY	6.6	ND	0.00	0.20	1997
119127	O	PRC-DE SOTO INTERNATIONAL	GLENDALE	0.0	ND	0.00	0.00	2000
119920	A	PECHINEY CAST PLATE INC	VERNON	1.6	ND	0.30	0.30	1996
122295	A	FALCON FOAM, A DIV OF ATLAS ROOFING CORP	LOS ANGELES	0.4	ND	0.00	0.00	1999

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
122300	A	BASF CORPORATION	COLTON	0.3	ND	0.60	0.00	2002
122822	O	CONSOLIDATED FILM INDUSTRIES, LLC	HOLLYWOOD	21.0	ND	0.10	0.40	2000
124016	O	CHEMETALL U,S., INC,	LA MIRADA	0.0	ND	0.10	0.10	2000
124506	A	THE BOEING COMPANY	TORRANCE	4.2	ND	0.50	0.10	1995
124805	A	EXIDE TECHNOLOGIES	COMMERCE	0.3	ND	0.00	0.00	2000
124806	O	EXIDE TECHNOLOGIES	CITY OF INDUSTRY	1.0	ND	0.00	0.00	1999
124838	A	EXIDE TECHNOLOGIES	VERNON	0.0	ND	0.00	0.00	2013
125281	O	ALCO CAD-NICKEL PLATING, MODERN PLATING	LOS ANGELES	8.2	ND	0.10	0.00	1995
126060	A	STERIGENICS US, LLC	ONTARIO	3.8	0.00	0.00	0.00	2007
126191	A	STERIGENICS US, INC.	LOS ANGELES	3.3	ND	0.00	0.00	1996
126197	A	STERIGENICS US, INC.	LOS ANGELES	3.6	ND	0.00	0.00	1996
126536	A	CPP - POMONA	POMONA	1.5	ND	0.00	0.00	1999
126544	A	PAC FOUNDRIES-INDUSTRY	CITY OF INDUSTRY	1.3	ND	0.60	0.10	1996
126964	A	EDWARDS LIFESCIENCES LLC	IRVINE	0.8	ND	0.00	0.00	1995
127568	A	ENGINEERED POLYMER SOLUTION, VALSPAR	MONTEBELLO	3.5	ND	0.10	0.50	2000
132343	A	SPECTRUM PAINT & POWDER, INC.	ANAHEIM	0.0	ND	0.20	0.70	1997
132954	A	ALL AMERICAN ASPHALT	SAN FERNANDO	1.6	0.00	0.40	0.30	2017
133405	A	BODYCOTE THERMAL PROCESSING	LOS ANGELES	2.4	ND	0.00	0.20	1999
133660	A	HAYDEN INDUSTRIAL PRODUCTS	CORONA	1.6	ND	0.80	0.40	1998
134018	A	INDUSTRIAL CONTAINER SERVICES-CA LLC	MONTEBELLO	5.2	ND	0.60	0.20	2000
134931	A	ARCONIC GLOBAL FASTENERS & RINGS, INC.	FULLERTON	0.6	ND	1.90	0.02	1997
134943	A	ARCONIC GLOBAL FASTENERS & RINGS INC	TORRANCE	2.6	ND	0.60	0.00	2008
136148	A	E/M COATING SERVICES	NORTH HOLLYWOOD	5.8	ND	0.30	0.60	1998
140811	A	DUCOMMUN AEROSTRUCTURES INC	MONROVIA	3.5	0.01	0.00	0.00	2002
140961	A	GKN AEROSPACE TRANSPARENCY SYS INC	GARDEN GROVE	6.0	ND	0.00	0.50	1996
142267	A	FS PRECISION TECH LLC	COMPTON	2.0	ND	0.10	0.20	2001
148925	A	CHERRY AEROSPACE	SANTA ANA	9.7	ND	0.10	0.20	1999

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
149241	A	REGAL CULTURED MARBLE	POMONA	0.0	ND	0.00	0.20	1995
150201	A	BREITBURN OPERATING LP	SANTA FE SPRINGS	0.8	ND	0.00	0.00	1998
151798	A	TESORO REFINING AND MARKETING CO, LLC	CARSON	2.8	ND	0.10	0.00	1999
151899	A	CALIFORNIA RESOURCES PRODUCTION CORP	NEWHALL	3.5	ND	0.00	0.20	2000
152054	A	LINN WESTERN OPERATING INC	BREA	1.1	ND	0.00	0.10	1996
152501	A	PRECISION SPECIALTY METALS, INC.	LOS ANGELES	0.5	ND	0.40	0.20	2001
153546	A	HUCK INTERNATIONAL INC	CARSON	3.3	ND	0.00	0.00	1999
155828	A	GARRETT AVN. SVCS. LLC DBA STANDARD AERO	LOS ANGELES	9.3	ND	0.19	0.25	2002
156741	A	HARBOR COGENERATION CO, LLC	WILMINGTON	0.1	ND	0.00	0.00	2002
157451	A	BENDER CCP INC	VERNON	4.4	0.00	1.00	0.00	2002
160437	A	SOUTHERN CALIFORNIA EDISON	REDLANDS	2.3	0.00	0.00	0.00	2013
160916	A	FXI, INC.	ORANGE	0.0	ND	0.40	0.40	1994
161142	A	FOAMEX INNOVATIONS, INC.	COMPTON	0.3	0.00	0.00	0.00	2010
164864	A	ARROWHEAD BRASS & PLUMBING	LOS ANGELES	5.7	ND	0.30	0.00	1995
165192	A	TRIUMPH AEROSTRUCTURES, LLC	HAWTHORNE	19.7	ND	0.64	0.24	1999
166587	A	THE BOEING COMPANY	HUNTINGTON BEACH	7.0	ND	0.00	0.00	1995
167981	A	TESORO LOGISTICS, WILMINGTON TERMINAL	WILMINGTON	2.8	ND	0.00	0.00	2000
168088	A	POLYNT COMPOSITES USA INC	LYNWOOD	6.5	ND	0.10	1.60	1995
169754	A	SO CAL HOLDING, LLC	HUNTINGTON BEACH	7.6	0.02	0.02	0.04	2019
169990	A	SPS TECHNOLOGIES, LLC	GARDENA	8.9	ND	0.10	0.10	1999
171107	A	PHILLIPS 66 CO/LA REFINERY WILMINGTON PL	WILMINGTON	23.2	0.29	0.10	0.70	2013
171109	A	PHILLIPS 66 COMPANY/LOS ANGELES REFINERY	CARSON	6.6	0.11	0.00	0.30	2011
172878	A	TESORO LOGISTICS LONG BEACH TERMINAL	LONG BEACH	2.4	ND	0.00	0.00	1999
174340	A	PRC DE SOTO INTERNATIONAL, INC.	IRVINE	0.7	ND	0.00	0.00	1995
174591	A	TESORO REF & MKTG CO LLC,CALCINER	LONG BEACH	4.3	ND	0.10	0.20	1995
174655	A	TESORO REFINING & MARKETING CO, LLC	CARSON	7.3	ND	0.30	0.10	2000
174703	A	TESORO LOGISTICS,CARSON PROD TERMINAL	CARSON	3.0	ND	0.00	0.00	1994

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
174710	A	TESORO LOGISTICS, VINVALE TERMINAL	SOUTH GATE	9.0	ND	0.00	0.00	1994
175124	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	8.7	ND	0.00	0.00	1995
175126	A	AEROJET ROCKETDYNE OF DE, INC.	CANOGA PARK	0.0	ND	0.00	0.00	1996
177042	A	SOLVAY USA, INC	LONG BEACH	4.3	ND	0.30	0.00	2001
180631	A	STCDARA, LLC	LA PUENTE	13.8	0.02	0.01	0.74	2001
180908	A	ECO SERVICES OPERATIONS CORP.	CARSON	0.1	ND	0.00	0.10	2006
181426	A	OC WASTE & RECYCLING, COYOTE	NEWPORT COAST	20.1	0.18	0.60	0.30	2009
181667	A	TORRANCE REFINING COMPANY LLC	TORRANCE	7.7	0.15	0.20	0.50	2013
182610	A	ELITE COMFORT SOLUTIONS	COMMERCE	2.0	ND	0.00	0.50	1998
182752	A	TORRANCE LOGISTICS COMPANY LLC	VERNON	5.3	ND	0.10	0.00	1997
182822	A	TORRANCE LOGISTICS COMPANY LLC	ANAHEIM	0.7	ND	0.00	0.00	1999
183567	A	GS II, INC.	WILMINGTON	6.3	0.04	1.82	0.19	2018
183926	A	EVONIK CORPORATION	LOS ANGELES	2.4	ND	0.10	0.80	1999
184301	A	SENTINEL PEAK RESOURCES CALIFORNIA, LLC	LOS ANGELES	2.7	ND	0.00	0.10	1997
185059	A	CUSTOM FIBREGLASS MFG. CO DBA SNUGTOP	LONG BEACH	2.5	ND	0.00	0.00	1995
185093	A	BEVERLY HILLS UNIFIED SCHOOL DISTRICT	BEVERLY HILLS	1.2	ND	0.00	0.00	2005
185282	A	BKEP MATERIALS LLC - FONTANA	FONTANA	0.0	ND	0.30	0.00	1999
185352	A	SNOW SUMMIT, LLC.	BIG BEAR LAKE	5.5	ND	0.20	0.00	2007
185575	A	BRIDGE ENERGY, LLC	BREA	3.4	ND	0.00	0.00	1999
185801	A	BERRY PETROLEUM COMPANY, LLC	SANTA CLARITA	1.6	ND	0.20	0.70	1999
186519	A	EMBEE PROCESSING	SANTA ANA	6.6	ND	0.21	0.58	2000
186899	A	ENERY HOLDINGS LLC	CARSON	0.8	ND	0.20	0.00	2007
187165	A	ALTAIR PARAMOUNT, LLC	PARAMOUNT	9.6	ND	0.00	0.00	2002
187348	A	HYDRO EXTRUDER, LLC	CITY OF INDUSTRY	1.3	ND	0.00	0.00	1999
187823	A	KIRKHILL INC	BREA	18.8	0.07	0.06	0.11	2019
188380	A	VALENCE SURFACE TECHNOLOGIES - LYNWOOD	LYNWOOD	0.5	0.00	0.10	0.40	2012
189043	A	REVLINE DBA ELIMINATOR BOATS	MIRA LOMA	0.0	ND	0.00	0.00	1995

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
190051	A	BRIDGE POINT LONG BEACH LLC	LONG BEACH	4.8	0.00	0.00	0.00	2002
190377	A	GCC LONG BEACH C/O GOODMAN	LONG BEACH	4.8	ND	0.20	0.10	1999
800003	A	HONEYWELL INTERNATIONAL INC	TORRANCE	1.8	ND	0.00	0.00	1999
800007	A	ALLIED SIGNAL INC (NSR USE ONLY)	EL SEGUNDO	3.6	ND	0.00	0.50	2000
800009	A	AMERON PROTECTIVE COAT DIV (EIS&NSR USE)	BREA	0.0	ND	0.20	0.20	2000
800018	A	BAXTER HEALTHCARE CORPORATION	IRVINE	0.0	ND	0.00	0.40	1994
800022	A	CALNEV PIPE LINE, LLC	BLOOMINGTON	5.9	ND	0.00	0.10	1999
800026	A	ULTRAMAR INC	WILMINGTON	7.2	0.18	0.70	0.20	2012
800030	A	CHEVRON PRODUCTS CO.	EL SEGUNDO	2.7	0.28	0.30	0.10	2001
800032	A	CHEVRON USA INC	MONTEBELLO	7.5	0.14	0.00	0.20	1999
800035	A	CONTINENTAL AIRLINES INC (NSR USE ONLY)	LOS ANGELES	2.8	ND	0.00	0.10	1995
800037	A	DEMENNO-KERDOON DBA WORLD OIL RECYCLING	COMPTON	4.9	0.01	0.01	0.02	2009
800039	O	DOUGLAS PRODUCTS DIVISION	TORRANCE	2.4	ND	0.00	0.00	1996
800041	A	DOW CHEM U.S.A.	TORRANCE	4.4	ND	0.10	0.00	2000
800047	O	FLETCHER OIL & REF CO	CARSON	5.9	ND	0.00	0.00	1998
800054	A	GATX RAIL CORP	SAN PEDRO	8.0	ND	0.30	0.50	1997
800056	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	WILMINGTON	2.3	0.01	0.00	0.00	1997
800057	A	KINDER MORGAN LIQUIDS TERMINALS, LLC	CARSON	8.5	ND	0.00	0.10	1999
800063	A	GROVER PROD. CO (EIS USE)	LOS ANGELES	3.3	0.04	0.88	0.07	2001
800066	A	HITCO CARBON COMPOSITES INC	GARDENA	6.4	ND	0.30	0.00	1995
800067	A	THE BOEING COMPANY	EL SEGUNDO	6.2	ND	0.00	0.10	2000
800074	A	LA CITY, DWP HAYNES GENERATING STATION	LONG BEACH	0.2	ND	0.00	0.00	2000
800075	A	LA CITY, DWP SCATTERGOOD GENERATING STN	PLAYA DEL REY	0.0	ND	0.00	0.00	2000
800079	A	PETRO DIAMOND TERMINAL CO	LONG BEACH	8.3	ND	0.00	0.20	1998
800087	A	MENASCO MFG CO (EIS USE)	BURBANK	0.0	ND	0.00	0.00	1997
800109	A	REYNOLDS METALS CO	TORRANCE	0.0	ND	0.20	0.90	2001
800111	O	THE BOEING COMPANY	DOWNEY	2.3	ND	0.00	0.10	1996

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800113	A	ROHR, INC.	RIVERSIDE	7.2	0.01	0.90	0.00	2007
800117	A	SHELL OIL CO (EIS USE)	WILMINGTON	7.3	ND	0.00	0.10	1998
800127	A	SO CAL GAS CO	MONTEBELLO	1.0	0.00	0.00	0.00	2009
800129	A	SFPP, L.P.	BLOOMINGTON	5.8	ND	0.00	0.00	1996
800149	A	US BORAX INC	WILMINGTON	9.5	ND	0.00	0.00	2000
800150	A	US GOVT, AF DEPT, MARCH AIR RESERVE BASE	RIVERSIDE	7.4	0.02	0.30	0.00	2008
800154	A	US GOVT, MARINE CORPS AIR STATION	TUSTIN	0.0	ND	0.00	0.00	2000
800168	A	PASADENA CITY, DWP	PASADENA	0.2	ND	0.70	0.00	1996
800180	A	UNOCAL CORP, UNOCAL CHEM DIV (EIS USE)	LA MIRADA	6.2	ND	0.50	0.80	1999
800181	A	CALIFORNIA PORTLAND CEMENT CO	COLTON	2.0	ND	0.00	0.40	1996
800182	A	RIVERSIDE CEMENT CO	RIVERSIDE	7.8	0.11	0.10	0.10	2001
800184	A	GOLDEN WEST REF CO	SANTA FE SPRINGS	8.8	ND	0.20	0.10	1997
800189	A	DISNEYLAND RESORT	ANAHEIM	3.3	0.03	0.10	0.10	2009
800193	A	LA CITY, DWP VALLEY GENERATING STATION	SUN VALLEY	0.2	ND	0.30	0.00	1999
800196	A	AMERICAN AIRLINES, INC,	LOS ANGELES	5.4	0.19	0.86	0.08	2002
800198	A	ULTRAMAR INC	WILMINGTON	5.9	ND	0.00	0.10	1999
800202	A	UNIVERSAL CITY STUDIOS, LLC.	UNIVERSAL CITY	2.4	ND	0.00	0.00	1996
800204	O	SIMPSON PAPER CO	POMONA	3.4	ND	0.00	0.00	1996
800207	A	METRO ST HOSP (EIS USE)	NORWALK	0.0	ND	0.00	0.00	1996
800209	A	BKK CORP (EIS USE)	WEST COVINA	6.9	ND	0.00	0.10	2000
800214	A	LA CITY, SANITATION BUREAU (HTP)	PLAYA DEL REY	7.6	ND	0.10	0.00	1999
800224	A	SO CAL EDISON CO	ETIWANDA	2.7	ND	0.00	0.20	2000
800236	A	LA CO. SANITATION DIST	CARSON	7.2	ND	0.20	0.10	2007
800273	O	CHEMOIL REF CORP (NSR USE ONLY)	SIGNAL HILL	0.0	ND	0.00	0.00	2000
800278	A	SFPP, L.P. (NSR USE)	CARSON	2.4	ND	0.00	0.10	1999
800279	A	SFPP, L.P. (NSR USE ONLY)	ORANGE	5.9	ND	0.00	0.20	1999
800288	A	UNIV CAL IRVINE (NSR USE ONLY)	IRVINE	5.6	ND	0.00	0.10	1996

Table C-2

Health Risks from Facilities with an Approved HRA

(Listed by Facility ID)

Facility ID	Facility Status (a)	Facility Name	City	Cancer Risk (chances in-one-million)	Cancer Burden (e)	Non-Cancer Acute Hazard Index	Non-Cancer Chronic Hazard Index	HRA Approval Year (d)
800301	A	ITT GILFILLAN	VAN NUYS	0.9	ND	0.10	0.20	1998
800318	A	GRISWOLD INDUSTRIES	COSTA MESA	9.5	0.01	0.10	0.00	2001
800320	A	AMVAC CHEMICAL CORP	LOS ANGELES	0.0	ND	0.10	0.30	2004
800325	A	TIDELANDS OIL PRODUCTION CO	LONG BEACH	1.9	ND	0.10	0.60	1999
800327	A	GLENDALE CITY, GLENDALE WATER & POWER	GLENDALE	179.5	4.97	0.80	1.69	2019
800330	A	THUMS LONG BEACH	LONG BEACH	1.2	ND	0.00	0.00	2000
800337	A	CHEVRON U.S.A., INC (NSR USE)	LA HABRA	0.0	ND	0.00	0.00	1996
800343	O	BOEING SATELLITE SYSTEMS, INC	EL SEGUNDO	0.3	ND	0.00	0.20	1996
800372	A	EQUILON ENTER. LLC, SHELL OIL PROD. US	CARSON	6.9	ND	0.40	0.10	2001
800373	A	LAKELAND DEVELOPMENT COMPANY	SANTA FE SPRINGS	9.7	ND	0.30	0.10	2000
800387	A	CAL INST OF TECH	PASADENA	2.4	ND	0.10	0.00	2007
800408	A	NORTHROP GRUMMAN SYSTEMS	MANHATTAN BEACH	1.4	ND	0.90	0.10	1998
800409	A	NORTHROP GRUMMAN SYSTEMS CORPORATION	REDONDO BEACH	5.5	ND	0.50	0.20	1998
800413	A	HAWKER PACIFIC AEROSPACE	SUN VALLEY	2.1	0.00	0.00	0.10	2009
800436	A	TESORO REFINING AND MARKETING CO, LLC	WILMINGTON	10.7	0.37	0.30	0.40	2013

Notes:

a) A = Active (note that facilities with "Active" status within South Coast AQMD's database may not currently be in operation); I = Inactive; OB = Out of Business

(b) All HRAs with HRA Approval Year dated 2015 and later have used the 2015 OEHHA Risk Assessment Guidelines for preparation of their HRA.

(c) ND = Not Determined

Appendix D — Approved Risk Reduction Plans and Voluntary Risk Reduction Plans

Facilities with an Approved Rule 1402(f) Risk Reduction Plan

Table D-1 — Status of Risk Reduction Plans

Facility ID	Facility Name	Submitted	Approved	Implemented	Residual Risk			
					Cancer Risk	Chronic HI	Acute HI	Cancer Burden
7427	OWENS-BROCKWAY GLASS CONTAINER INC	Yes	Yes	Yes	3.6	0.01	0.06	0.00
7730	CARPENTER CO	Yes	Yes	Yes	1.0	0.03	1.34	0.00
8015	ANADITE INC	Yes	Yes	Yes	3.5	0.63	0.78	N/A
8547	QUEMETCO INC	Yes	Yes	Yes	7.1	0.09	0.69	0.45
8582	SO CAL GAS CO/PLAYA DEL REY STORAGE FACILITY	Yes	Yes	In Progress	TBD	TBD	TBD	TBD
11818	HIXSON METAL FINISHING	Yes	Yes	In Progress	TBD	TBD	TBD	TBD
14191	NIKLOR CHEMICAL COMPANY INC **(a)**	Yes	Yes	Yes	N/A	N/A	N/A	N/A
15504	SCHLOSSER FORGE COMPANY	Yes	Yes	Yes	9.5	1.59	1.11	0.07
16951	ANAPLEX CORP **(d)**	Yes	In Progress	In Progress	TBD	TBD	TBD	TBD
18294	NORTHROP GRUMMAN SYSTEMS CORP	Yes	Yes	Yes	7.6	0.13	0.05	N/A
18931	GERDAU/TAMCO	Yes	Yes	In Progress	TBD	TBD	TBD	TBD
18989	BOWMAN PLATING CO INC	Yes	Yes	Yes	17.0	0.01	0.01	0.00
22410	PALACE PLATING **(b)**	Yes	Yes	Yes	5.6	0.73	0.38	N/A
23752	AEROCRAFT HEAT TREATING CO INC	Yes	Yes	In Progress	TBD	TBD	TBD	TBD
25012	AMADA AMERICA, INC.	Yes	Yes	Yes	0.0	0.00	0.00	0.00
41229	LUBECO INC **(d)**	Yes	In Progress	In Progress	TBD	TBD	TBD	TBD
45938	E.M.E. INC/ELECTRO MACHINE & ENGINEERING	Yes	Yes	Yes	0.0	0.00	0.00	0.00
61160	GE ENGINE SERVICES, LLC	Yes	Yes	Yes	0.5	0.70	0.01	0.00
119127	PRC DESOTO INTERNATIONAL **(a)**	Yes	Yes	Yes	N/A	N/A	N/A	N/A
124838	EXIDE TECHNOLOGIES **(a,c)**	Yes	Yes	*(See Note)*	N/A	N/A	N/A	N/A
134931	ARCONIC GLOBAL FASTENERS & RINGS, INC.	Yes	Yes	Yes	0.6	1.90	0.02	0.00
155828	GARRETT AVIATION SERVICES, LLC **(a)**	Yes	Yes	Yes	7.0	0.28	0.03	N/A
165192	TRIUMPH AEROSTRUCTURES, LLC. **(c)**	Yes	Yes	Yes	19.7	0.64	0.24	N/A
180631	STCDARA, LLC	Yes	Yes	Yes	13.8	0.01	0.74	0.02
186519	EMBEE PROCESSING	Yes	Yes	Yes	6.6	0.21	0.58	N/A
800037	DEMENNO/KERDOON	Yes	Yes	Yes	4.9	0.00	0.02	0.01
800063	GROVER PRODUCTS CO.	Yes	Yes	Yes	3.3	0.88	0.07	0.04
800196	AMERICAN AIRLINES, INC.	Yes	Yes	Yes	5.4	0.86	0.08	0.19
800327	GLENDALE CITY, GLENDALE WATER & POWER	Yes	In Progress	In Progress	TBD	TBD	TBD	TBD

Notes:

(a) Facility has shut down, resulting risks are zero.
(b) The specific risk driver listed in this HRA is no longer in use & the resulting risk has been eliminated.
(c) Facility shut down prior to implementation of RRP.
(d) HRA and RRP review is in progress and residual risk is to be determined after implementation of risk reduction measures.

Facilities with an Approved Rule 1402(h) Voluntary Risk Reduction Plan

South Coast AQMD's Rule 1402 — Control of Toxic Air Contaminants from Existing Sources includes a Voluntary Risk Reduction Program. Facilities that participate in the Voluntary Risk Reduction Program reduce their health risks sooner and below the thresholds required under Rule 1402. Facilities that participate in this program have already had a HRA approved by South Coast AQMD that shows the facility's risks were below risk reduction thresholds at the time of HRA approval. An HRA is a study that estimates how a facility's emissions affect people's health risks in the surrounding community.

On March 6, 2015, OEHHA approved revisions to its guidelines (2015 OEHHA Guidelines) that are used by all air districts throughout the state to prepare HRAs. The 2015 OEHHA Guidelines incorporates age sensitivity factors which will increase 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. 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. The Voluntary Risk Reduction Program provides an opportunity for participating facilities to address the increase in their estimated cancer risk due to the 2015 OEHHA Guidelines.

Table D-2 below lists the facilities with an approved Voluntary Risk Reduction Plan.

Table D-1 — Facilities with Approved Voluntary Risk Reduction Plans

Facility ID	Facility Status (a)	Facility Name	Address	City	VRRP Approval Year (e)
17301	A	ORANGE COUNTY SANITATION DISTRICT	10844 ELLIS AVE	FOUNTAIN VALLEY	2018
29110	A	ORANGE COUNTY SANITATION DISTRICT	22212 BROOKHURST ST	HUNTINGTON BEACH	2018
800030	A	CHEVRON EL SEGUNDO REFINERY	324 WEST EL SEGUNDO BLVD	EL SEGUNDO	2019

Appendix E — List of Acronyms and Abbreviations

Acronym	Description
AB 2588	Air Toxics "Hot Spots" Information and Assessment Act
AB 617	Assembly Bill 617
AER	Annual Emissions Reporting
ATIR	Air Toxics Inventory Report
CAPCOA	California Air Pollution Control Officers Association
CARB	California Air Resources Board
CEMS	Continuous Emissions Monitoring System
CEQA	California Environmental Quality Act
DPM	Diesel Particulate Matter
EGBE	Ethylene Glycol mono-n-Butyl Ether
EIR	Environmental Impact Report
F.I.N.D	Facility Information Detail
H&S Code	California Health and Safety Code
HARP	Hotspots Analysis and Reporting Program
HI	Hazard Index
HRA	Health Risk Assessment
LPG	Liquefied Petroleum Gas
MATES	Multiple Air Toxics Exposure Study
MDI	Methylene Phenyl Diisocyanate
NAAQS	National Ambient Air Quality Standard
OEHHA	Office of Environmental Health Hazard Assessment
PAMS	Photochemical Assessment Monitoring Stations
REL	Reference Exposure Levels
RRP	Risk Reduction Plan
SB 1731	Facility Air Toxic Contaminant Risk Audit and Reduction Plan
South Coast AQMD	South Coast Air Quality Management District
TBAc	Tert-Butyl Acetate
TS	Total Facility Score
U.S. EPA	United States Environmental Protection Agency
VRRP	Voluntary Risk Reduction Plan

South Coast Air Quality Management District

Facility Prioritization Procedure
for
the Rule 1402 Implementation of the AB 2588 Program

~~September~~October ~~2019~~2020

Preface

This version of the Prioritization Procedure updates the previous September ~~2018~~2019 version~~, which was updated to incorporate the California Office of Environmental Health Hazard Assessment *Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments* (2015 OEHHA Guidelines).~~. This is intended to be a "living" document, which staff will update periodically as needed.

The revisions to this document from the previous September 2019 version include:

- Correcting equations for calculation of cancer score for worker adjustment factor;
- Removing reference to worker adjustment factor in non-cancer chronic description; and
- Provide additional clarification on the worker adjustment factor.

Previous revisions are described below.

The September 2019 revisions to this document from the previous September 2018 version include:

- Correcting equations for calculation of cancer score;
- Correcting description of emissions for calculation of non-cancer acute score;

The November 2016 revisions to this document from the previous June 2015 version include:

- Incorporating updates from the August 2016 Facility Prioritization Guidelines prepared by The Air Toxics and Risk Manager Committee (TARMAC) of California Air Pollution Control Officers Association (CAPCOA).

The June 2015 revisions to this document from the previous March 2011 version include:

- Incorporating the California Office of Environmental Health Hazard Assessment *Air Toxics Hot Spots Program Risk Assessment Guidelines Guidance Manual for Preparation of Health Risk Assessments* (2015 OEHHA Guidelines)

~~<<<let's leave all these in>>>~~

Table of Contents

List of Tables

I. INTRODUCTION

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (commonly known as AB 2588) established a statewide program for the inventory of air toxics emissions from individual facilities as well as requirements for risk assessment and public notification of potential health risks. AB 2588 requires the South Coast Air Quality Management District (South Coast AQMD) to designate high, intermediate, and low priority categories and include each facility within the appropriate category based on its individual priority score. In establishing priorities, South Coast AQMD is to consider the potency, toxicity, quantity and volume of hazardous materials released from the facility; the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, daycare centers, worksites and residences; and any other factors that South Coast AQMD finds and determines may indicate that the facility may pose a significant risk to receptors.

II. FACILITY PRIORITIZATION PROCEDURE

This document describes the facility prioritization procedure utilized by South Coast AQMD (South Coast AQMD Procedure), which is consistent with the California Air Pollution Control Officers Association's (CAPCOA) August 2016 Facility Prioritization Guidelines (CAPCOA Guidelines)[1] developed by the Toxics and Risk Managers Committee (TARMAC).

The CAPCOA Guidelines primarily rely on four parameters to prioritize facilities: emissions, toxicity, the proximity to potential receptors, and stack height. While the South Coast AQMD Procedure is consistent with the CAPCOA Guidelines, several refinements have been made over the history of South Coast AQMD's AB 2588 Program. In September 1990, South Coast AQMD refined the original CAPCOA Guidelines to include adjustment factors for receptor proximity, exposure period, and averaging times in addition to the treatment of multipathway pollutants. In August 2004, South Coast AQMD revised its Procedure to accommodate the use of cancer potency factors (instead of unit risk factors) to allow for daily breathing rate and body weight variations as well as revised multipathway factors for resident and workers. In March 2011, the South Coast AQMD Procedure was revised to include updated toxicity criteria. In June 2015, the South Coast AQMD Procedure was updated to incorporate the revised risk calculation methodologies in the 2015 Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual for Preparation of Health Risk Assessments.

In November 2016, the South Coast AQMD Procedure was revised to further streamline and refine the prioritization methodology for better characterization of the priority score for each facility before an Air Toxics Inventory Report (ATIR) or a Voluntary Risk Reduction Plan (VRRP) is requested. The 2016 South Coast AQMD Procedure used the local meteorology from all available South Coast AQMD meteorological stations (Version 8 meteorological data) for every facility and evaluated risks at the actual closest receptor locations as well as receptors located in the worst case wind direction (e.g., downwind). ~~This current (~~The September 2019~~)~~ South Coast AQMD Procedure ~~incorporates~~incorporated the Version 9 meteorological data and

[1] ~~http://www.capcoa.org/wp-content/uploads/2016/08/CAPCOA%20Prioritization%20Guidelines%20-%20August%202016%20FINAL.pdf~~ www.capcoa.org/wp-content/uploads/2016/08/CAPCOA%20Prioritization%20Guidelines%20-%20August%202016%20FINAL.pdf

~~simplifies~~simplified calculation of a facility's non-cancer acute score. This current version (~~September~~October 2020) of the South Coast AQMD Procedure corrects the equation for calculating the cancer score for worker adjustment factor, removes reference to worker adjustment factor in non-cancer chronic description, and provides additional clarity on the worker adjustment factor (WAF).

A facility receives scores for four health endpoints: cancer, non-cancer chronic, non-cancer chronic 8-hr, and non-cancer acute. The cancer, non-cancer chronic, non-cancer chronic 8-hr health endpoints are evaluated for four receptors for each facility: the absolute closest sensitive receptor and worker receptor, and the closest sensitive receptor and worker receptor in the worst case wind direction. The non-cancer acute health endpoint is evaluated at a single receptor only in the worst case wind direction. Unlike the sensitive and worker receptor, this single receptor can be at the facility fenceline due to a potential for one-hour exposure duration. Every facility therefore receives 13 different scores: three health endpoints (cancer, non-cancer chronic and non-cancer chronic 8 hour) at four receptors, and one non-cancer acute health endpoint at a single receptor. The highest score is used to determine the Priority Score (PS).

Three categories are used in the ranking: high priority, intermediate priority and low priority. Based on the priority score, facilities designated as high priority are required to submit either an ATIR or VRRP under the AB 2588 Program. Facilities ranked with intermediate priority are considered to be District Tracking facilities, which are then required to submit a complete ~~an~~ air toxics inventory once every four years. Facilities ranked with low priority are potentially exempt from reporting. Due to the very conservative nature of the screening South Coast AQMD Procedure used for prioritization, and consistent with CAPCOA's Guidelines, a priority score of 10 may be considered similar to a calculated cancer risk of 100 chances ~~per~~ in-one-million or a hazard index (HI) of 10. The same emissions profile evaluated in a more detailed Health Risk Assessment (HRA) using actual stack parameters and more detailed dispersion modeling will likely result in much lower calculated risks. The following table summarizes thresholds used to prioritize facilities:

Table 1: Prioritization Categories

Priority Score	Category
PS > 10	High Priority
1 < PS ≤ 10	Intermediate Priority
PS ≤ 1	Low Priority

Facilities subject to the AB 2588 Program are required to submit a detailed list of their air toxic emissions every four years (referred to as a quadrennial update). Based on their level of air toxic and criteria pollutant emissions, each year a different group of facilities will report a detailed list of its air toxic emissions. Upon initial prioritization of facilities, South Coast AQMD staff conducts auditing to confirm the distances reported to sensitive receptors and workers, ~~and that the~~verify reported emissions are consistent with expected levels considering trends and facility changes such as new or modified permitted equipment or pollution controls, and ~~comparing~~compare the priority score results with the last (HRA) or Risk Reduction Plan (Voluntary or Traditional), if applicable. This additional information obtained through priority score auditing will often negate the need to

ask for additional reports such as an ATIR. If, however, the priority score remains high, the facility is asked to prepare an ATIR or a VRRP under the AB 2588 Program.

A. Calculation of Cancer Score

The scores for residential and worker cancer effects are calculated as follows:

$$S_{r,cancer} = \sum E_c \times CP_c \times MP_{c,r} \times RP_r \times 677.40 \times 10^{-1}$$

$$S_{w,cancer} = \sum E_c \times CP_c \times MP_{c,w} \times RP_w \times WAF \times 55.86 \times 10^{-1}$$

Where;

$S_{r, cancer}$ $S_{w, cancer}$	=	Total cancer score (summed for all carcinogens separately, by the residential receptor and worker receptor)
c	=	Specific carcinogen
r	=	Residential receptor
w	=	Worker receptor
E_c	=	Annual emissions of carcinogen, c $\left(\frac{ton}{year}\right)$
CP_c	=	Cancer potency of carcinogen, c $(mg/kg\text{-}day)^{-1}$
$MP_{c,r}$ $MP_{c,w}$	=	Multipathway adjustment factor of carcinogen, c; there are separate multipathway factors for residential receptor and worker receptor for the applicable exposure duration (see Table 3.1 of *Permit Application Package "N"*)
RP_r RP_w	=	Receptor proximity adjustment factor for residential receptor and worker receptor, $\chi/Q \left(\frac{\frac{\mu g}{m^3}}{\frac{ton}{year}}\right)$
WAF	=	Worker Adjustment Factor (dimensionless)
677.40	=	Residential Combined Exposure Factor that accounts for age-specific breathing rate, age specific factor, exposure duration, exposure frequency, and averaging time from South Coast AQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*
55.86	=	Worker Combined Exposure Factor that accounts for age-specific breathing rate, age specific factor, exposure duration, exposure frequency, and averaging time from South Coast AQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*
10^{-1}	=	Scalar to adjust priority score to 1-10 scale

Annual Emissions:

Annual emissions of carcinogens are taken from the Toxic Air Contaminants (TAC)/Ozone Depleting Compounds (ODC) Emissions and Fees Summary of the Annual Emission Reporting (AER) Program. Each substance has a degree of accuracy associated with them that is a de-minimis emission level for reporting. As a result, facility-wide air toxic emissions greater than one-half of their corresponding degree of accuracy are inventoried and reported. Conversely, total facility air toxic emissions less than one-half of their corresponding degree of accuracy levels are not considered in the prioritization. The carcinogens and associated degree of accuracy levels are listed

in the ~~*Supplemental Instructions Reporting Procedures for AB*~~ *AB 2588* ~~*Facilities for Reporting their*~~ *Quadrennial Air Toxics* ~~*Emissions*~~*Emission Inventory Reporting Procedures*.[2]

Cancer Potency:

The Cancer Potency (CP) factor is a measure of the cancer potency of a carcinogen. The CP is the estimated probability that a person will contract cancer as a result of a daily inhalation of 1 milligram of the carcinogen per kilogram of body weight continuously over a period of 70 years. The cancer potencies used in this Procedure are published by the Office of Environmental Health Hazard Assessment (OEHHA).[3]

Multipathway Adjustment Factor:

The multipathway (MP_c) adjustment factor is used for carcinogens that may contribute to risk from exposure pathways other than inhalation. These carcinogens deposit on the ground in particulate form and contribute to risk through ingestion of soil or backyard garden vegetables or through other routes. This factor is used to account for additional risks from exposure through non-inhalation pathways. The MP_c adjustment factors for specific carcinogens have been developed by South Coast AQMD staff by using the Health Risk Assessment Standalone Tool (RAST) developed by the California Air Resources Board (CARB).[4] The MP_c factors also satisfy the requirements of the South Coast AQMD's *Risk Assessment Procedures for Rules 1401, 1401.1 and 212*.[5] The substances and associated MP_c adjustment factors for worker and residents for longest exposure duration listed in Table 3.1 of *Permit Application Package "N"*[6] or the most current version of the document. For carcinogens that only affect the inhalation pathway, the MP_c adjustment factor is set to one.

Receptor Proximity Adjustment Factor:

There are four Receptor Proximity (RP) adjustment factors calculated for each facility for cancer score. They are calculated based on the distances from the facility to the nearest sensitive (e.g., residential) and worker receptors regardless of wind direction, and the nearest sensitive and worker receptors in the worst case wind direction. The receptors in the worst case wind direction are also evaluated in case the nearest receptors do not experience the highest risk. Receptor locations are off-site, where persons may be exposed to air toxic emissions from the facility. The receptor distance is defined as the closest distance between any major source or group of major sources of air toxic emissions at the facility and the property boundary of any one of the receptor locations. Consistent with the CAPCOA Guidelines, the minimum distance evaluated is 50 meters. The RP adjustment factors for every meteorological station[7] using the Version 9 meteorological data at receptor locations of 50, 75, 100, 200, 300, 500, and 1000 meters are included in Tables 3 and 4 at the end of this guidance. These RP adjustment factors are (χ/Q) values derived from U.S. EPA's

[2] ~~http://~~www.aqmd.gov/docs/default-source/planning/risk-assessment/quadrennial_atir_procedure.pdf

[3] The latest CP values can be obtained at http://www.arb.ca.gov/toxics/healthval/healthval.htm

[4] www.arb.ca.gov/toxics/harp/harp.htm

[5] ~~http://~~www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf

[6] ~~www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/riskassessproc-v8-1.pdf~~ www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf

[7] Meteorological station information is available here: www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod

AERMOD air dispersion model utilizing a unitary emission rate of one ton per year exiting out of a 0.1 meter diameter stack that is 0.27 meters above a 4.0 meter tall building, with a velocity of 5 meters per second. Linear interpolation is used to determine the appropriate (χ/Q) for receptor locations located between the distances specified in Tables ~~3~~2 and ~~4~~3.

Worker Adjustment Factor:

The modeled annual average air concentration should be adjusted to the air concentration that the worker is actually exposed to if the source does not operate continuously. The Worker Adjustment Factor (WAF) is calculated with the following equation:

$$WAF = \frac{H_r}{H_{source}} \times \frac{D_r}{D_{source}} \times DF$$

Where,

H_r	=	Number of hours per day the annual average residential air concentration is based on (always 24 hours)
H_{source}	=	Number of hours the source operates per day
D_r	=	Number of days per week the annual average residential air concentration is based on (always 7 days)
D_{source}	=	Number of days the source operates per week
DF	=	Discount factor for when the offsite worker's schedule partially overlaps the source's emission schedule.

Although the 2015 OEHHA Guidelines allow the use of a discount factor (DF) when assessing inhalation cancer health impacts, if the off-site worker's schedule partially overlaps with the source's emission schedule, the DF should only be used when there are limits on the hours of operation specified in the facility's operating permits. Since South Coast AQMD permits do not typically include limits on hours of operations, it is assumed that the offsite worker's schedule fully overlaps with the emission source's schedule, and therefore DF is assumed to be equal to 1. Further, for facilities that operate less than 8 hours per day and 5 days per week, WAF is calculated based on an operating schedule of 8 hours per day and 5 days per week.

B. Calculation of Non-Cancer Score

For a toxic substance, non-cancer health effects can occur via acute, non-cancer 8-hour exposure, and/or annual chronic exposure. All of these non-cancer effects are used in the calculation of a facility's priority score. For each substance associated with acute, non-cancer 8-hour and chronic toxicity, South Coast AQMD staff calculates separate scores using the formulas shown below.

Non-Cancer Chronic Score:

For a facility which emits pollutants with known non-cancer chronic health effects, the scores for non-cancer chronic effects for residential receptor and worker receptor are calculated as follows:

$$S_{r,chronic} = \sum \left(\frac{E_t}{REL_{t,chronic}} \right) \times MP_{t,r} \times RP_r$$

$$S_{w,chronic} = \sum \left(\frac{E_t}{REL_{t,chronic}} \right) \times MP_{t,w} \times RP_w$$

Where;

$S_{r,\ chronic}$ $S_{w,\ chronic}$	=	Total chronic score (summed for all substances with non-cancer chronic effects separately, by the residential receptor and worker receptor)
t	=	Toxic substance
r	=	Residential Receptor
w	=	Worker Receptor
E_t	=	Annual emissions of substance, t (ton/year)
$REL_{t,\ chronic}$	=	Chronic reference exposure level of toxic substance, t ($\mu g/m^3$)
$MP_{t,r}$ $MP_{t,w}$	=	Multipathway adjustment factor of carcinogen, c; there are separate multipathway factors for residential receptor and worker receptor as shown in Table 3.2 of *Permit Application Package "N"*
RP_r RP_w	=	Receptor proximity adjustment factor for residential receptor and for worker receptor, $\chi/Q \left(\frac{\frac{\mu g}{m^3}}{\frac{ton}{year}} \right)$
~~WAF~~	=	~~Worker Adjustment Factor (dimensionless)~~

Non-Cancer 8-Hour Score:

For a facility which emits pollutants with known non-cancer 8-hour health effects, the scores for non-cancer 8-hour effects for residential receptor and worker receptor are calculated as follows:

$$S_{r,8-hr} = \sum \left(\frac{E_t}{REL_t} \right) \times (WAF) \times RP_r$$

$$S_{w,8-hr} = \sum \left(\frac{E_t}{REL_t} \right) \times (WAF) \times RP_w$$

Where;

$S_{w,\ 8\text{-}hr}$ $S_{r,\ 8\text{-}hr}$	=	Total 8-hour score (summed for all substances with non-cancer 8-hour effects separately, by the residential receptor and worker receptor)
t	=	Toxic substance
r	=	Residential Receptor
w	=	Worker Receptor
E_t	=	Annual emissions of substance, t (ton/year)
$REL_{t,\ 8\text{-}hr}$	=	8-hour reference exposure level of toxic substance, t ($\mu g/m^3$)
RP_r RP_w	=	Receptor proximity adjustment factor for residential receptor and worker receptor, $\chi/Q \left(\frac{\frac{\mu g}{m^3}}{\frac{ton}{year}} \right)$
WAF	=	Worker Adjustment Factor (dimensionless)

Non-Cancer Acute Score:

For a facility which emits pollutants with known non-cancer acute health effects, the score for non-cancer acute effects is calculated as follows:

$$S_{acute} = \sum \left(\frac{E_t}{REL_t} \right) \times RP$$

Where;

S_{acute}	=	Total acute score (summed for all substances with non-cancer acute effects separately, by the residential receptor and worker receptor)
t	=	Toxic substance
E_t	=	Maximum hourly emissions of substance, t (lb/hour)
REL_t	=	Acute reference exposure level of toxic substance, t (µg/m^3)
RP	=	Receptor proximity adjustment factor for hourly concentration, χ/Q $\left(\frac{\mu g}{m^3} \Big/ \frac{lb}{hr} \right)$

Annual and Maximum Hourly Emissions:

Two different emissions rates are required for calculating the score for non-cancer health effects. The methodology for calculating the non-cancer score for chronic exposure requires annual emissions (tons/year) for each emitted pollutant whereas calculation of the non-cancer score for acute exposure requires maximum hourly emissions (lbs/hr) for each emitted pollutant. Maximum hourly emissions are obtained by dividing the annual emissions (lbs/yr) of the pollutant by the facility's actual operating hours and then multiplied by a maximum hourly emission adjustment factor of 1.25. Annual emissions are taken from the Toxic Air Contaminants (TAC)/Ozone Depleting Compounds (ODC) Emissions and Fees Summary of the AER Program. As specified previously, emissions of specified substances which are below one-half of their corresponding degree of accuracy levels are neglected in the computation.

Reference Exposure Levels:

The Reference Exposure Level (REL) is used as an indicator of all potential adverse non-cancer health effects, and refers to a concentration level (µg/m^3) or dose (mg/kg-day) below which no adverse health effects are anticipated. The RELs used in this Procedure are published by OEHHA and CARB.[8]

MultiPpathway Adjustment Factor:

The MultiPathway (MP_t) adjustment factor is used for substances that may contribute to non-cancer chronic risks from exposure pathways other than inhalation. The MP_t adjustment factors to evaluate the non-cancer chronic health endpoint for selected toxic pollutants can be found in Table 3.2 of *Permit Application Package "N"*[9] or the most recent version of the document. There are separate MP factors for workers and residents. For non-cancer chronic health effects, substances that only affect the inhalation pathway, the MP_t adjustment factor is set to one (1.0). Note that for calculation of non-cancer scores, the MP_t is relevant for the chronic risk endpoint.

[8] www.arb.ca.gov/toxics/healthval/healthval.htm

[9] www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf

Receptor Proximity Adjustment Factor:

The Receptor Proximity (RP) adjustment factor is the same adjustment factor used in the calculation of the facility cancer score discussed previously. The RP adjustment factor for non-cancer acute score is based on a single distance from the facility to the nearest receptor regardless of wind direction. This receptor can be at the facility fenceline to account for the short one-hour exposure duration. To simplify calculation of the non-cancer acute score, the worst case wind direction is used for the single receptor distance.

Worker Adjustment Factor:

The modeled annual average air concentration should be adjusted to the air concentration that the worker is actually exposed to if the source does not operate continuously. This is the same adjustment factor used in the calculation of the facility cancer score discussed previously.

C. Facility Ranking

From the computed scores for cancer and all non-cancer effects, the priority score is the higher of the 13 scores~~,~~ and serves as the basis for ranking a facility as described in Table 1.

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	10	7.655	4.130	2.495	0.662	0.305	0.124	0.038
Azusa	20	8.185	4.380	2.644	0.697	0.314	0.125	0.038
Azusa	30	9.407	4.858	2.922	0.755	0.326	0.127	0.039
Azusa	40	11.768	5.819	3.451	0.839	0.344	0.130	0.039
Azusa	50	15.417	7.573	4.449	1.012	0.376	0.134	0.040
Azusa	60	19.640	10.129	6.051	1.362	0.438	0.138	0.042
Azusa	70	22.492	12.152	7.603	1.818	0.531	0.141	0.042
Azusa	80	23.252	12.525	7.756	1.823	0.523	0.140	0.042
Azusa	90	21.273	11.068	6.613	1.499	0.449	0.135	0.041
Azusa	100	17.572	8.821	5.267	1.211	0.403	0.130	0.039
Azusa	110	13.662	7.095	4.287	1.014	0.366	0.126	0.038
Azusa	120	11.066	5.917	3.579	0.882	0.342	0.124	0.038
Azusa	130	9.364	5.210	3.181	0.804	0.327	0.123	0.038
Azusa	140	8.441	4.825	2.970	0.765	0.320	0.122	0.038
Azusa	150	8.057	4.682	2.880	0.754	0.318	0.122	0.038
Azusa	160	8.287	4.711	2.882	0.744	0.315	0.122	0.038
Azusa	170	9.368	5.017	3.051	0.745	0.312	0.122	0.038
Azusa	180	11.449	5.814	3.522	0.796	0.314	0.123	0.038
Azusa	190	13.972	7.367	4.477	1.002	0.345	0.124	0.038
Azusa	200	15.740	8.619	5.377	1.257	0.396	0.124	0.038
Azusa	210	16.469	8.915	5.604	1.343	0.414	0.125	0.038
Azusa	220	15.942	8.355	5.212	1.214	0.394	0.124	0.038
Azusa	230	14.506	7.591	4.634	1.108	0.377	0.124	0.038
Azusa	240	13.186	6.929	4.249	1.038	0.366	0.123	0.038
Azusa	250	12.177	6.451	3.971	0.983	0.357	0.123	0.038
Azusa	260	11.477	6.059	3.696	0.926	0.347	0.123	0.038
Azusa	270	10.745	5.688	3.464	0.878	0.336	0.122	0.038
Azusa	280	10.081	5.306	3.213	0.822	0.329	0.123	0.038
Azusa	290	9.466	4.987	3.023	0.780	0.323	0.123	0.038
Azusa	300	9.034	4.727	2.860	0.755	0.320	0.123	0.038
Azusa	310	8.678	4.518	2.734	0.731	0.316	0.123	0.038
Azusa	320	8.409	4.328	2.614	0.702	0.311	0.122	0.038
Azusa	330	8.144	4.192	2.515	0.679	0.307	0.122	0.038
Azusa	340	7.869	4.102	2.454	0.665	0.305	0.123	0.038

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	350	7.581	4.048	2.433	0.657	0.303	0.123	0.038
Azusa	360	7.509	4.042	2.435	0.648	0.301	0.123	0.038
Banning	10	1.834	1.222	0.794	0.236	0.114	0.047	0.015
Banning	20	1.908	1.295	0.862	0.258	0.121	0.049	0.015
Banning	30	2.357	1.502	1.021	0.311	0.141	0.054	0.016
Banning	40	3.748	2.120	1.414	0.431	0.192	0.072	0.020
Banning	50	6.731	3.677	2.381	0.697	0.300	0.110	0.030
Banning	60	12.021	6.517	4.184	1.201	0.479	0.170	0.050
Banning	70	18.569	10.388	6.762	1.877	0.696	0.238	0.073
Banning	80	23.911	13.741	8.851	2.448	0.863	0.284	0.090
Banning	90	24.235	14.033	9.124	2.534	0.857	0.284	0.091
Banning	100	19.437	10.881	6.968	1.936	0.700	0.238	0.074
Banning	110	12.291	6.678	4.358	1.259	0.484	0.171	0.051
Banning	120	6.728	3.784	2.515	0.763	0.313	0.112	0.032
Banning	130	3.735	2.316	1.595	0.485	0.205	0.075	0.021
Banning	140	2.488	1.668	1.146	0.345	0.151	0.057	0.017
Banning	150	2.022	1.405	0.943	0.281	0.127	0.050	0.015
Banning	160	1.926	1.306	0.859	0.255	0.118	0.048	0.015
Banning	170	2.045	1.297	0.842	0.248	0.116	0.048	0.015
Banning	180	2.287	1.365	0.885	0.258	0.119	0.049	0.015
Banning	190	2.669	1.531	0.977	0.284	0.128	0.052	0.016
Banning	200	3.136	1.796	1.153	0.334	0.144	0.056	0.017
Banning	210	3.608	2.089	1.359	0.396	0.162	0.061	0.019
Banning	220	3.983	2.286	1.496	0.433	0.175	0.065	0.020
Banning	230	4.178	2.394	1.558	0.447	0.181	0.067	0.021
Banning	240	4.318	2.447	1.596	0.467	0.188	0.068	0.021
Banning	250	4.531	2.516	1.634	0.469	0.191	0.070	0.021
Banning	260	5.129	2.730	1.712	0.491	0.202	0.074	0.022
Banning	270	5.788	3.128	1.940	0.539	0.217	0.080	0.024
Banning	280	6.033	3.351	2.105	0.568	0.226	0.084	0.026
Banning	290	5.481	3.033	1.924	0.531	0.214	0.079	0.024
Banning	300	4.348	2.337	1.439	0.401	0.176	0.068	0.020
Banning	310	3.214	1.688	1.048	0.309	0.143	0.056	0.017
Banning	320	2.526	1.380	0.879	0.264	0.124	0.050	0.015
Banning	330	2.247	1.278	0.809	0.242	0.116	0.047	0.015

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Banning	340	2.122	1.237	0.784	0.235	0.113	0.047	0.014
Banning	350	2.005	1.217	0.775	0.232	0.112	0.046	0.014
Banning	360	1.895	1.206	0.773	0.230	0.112	0.047	0.014
Burbank Arpt.	10	11.332	5.792	3.623	0.913	0.379	0.145	0.043
Burbank Arpt.	20	8.178	4.565	2.856	0.765	0.327	0.124	0.037
Burbank Arpt.	30	6.762	3.898	2.459	0.670	0.289	0.110	0.033
Burbank Arpt.	40	6.150	3.582	2.261	0.620	0.269	0.104	0.032
Burbank Arpt.	50	6.033	3.514	2.211	0.612	0.264	0.102	0.031
Burbank Arpt.	60	6.333	3.633	2.289	0.630	0.267	0.102	0.032
Burbank Arpt.	70	6.963	3.940	2.496	0.678	0.277	0.103	0.032
Burbank Arpt.	80	7.957	4.430	2.794	0.748	0.291	0.105	0.032
Burbank Arpt.	90	9.125	5.059	3.202	0.845	0.306	0.107	0.033
Burbank Arpt.	100	10.303	5.731	3.635	0.953	0.331	0.110	0.034
Burbank Arpt.	110	11.221	6.297	4.045	1.060	0.355	0.112	0.035
Burbank Arpt.	120	11.823	6.658	4.280	1.109	0.366	0.114	0.035
Burbank Arpt.	130	12.050	6.794	4.363	1.135	0.373	0.115	0.036
Burbank Arpt.	140	11.811	6.651	4.324	1.112	0.370	0.115	0.036
Burbank Arpt.	150	11.039	6.275	4.033	1.050	0.353	0.113	0.035
Burbank Arpt.	160	9.847	5.588	3.567	0.910	0.320	0.110	0.034
Burbank Arpt.	170	8.560	4.764	3.040	0.769	0.287	0.106	0.033
Burbank Arpt.	180	7.363	4.076	2.587	0.649	0.262	0.103	0.032
Burbank Arpt.	190	6.464	3.677	2.353	0.618	0.259	0.101	0.031
Burbank Arpt.	200	5.998	3.518	2.241	0.611	0.259	0.100	0.031
Burbank Arpt.	210	5.878	3.433	2.191	0.610	0.259	0.100	0.031
Burbank Arpt.	220	5.903	3.428	2.184	0.608	0.259	0.100	0.031
Burbank Arpt.	230	6.035	3.490	2.219	0.621	0.262	0.100	0.031
Burbank Arpt.	240	6.418	3.660	2.330	0.647	0.268	0.101	0.031
Burbank Arpt.	250	7.044	3.997	2.562	0.706	0.282	0.103	0.032
Burbank Arpt.	260	8.060	4.532	2.893	0.792	0.305	0.108	0.033
Burbank Arpt.	270	9.213	5.167	3.312	0.912	0.336	0.117	0.036
Burbank Arpt.	280	10.508	5.798	3.679	1.018	0.377	0.130	0.040
Burbank Arpt.	290	11.700	6.491	4.147	1.121	0.417	0.145	0.045
Burbank Arpt.	300	12.622	7.119	4.565	1.241	0.459	0.157	0.049
Burbank Arpt.	310	13.120	7.389	4.745	1.283	0.475	0.163	0.051
Burbank Arpt.	320	13.308	7.275	4.658	1.239	0.472	0.164	0.050

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Burbank Arpt.	330	13.495	7.321	4.598	1.222	0.469	0.165	0.049
Burbank Arpt.	340	14.255	7.629	4.760	1.235	0.473	0.169	0.051
Burbank Arpt.	350	14.988	8.101	5.103	1.260	0.469	0.172	0.052
Burbank Arpt.	360	13.944	7.552	4.756	1.141	0.430	0.164	0.050
Central L.A.	10	12.372	6.586	4.039	0.938	0.339	0.123	0.038
Central L.A.	20	12.289	6.467	3.875	0.902	0.340	0.124	0.038
Central L.A.	30	11.924	5.981	3.543	0.826	0.331	0.125	0.038
Central L.A.	40	11.815	5.741	3.364	0.803	0.333	0.127	0.038
Central L.A.	50	12.475	6.033	3.491	0.832	0.342	0.129	0.039
Central L.A.	60	14.213	6.902	3.980	0.915	0.358	0.132	0.040
Central L.A.	70	15.835	8.054	4.797	1.097	0.389	0.134	0.040
Central L.A.	80	16.747	8.791	5.341	1.270	0.418	0.132	0.040
Central L.A.	90	16.248	8.525	5.164	1.241	0.403	0.128	0.039
Central L.A.	100	14.558	7.378	4.365	1.021	0.360	0.123	0.037
Central L.A.	110	12.095	6.124	3.664	0.867	0.331	0.119	0.036
Central L.A.	120	10.308	5.353	3.181	0.780	0.314	0.117	0.036
Central L.A.	130	9.083	4.925	2.961	0.743	0.307	0.116	0.036
Central L.A.	140	8.484	4.732	2.886	0.736	0.307	0.116	0.036
Central L.A.	150	8.314	4.691	2.854	0.733	0.305	0.116	0.036
Central L.A.	160	8.560	4.740	2.852	0.716	0.300	0.116	0.036
Central L.A.	170	9.425	4.964	2.949	0.707	0.296	0.116	0.036
Central L.A.	180	10.993	5.579	3.249	0.716	0.294	0.116	0.036
Central L.A.	190	13.850	6.802	3.965	0.811	0.307	0.117	0.036
Central L.A.	200	16.745	8.774	5.175	1.093	0.348	0.117	0.036
Central L.A.	210	18.447	10.200	6.465	1.563	0.440	0.119	0.036
Central L.A.	220	18.751	10.353	6.663	1.615	0.459	0.119	0.036
Central L.A.	230	17.517	9.238	5.554	1.226	0.378	0.118	0.036
Central L.A.	240	14.952	7.368	4.301	0.924	0.332	0.118	0.036
Central L.A.	250	12.125	6.014	3.509	0.811	0.319	0.118	0.036
Central L.A.	260	10.229	5.170	3.054	0.763	0.312	0.118	0.036
Central L.A.	270	8.895	4.619	2.770	0.714	0.302	0.117	0.036
Central L.A.	280	8.021	4.214	2.514	0.661	0.295	0.117	0.036
Central L.A.	290	7.386	3.938	2.354	0.631	0.290	0.117	0.036
Central L.A.	300	7.112	3.795	2.267	0.620	0.288	0.116	0.036
Central L.A.	310	7.202	3.756	2.243	0.620	0.288	0.116	0.036

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Central L.A.	320	7.512	3.791	2.260	0.620	0.289	0.116	0.036
Central L.A.	330	8.099	3.972	2.318	0.625	0.290	0.117	0.036
Central L.A.	340	9.012	4.434	2.532	0.643	0.293	0.118	0.036
Central L.A.	350	10.412	5.156	3.023	0.698	0.300	0.119	0.037
Central L.A.	360	11.747	6.060	3.650	0.821	0.314	0.121	0.037
Chino Arpt.	10	5.753	3.228	2.054	0.567	0.248	0.098	0.030
Chino Arpt.	20	6.084	3.420	2.177	0.613	0.264	0.102	0.031
Chino Arpt.	30	6.923	3.855	2.468	0.709	0.296	0.111	0.034
Chino Arpt.	40	8.562	4.714	3.032	0.869	0.356	0.129	0.039
Chino Arpt.	50	10.966	6.170	3.972	1.128	0.453	0.161	0.048
Chino Arpt.	60	13.836	7.874	5.116	1.468	0.572	0.200	0.061
Chino Arpt.	70	16.230	9.205	5.999	1.713	0.662	0.231	0.071
Chino Arpt.	80	17.557	9.887	6.322	1.798	0.697	0.244	0.075
Chino Arpt.	90	17.074	9.626	6.221	1.799	0.674	0.237	0.074
Chino Arpt.	100	15.185	8.498	5.459	1.563	0.603	0.214	0.066
Chino Arpt.	110	12.693	7.089	4.625	1.339	0.517	0.181	0.056
Chino Arpt.	120	10.686	6.055	3.937	1.121	0.434	0.151	0.046
Chino Arpt.	130	9.506	5.441	3.523	0.991	0.378	0.130	0.040
Chino Arpt.	140	9.021	5.194	3.386	0.926	0.348	0.119	0.036
Chino Arpt.	150	8.892	5.224	3.395	0.925	0.339	0.115	0.035
Chino Arpt.	160	8.982	5.266	3.412	0.900	0.327	0.113	0.035
Chino Arpt.	170	9.348	5.314	3.445	0.876	0.315	0.114	0.035
Chino Arpt.	180	9.704	5.458	3.528	0.854	0.305	0.115	0.036
Chino Arpt.	190	9.906	5.628	3.654	0.910	0.322	0.115	0.036
Chino Arpt.	200	9.970	5.781	3.753	0.980	0.342	0.116	0.036
Chino Arpt.	210	10.149	5.869	3.831	1.029	0.355	0.116	0.036
Chino Arpt.	220	10.236	5.889	3.859	1.040	0.361	0.117	0.036
Chino Arpt.	230	10.103	5.835	3.794	1.032	0.361	0.117	0.036
Chino Arpt.	240	9.867	5.630	3.653	0.998	0.353	0.115	0.036
Chino Arpt.	250	9.539	5.387	3.483	0.954	0.342	0.113	0.035
Chino Arpt.	260	9.217	5.165	3.307	0.903	0.328	0.111	0.034
Chino Arpt.	270	8.730	4.891	3.134	0.862	0.315	0.108	0.034
Chino Arpt.	280	8.101	4.531	2.886	0.792	0.301	0.106	0.033
Chino Arpt.	290	7.450	4.180	2.680	0.743	0.290	0.104	0.032
Chino Arpt.	300	6.939	3.918	2.507	0.701	0.282	0.102	0.032

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Chino Arpt.	310	6.544	3.687	2.350	0.662	0.272	0.101	0.031
Chino Arpt.	320	6.217	3.486	2.214	0.624	0.263	0.099	0.031
Chino Arpt.	330	5.949	3.341	2.114	0.599	0.255	0.098	0.030
Chino Arpt.	340	5.748	3.245	2.053	0.577	0.248	0.096	0.030
Chino Arpt.	350	5.677	3.175	2.015	0.559	0.243	0.096	0.030
Chino Arpt.	360	5.661	3.167	2.006	0.544	0.239	0.096	0.030
Desert Hot Springs Arpt.	10	4.354	2.431	1.555	0.432	0.190	0.075	0.023
Desert Hot Springs Arpt.	20	3.970	2.302	1.473	0.420	0.184	0.072	0.022
Desert Hot Springs Arpt.	30	3.797	2.206	1.411	0.407	0.179	0.070	0.022
Desert Hot Springs Arpt.	40	3.701	2.148	1.374	0.400	0.178	0.069	0.021
Desert Hot Springs Arpt.	50	3.694	2.173	1.387	0.403	0.179	0.070	0.021
Desert Hot Springs Arpt.	60	3.847	2.273	1.462	0.425	0.185	0.071	0.022
Desert Hot Springs Arpt.	70	4.157	2.456	1.594	0.462	0.196	0.074	0.023
Desert Hot Springs Arpt.	80	4.732	2.747	1.774	0.511	0.213	0.079	0.024
Desert Hot Springs Arpt.	90	5.562	3.187	2.054	0.592	0.238	0.087	0.026
Desert Hot Springs Arpt.	100	6.801	3.840	2.482	0.720	0.284	0.101	0.030
Desert Hot Springs Arpt.	110	8.561	4.809	3.148	0.922	0.361	0.126	0.037
Desert Hot Springs Arpt.	120	11.069	6.268	4.101	1.201	0.471	0.165	0.049
Desert Hot Springs Arpt.	130	14.284	8.182	5.390	1.606	0.624	0.217	0.067
Desert Hot Springs Arpt.	140	17.303	10.020	6.742	1.966	0.764	0.267	0.084
Desert Hot Springs Arpt.	150	18.909	11.211	7.462	2.183	0.831	0.291	0.092
Desert Hot Springs Arpt.	160	18.395	10.804	7.151	2.039	0.772	0.275	0.087
Desert Hot Springs Arpt.	170	16.201	9.106	5.982	1.676	0.629	0.232	0.072
Desert Hot Springs Arpt.	180	12.755	7.020	4.615	1.232	0.472	0.182	0.056
Desert Hot Springs Arpt.	190	9.216	5.194	3.495	0.961	0.376	0.139	0.042
Desert Hot Springs Arpt.	200	6.551	3.969	2.640	0.739	0.295	0.108	0.033
Desert Hot Springs Arpt.	210	5.056	3.080	2.042	0.578	0.237	0.088	0.026
Desert Hot Springs Arpt.	220	4.181	2.533	1.646	0.472	0.201	0.076	0.023
Desert Hot Springs Arpt.	230	3.721	2.244	1.438	0.419	0.183	0.070	0.022
Desert Hot Springs Arpt.	240	3.579	2.112	1.347	0.393	0.174	0.068	0.021
Desert Hot Springs Arpt.	250	3.598	2.083	1.325	0.389	0.173	0.067	0.021
Desert Hot Springs Arpt.	260	3.737	2.120	1.349	0.393	0.174	0.068	0.021
Desert Hot Springs Arpt.	270	3.984	2.227	1.409	0.410	0.179	0.069	0.021
Desert Hot Springs Arpt.	280	4.495	2.461	1.547	0.448	0.195	0.074	0.022
Desert Hot Springs Arpt.	290	5.383	2.886	1.818	0.515	0.221	0.083	0.025

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Desert Hot Springs Arpt.	300	6.685	3.549	2.204	0.614	0.259	0.095	0.028
Desert Hot Springs Arpt.	310	7.973	4.304	2.668	0.724	0.298	0.109	0.032
Desert Hot Springs Arpt.	320	8.619	4.713	2.982	0.798	0.324	0.117	0.034
Desert Hot Springs Arpt.	330	8.325	4.544	2.828	0.765	0.311	0.113	0.033
Desert Hot Springs Arpt.	340	7.280	3.865	2.371	0.641	0.269	0.100	0.029
Desert Hot Springs Arpt.	350	6.004	3.149	1.973	0.543	0.231	0.088	0.026
Desert Hot Springs Arpt.	360	4.988	2.695	1.710	0.466	0.202	0.080	0.024
Fontana	10	7.494	4.115	2.563	0.683	0.303	0.121	0.037
Fontana	20	8.855	4.704	2.898	0.761	0.324	0.125	0.038
Fontana	30	11.533	5.937	3.617	0.926	0.365	0.134	0.040
Fontana	40	15.562	8.126	5.026	1.234	0.437	0.147	0.044
Fontana	50	19.933	10.796	6.792	1.686	0.542	0.162	0.049
Fontana	60	23.176	12.741	8.061	1.992	0.610	0.173	0.053
Fontana	70	23.590	12.904	8.148	1.994	0.611	0.174	0.053
Fontana	80	21.121	11.288	6.985	1.721	0.549	0.165	0.050
Fontana	90	16.789	8.798	5.392	1.345	0.455	0.150	0.045
Fontana	100	12.513	6.522	4.017	1.023	0.384	0.135	0.041
Fontana	110	9.378	5.146	3.230	0.843	0.339	0.125	0.038
Fontana	120	7.859	4.547	2.864	0.768	0.319	0.120	0.037
Fontana	130	7.303	4.358	2.750	0.743	0.311	0.118	0.037
Fontana	140	7.337	4.371	2.759	0.736	0.309	0.117	0.036
Fontana	150	7.708	4.541	2.847	0.760	0.312	0.118	0.037
Fontana	160	8.430	4.828	3.015	0.779	0.314	0.118	0.037
Fontana	170	9.722	5.301	3.320	0.809	0.315	0.120	0.037
Fontana	180	11.633	6.134	3.816	0.870	0.320	0.122	0.038
Fontana	190	13.771	7.425	4.636	1.069	0.359	0.125	0.039
Fontana	200	15.350	8.531	5.395	1.295	0.409	0.129	0.040
Fontana	210	16.031	8.854	5.651	1.391	0.432	0.130	0.040
Fontana	220	15.527	8.445	5.376	1.312	0.422	0.130	0.040
Fontana	230	14.113	7.684	4.829	1.214	0.404	0.127	0.039
Fontana	240	12.529	6.798	4.271	1.086	0.377	0.124	0.038
Fontana	250	11.047	5.960	3.732	0.960	0.352	0.121	0.037
Fontana	260	9.844	5.284	3.276	0.853	0.330	0.119	0.037
Fontana	270	8.866	4.779	2.965	0.791	0.317	0.118	0.037
Fontana	280	8.145	4.399	2.719	0.735	0.308	0.118	0.037

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fontana	290	7.656	4.132	2.553	0.696	0.301	0.117	0.036
Fontana	300	7.413	3.990	2.459	0.679	0.299	0.117	0.036
Fontana	310	7.299	3.930	2.423	0.674	0.298	0.117	0.036
Fontana	320	7.182	3.887	2.400	0.666	0.296	0.117	0.036
Fontana	330	6.994	3.840	2.364	0.659	0.295	0.117	0.036
Fontana	340	6.790	3.787	2.333	0.647	0.293	0.117	0.036
Fontana	350	6.737	3.769	2.332	0.634	0.289	0.117	0.036
Fontana	360	6.915	3.853	2.395	0.642	0.291	0.118	0.037
Fullerton Arpt.	10	14.907	7.850	4.869	1.151	0.419	0.151	0.046
Fullerton Arpt.	20	14.941	8.065	4.938	1.187	0.438	0.155	0.047
Fullerton Arpt.	30	14.503	7.826	4.858	1.206	0.443	0.155	0.047
Fullerton Arpt.	40	13.643	7.335	4.575	1.140	0.429	0.150	0.045
Fullerton Arpt.	50	12.538	6.744	4.157	1.057	0.405	0.143	0.043
Fullerton Arpt.	60	11.797	6.289	3.880	1.001	0.389	0.138	0.041
Fullerton Arpt.	70	11.901	6.313	3.890	0.982	0.381	0.136	0.041
Fullerton Arpt.	80	13.199	7.004	4.263	1.060	0.391	0.137	0.042
Fullerton Arpt.	90	14.408	7.940	4.970	1.260	0.422	0.138	0.042
Fullerton Arpt.	100	14.712	8.169	5.160	1.332	0.441	0.138	0.043
Fullerton Arpt.	110	13.702	7.465	4.668	1.166	0.405	0.135	0.042
Fullerton Arpt.	120	12.158	6.511	4.005	1.011	0.376	0.132	0.041
Fullerton Arpt.	130	10.988	5.933	3.686	0.949	0.361	0.128	0.039
Fullerton Arpt.	140	10.386	5.682	3.572	0.920	0.353	0.126	0.039
Fullerton Arpt.	150	10.036	5.570	3.488	0.910	0.348	0.124	0.038
Fullerton Arpt.	160	9.763	5.438	3.389	0.863	0.335	0.124	0.038
Fullerton Arpt.	170	9.561	5.283	3.292	0.818	0.323	0.123	0.038
Fullerton Arpt.	180	9.361	5.162	3.212	0.780	0.313	0.123	0.038
Fullerton Arpt.	190	9.236	5.121	3.201	0.792	0.319	0.123	0.038
Fullerton Arpt.	200	9.279	5.205	3.233	0.826	0.329	0.123	0.038
Fullerton Arpt.	210	9.637	5.369	3.360	0.874	0.338	0.124	0.038
Fullerton Arpt.	220	10.341	5.696	3.587	0.922	0.349	0.125	0.039
Fullerton Arpt.	230	11.447	6.264	3.915	0.996	0.364	0.126	0.039
Fullerton Arpt.	240	13.188	7.123	4.435	1.107	0.386	0.128	0.039
Fullerton Arpt.	250	15.160	8.254	5.182	1.275	0.419	0.131	0.040
Fullerton Arpt.	260	16.654	9.246	5.827	1.447	0.451	0.133	0.041
Fullerton Arpt.	270	16.389	9.138	5.809	1.480	0.451	0.133	0.041

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fullerton Arpt.	280	14.474	7.859	4.870	1.196	0.403	0.132	0.041
Fullerton Arpt.	290	11.838	6.284	3.871	0.964	0.363	0.130	0.040
Fullerton Arpt.	300	9.894	5.359	3.320	0.872	0.349	0.128	0.040
Fullerton Arpt.	310	9.050	5.052	3.162	0.842	0.344	0.128	0.039
Fullerton Arpt.	320	9.009	5.099	3.215	0.853	0.348	0.129	0.040
Fullerton Arpt.	330	9.506	5.418	3.397	0.893	0.356	0.131	0.040
Fullerton Arpt.	340	10.532	5.925	3.686	0.937	0.365	0.135	0.041
Fullerton Arpt.	350	12.203	6.577	4.133	1.008	0.378	0.139	0.043
Fullerton Arpt.	360	13.822	7.360	4.577	1.058	0.387	0.145	0.044
Hawthorne Arpt.	10	6.695	3.721	2.327	0.625	0.278	0.111	0.034
Hawthorne Arpt.	20	7.007	3.947	2.476	0.669	0.289	0.113	0.035
Hawthorne Arpt.	30	7.848	4.366	2.757	0.746	0.308	0.116	0.035
Hawthorne Arpt.	40	9.469	5.138	3.243	0.855	0.338	0.123	0.037
Hawthorne Arpt.	50	11.988	6.463	4.037	1.042	0.390	0.135	0.040
Hawthorne Arpt.	60	14.989	8.157	5.100	1.298	0.461	0.152	0.045
Hawthorne Arpt.	70	17.412	9.442	5.943	1.496	0.514	0.166	0.050
Hawthorne Arpt.	80	19.192	10.158	6.166	1.482	0.514	0.171	0.051
Hawthorne Arpt.	90	19.151	10.265	6.277	1.537	0.504	0.163	0.049
Hawthorne Arpt.	100	17.449	9.515	6.038	1.559	0.499	0.150	0.045
Hawthorne Arpt.	110	14.714	8.137	5.188	1.304	0.429	0.135	0.041
Hawthorne Arpt.	120	12.269	6.718	4.176	1.036	0.367	0.123	0.037
Hawthorne Arpt.	130	10.777	6.047	3.828	0.966	0.345	0.117	0.036
Hawthorne Arpt.	140	10.384	5.979	3.848	0.970	0.341	0.113	0.035
Hawthorne Arpt.	150	10.382	6.063	3.869	0.978	0.339	0.112	0.035
Hawthorne Arpt.	160	10.399	6.018	3.784	0.924	0.322	0.111	0.034
Hawthorne Arpt.	170	10.431	5.857	3.684	0.863	0.305	0.110	0.034
Hawthorne Arpt.	180	10.290	5.696	3.579	0.811	0.291	0.110	0.034
Hawthorne Arpt.	190	10.080	5.592	3.509	0.818	0.298	0.110	0.034
Hawthorne Arpt.	200	9.865	5.546	3.463	0.850	0.310	0.110	0.034
Hawthorne Arpt.	210	9.881	5.492	3.462	0.875	0.317	0.110	0.034
Hawthorne Arpt.	220	9.996	5.532	3.492	0.881	0.320	0.110	0.034
Hawthorne Arpt.	230	10.104	5.625	3.537	0.905	0.325	0.111	0.034
Hawthorne Arpt.	240	10.253	5.658	3.556	0.919	0.330	0.112	0.034
Hawthorne Arpt.	250	10.317	5.623	3.529	0.906	0.329	0.113	0.035
Hawthorne Arpt.	260	10.414	5.599	3.462	0.889	0.328	0.114	0.035

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Hawthorne Arpt.	270	10.229	5.537	3.447	0.898	0.329	0.116	0.036
Hawthorne Arpt.	280	9.829	5.294	3.290	0.861	0.327	0.117	0.036
Hawthorne Arpt.	290	9.225	4.941	3.069	0.800	0.317	0.117	0.036
Hawthorne Arpt.	300	8.654	4.633	2.873	0.766	0.313	0.117	0.036
Hawthorne Arpt.	310	8.207	4.436	2.749	0.741	0.307	0.116	0.036
Hawthorne Arpt.	320	7.859	4.243	2.649	0.716	0.302	0.115	0.035
Hawthorne Arpt.	330	7.481	4.077	2.523	0.691	0.295	0.114	0.035
Hawthorne Arpt.	340	7.093	3.883	2.398	0.654	0.286	0.113	0.035
Hawthorne Arpt.	350	6.802	3.721	2.306	0.622	0.278	0.112	0.035
Hawthorne Arpt.	360	6.651	3.649	2.268	0.608	0.274	0.111	0.034
John Wayne Int'l Arpt.	10	11.525	6.411	4.142	1.132	0.452	0.169	0.051
John Wayne Int'l Arpt.	20	14.281	8.138	5.275	1.439	0.552	0.197	0.060
John Wayne Int'l Arpt.	30	16.806	9.540	6.213	1.722	0.636	0.220	0.067
John Wayne Int'l Arpt.	40	18.225	10.207	6.649	1.810	0.667	0.225	0.068
John Wayne Int'l Arpt.	50	18.231	10.236	6.605	1.811	0.653	0.215	0.065
John Wayne Int'l Arpt.	60	17.285	9.760	6.321	1.722	0.609	0.196	0.059
John Wayne Int'l Arpt.	70	15.501	8.727	5.684	1.566	0.545	0.172	0.052
John Wayne Int'l Arpt.	80	13.046	7.287	4.670	1.275	0.454	0.147	0.044
John Wayne Int'l Arpt.	90	10.337	5.773	3.713	1.026	0.372	0.126	0.038
John Wayne Int'l Arpt.	100	8.135	4.624	2.980	0.830	0.317	0.111	0.034
John Wayne Int'l Arpt.	110	6.707	3.918	2.550	0.717	0.284	0.103	0.031
John Wayne Int'l Arpt.	120	6.000	3.578	2.322	0.659	0.267	0.098	0.030
John Wayne Int'l Arpt.	130	5.746	3.436	2.215	0.624	0.257	0.096	0.030
John Wayne Int'l Arpt.	140	5.747	3.397	2.187	0.614	0.255	0.095	0.030
John Wayne Int'l Arpt.	150	5.826	3.448	2.217	0.622	0.253	0.094	0.029
John Wayne Int'l Arpt.	160	5.984	3.481	2.237	0.617	0.250	0.094	0.029
John Wayne Int'l Arpt.	170	6.380	3.572	2.283	0.601	0.244	0.094	0.029
John Wayne Int'l Arpt.	180	7.017	3.871	2.478	0.625	0.245	0.095	0.029
John Wayne Int'l Arpt.	190	7.824	4.383	2.817	0.722	0.268	0.098	0.030
John Wayne Int'l Arpt.	200	8.397	4.847	3.139	0.830	0.296	0.102	0.032
John Wayne Int'l Arpt.	210	8.555	4.942	3.241	0.891	0.316	0.105	0.033
John Wayne Int'l Arpt.	220	8.254	4.683	3.041	0.828	0.309	0.107	0.033
John Wayne Int'l Arpt.	230	7.711	4.374	2.820	0.787	0.302	0.107	0.033
John Wayne Int'l Arpt.	240	7.328	4.169	2.703	0.767	0.299	0.106	0.033
John Wayne Int'l Arpt.	250	7.183	4.089	2.653	0.751	0.296	0.106	0.033

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
John Wayne Int'l Arpt.	260	7.266	4.123	2.675	0.769	0.301	0.108	0.033
John Wayne Int'l Arpt.	270	7.454	4.208	2.720	0.783	0.307	0.112	0.034
John Wayne Int'l Arpt.	280	7.790	4.403	2.830	0.811	0.324	0.118	0.037
John Wayne Int'l Arpt.	290	8.107	4.674	3.067	0.895	0.350	0.125	0.039
John Wayne Int'l Arpt.	300	8.201	4.791	3.140	0.912	0.360	0.130	0.041
John Wayne Int'l Arpt.	310	8.015	4.673	3.047	0.887	0.357	0.130	0.041
John Wayne Int'l Arpt.	320	7.684	4.487	2.943	0.852	0.349	0.128	0.040
John Wayne Int'l Arpt.	330	7.406	4.428	2.898	0.840	0.344	0.127	0.039
John Wayne Int'l Arpt.	340	7.320	4.434	2.930	0.833	0.341	0.128	0.039
John Wayne Int'l Arpt.	350	7.809	4.562	3.035	0.854	0.349	0.133	0.041
John Wayne Int'l Arpt.	360	9.135	5.101	3.361	0.914	0.375	0.146	0.044
Lake Elsinore	10	13.087	6.683	4.001	0.955	0.393	0.153	0.047
Lake Elsinore	20	12.293	6.385	3.835	0.976	0.405	0.155	0.048
Lake Elsinore	30	12.494	6.498	3.927	1.020	0.419	0.158	0.049
Lake Elsinore	40	13.106	6.925	4.207	1.073	0.436	0.163	0.050
Lake Elsinore	50	13.688	7.373	4.505	1.155	0.454	0.166	0.051
Lake Elsinore	60	13.972	7.539	4.630	1.189	0.461	0.166	0.051
Lake Elsinore	70	13.694	7.261	4.441	1.148	0.452	0.163	0.050
Lake Elsinore	80	12.965	6.747	4.094	1.064	0.429	0.159	0.049
Lake Elsinore	90	12.377	6.459	3.929	1.024	0.415	0.156	0.048
Lake Elsinore	100	12.618	6.605	4.025	1.040	0.417	0.155	0.048
Lake Elsinore	110	13.761	7.255	4.445	1.126	0.433	0.156	0.048
Lake Elsinore	120	15.717	8.400	5.156	1.274	0.460	0.158	0.049
Lake Elsinore	130	18.015	9.791	6.095	1.498	0.499	0.159	0.049
Lake Elsinore	140	19.793	10.852	6.903	1.695	0.539	0.160	0.049
Lake Elsinore	150	20.504	11.290	7.084	1.723	0.535	0.159	0.049
Lake Elsinore	160	20.017	10.910	6.793	1.588	0.499	0.157	0.049
Lake Elsinore	170	18.792	10.040	6.234	1.399	0.453	0.155	0.048
Lake Elsinore	180	16.982	8.964	5.517	1.201	0.413	0.154	0.048
Lake Elsinore	190	14.902	7.925	4.893	1.121	0.413	0.153	0.047
Lake Elsinore	200	13.094	7.092	4.336	1.071	0.412	0.152	0.047
Lake Elsinore	210	11.834	6.383	3.937	1.015	0.405	0.151	0.047
Lake Elsinore	220	10.958	5.901	3.636	0.957	0.397	0.151	0.047
Lake Elsinore	230	10.319	5.572	3.402	0.914	0.389	0.150	0.047
Lake Elsinore	240	9.932	5.339	3.250	0.880	0.383	0.150	0.047

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Lake Elsinore	250	9.643	5.204	3.177	0.866	0.381	0.149	0.047
Lake Elsinore	260	9.579	5.160	3.160	0.866	0.380	0.149	0.047
Lake Elsinore	270	9.687	5.197	3.184	0.871	0.379	0.149	0.046
Lake Elsinore	280	10.126	5.336	3.263	0.882	0.382	0.149	0.047
Lake Elsinore	290	11.168	5.743	3.477	0.913	0.388	0.150	0.047
Lake Elsinore	300	13.279	6.739	4.031	1.002	0.403	0.151	0.047
Lake Elsinore	310	16.405	8.527	5.181	1.247	0.444	0.153	0.048
Lake Elsinore	320	19.375	10.494	6.661	1.627	0.519	0.155	0.048
Lake Elsinore	330	20.844	11.671	7.449	1.850	0.553	0.155	0.048
Lake Elsinore	340	20.200	11.088	6.946	1.659	0.508	0.154	0.048
Lake Elsinore	350	17.924	9.390	5.695	1.270	0.430	0.153	0.048
Lake Elsinore	360	15.143	7.633	4.561	1.016	0.392	0.152	0.047
Long Beach Arpt.	10	10.121	5.456	3.439	0.884	0.363	0.138	0.041
Long Beach Arpt.	20	9.056	4.959	3.080	0.815	0.345	0.131	0.039
Long Beach Arpt.	30	7.841	4.267	2.672	0.731	0.317	0.122	0.036
Long Beach Arpt.	40	6.684	3.742	2.368	0.664	0.293	0.113	0.034
Long Beach Arpt.	50	5.843	3.440	2.184	0.624	0.278	0.109	0.033
Long Beach Arpt.	60	5.507	3.289	2.109	0.613	0.275	0.108	0.033
Long Beach Arpt.	70	5.587	3.320	2.156	0.630	0.281	0.110	0.034
Long Beach Arpt.	80	6.197	3.594	2.336	0.687	0.300	0.115	0.035
Long Beach Arpt.	90	7.578	4.187	2.717	0.808	0.340	0.128	0.038
Long Beach Arpt.	100	10.431	5.478	3.422	0.998	0.415	0.154	0.045
Long Beach Arpt.	110	14.532	7.973	5.053	1.359	0.526	0.189	0.058
Long Beach Arpt.	120	18.118	10.657	7.069	1.956	0.671	0.215	0.069
Long Beach Arpt.	130	19.057	11.334	7.581	2.125	0.701	0.212	0.069
Long Beach Arpt.	140	16.868	9.558	6.227	1.649	0.569	0.183	0.057
Long Beach Arpt.	150	13.190	7.209	4.589	1.257	0.447	0.147	0.044
Long Beach Arpt.	160	9.980	5.532	3.566	0.956	0.351	0.122	0.036
Long Beach Arpt.	170	7.954	4.457	2.882	0.745	0.289	0.109	0.033
Long Beach Arpt.	180	6.732	3.845	2.491	0.638	0.261	0.103	0.032
Long Beach Arpt.	190	6.107	3.618	2.348	0.617	0.257	0.100	0.031
Long Beach Arpt.	200	5.936	3.618	2.338	0.632	0.261	0.099	0.031
Long Beach Arpt.	210	6.157	3.703	2.385	0.657	0.266	0.099	0.031
Long Beach Arpt.	220	6.709	3.897	2.493	0.677	0.271	0.100	0.031
Long Beach Arpt.	230	7.484	4.267	2.719	0.731	0.283	0.102	0.031

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Long Beach Arpt.	240	8.497	4.821	3.078	0.819	0.301	0.104	0.032
Long Beach Arpt.	250	9.445	5.395	3.488	0.931	0.326	0.106	0.033
Long Beach Arpt.	260	10.100	5.724	3.674	0.972	0.334	0.107	0.033
Long Beach Arpt.	270	10.166	5.704	3.638	0.958	0.327	0.108	0.033
Long Beach Arpt.	280	9.877	5.508	3.508	0.933	0.329	0.110	0.034
Long Beach Arpt.	290	9.471	5.349	3.441	0.926	0.334	0.113	0.035
Long Beach Arpt.	300	9.214	5.269	3.411	0.932	0.343	0.117	0.036
Long Beach Arpt.	310	9.129	5.235	3.386	0.930	0.349	0.121	0.037
Long Beach Arpt.	320	9.295	5.250	3.398	0.927	0.358	0.126	0.039
Long Beach Arpt.	330	9.596	5.508	3.545	0.963	0.369	0.131	0.040
Long Beach Arpt.	340	9.947	5.684	3.651	0.988	0.378	0.135	0.042
Long Beach Arpt.	350	10.498	5.645	3.599	0.939	0.370	0.138	0.042
Long Beach Arpt.	360	10.699	5.627	3.514	0.882	0.360	0.140	0.042
Los Angeles Int'l Arpt.	10	4.908	2.920	1.903	0.522	0.223	0.088	0.027
Los Angeles Int'l Arpt.	20	5.095	3.040	1.976	0.557	0.234	0.089	0.028
Los Angeles Int'l Arpt.	30	5.625	3.270	2.146	0.616	0.253	0.094	0.029
Los Angeles Int'l Arpt.	40	6.927	3.848	2.530	0.733	0.299	0.108	0.032
Los Angeles Int'l Arpt.	50	9.539	5.202	3.349	0.964	0.389	0.139	0.040
Los Angeles Int'l Arpt.	60	13.907	7.564	4.816	1.373	0.536	0.188	0.056
Los Angeles Int'l Arpt.	70	18.022	10.315	6.698	1.858	0.694	0.238	0.074
Los Angeles Int'l Arpt.	80	19.132	11.123	7.248	2.023	0.745	0.254	0.080
Los Angeles Int'l Arpt.	90	16.063	8.972	5.667	1.571	0.605	0.219	0.066
Los Angeles Int'l Arpt.	100	11.044	5.695	3.479	1.025	0.437	0.162	0.047
Los Angeles Int'l Arpt.	110	6.917	3.785	2.520	0.772	0.326	0.120	0.035
Los Angeles Int'l Arpt.	120	5.401	3.210	2.143	0.635	0.269	0.100	0.030
Los Angeles Int'l Arpt.	130	5.089	3.065	2.012	0.583	0.248	0.094	0.029
Los Angeles Int'l Arpt.	140	5.091	3.062	2.014	0.584	0.246	0.093	0.029
Los Angeles Int'l Arpt.	150	5.068	3.070	2.000	0.580	0.242	0.092	0.029
Los Angeles Int'l Arpt.	160	4.993	2.990	1.926	0.549	0.235	0.091	0.028
Los Angeles Int'l Arpt.	170	4.974	2.875	1.857	0.526	0.228	0.090	0.028
Los Angeles Int'l Arpt.	180	4.999	2.861	1.858	0.511	0.223	0.090	0.028
Los Angeles Int'l Arpt.	190	5.109	2.976	1.938	0.538	0.230	0.091	0.028
Los Angeles Int'l Arpt.	200	5.400	3.177	2.058	0.580	0.241	0.092	0.028
Los Angeles Int'l Arpt.	210	5.966	3.496	2.273	0.638	0.255	0.095	0.029
Los Angeles Int'l Arpt.	220	6.782	3.953	2.586	0.717	0.275	0.098	0.030

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Los Angeles Int'l Arpt.	230	7.720	4.521	2.956	0.812	0.297	0.101	0.031
Los Angeles Int'l Arpt.	240	8.870	5.101	3.327	0.902	0.319	0.105	0.032
Los Angeles Int'l Arpt.	250	10.140	5.756	3.745	1.006	0.344	0.109	0.034
Los Angeles Int'l Arpt.	260	11.449	6.505	4.196	1.113	0.368	0.114	0.035
Los Angeles Int'l Arpt.	270	11.919	6.843	4.455	1.196	0.380	0.117	0.037
Los Angeles Int'l Arpt.	280	11.193	6.393	4.119	1.093	0.364	0.116	0.036
Los Angeles Int'l Arpt.	290	9.588	5.418	3.513	0.944	0.333	0.111	0.034
Los Angeles Int'l Arpt.	300	7.980	4.532	2.927	0.795	0.299	0.104	0.032
Los Angeles Int'l Arpt.	310	6.799	3.911	2.523	0.697	0.274	0.099	0.030
Los Angeles Int'l Arpt.	320	6.021	3.506	2.283	0.630	0.256	0.095	0.029
Los Angeles Int'l Arpt.	330	5.482	3.238	2.093	0.591	0.244	0.091	0.028
Los Angeles Int'l Arpt.	340	5.079	3.020	1.945	0.538	0.230	0.089	0.027
Los Angeles Int'l Arpt.	350	4.883	2.876	1.857	0.514	0.221	0.087	0.027
Los Angeles Int'l Arpt.	360	4.833	2.862	1.853	0.502	0.216	0.087	0.027
Mission Viejo	10	16.344	8.682	5.353	1.202	0.425	0.152	0.046
Mission Viejo	20	15.525	8.320	5.036	1.183	0.432	0.153	0.047
Mission Viejo	30	14.877	7.915	4.842	1.181	0.436	0.154	0.047
Mission Viejo	40	14.352	7.635	4.698	1.157	0.435	0.153	0.047
Mission Viejo	50	13.879	7.404	4.502	1.123	0.428	0.152	0.046
Mission Viejo	60	13.520	7.108	4.320	1.085	0.419	0.150	0.046
Mission Viejo	70	13.233	6.880	4.183	1.052	0.412	0.149	0.045
Mission Viejo	80	13.276	6.821	4.103	1.037	0.408	0.148	0.045
Mission Viejo	90	13.407	6.912	4.176	1.055	0.407	0.148	0.045
Mission Viejo	100	13.581	7.055	4.274	1.080	0.413	0.149	0.045
Mission Viejo	110	13.499	7.093	4.349	1.102	0.418	0.149	0.045
Mission Viejo	120	13.018	6.905	4.247	1.092	0.417	0.148	0.045
Mission Viejo	130	12.057	6.402	3.948	1.036	0.406	0.146	0.045
Mission Viejo	140	10.756	5.660	3.469	0.915	0.382	0.145	0.044
Mission Viejo	150	9.319	4.912	2.979	0.806	0.360	0.143	0.044
Mission Viejo	160	8.192	4.377	2.666	0.743	0.348	0.141	0.044
Mission Viejo	170	7.556	4.102	2.518	0.714	0.341	0.141	0.044
Mission Viejo	180	7.482	4.074	2.507	0.707	0.339	0.140	0.043
Mission Viejo	190	8.023	4.327	2.645	0.729	0.342	0.140	0.043
Mission Viejo	200	9.348	4.977	3.024	0.792	0.351	0.141	0.044
Mission Viejo	210	11.391	6.120	3.744	0.952	0.377	0.141	0.044

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Mission Viejo	220	13.828	7.585	4.767	1.197	0.423	0.142	0.044
Mission Viejo	230	16.038	8.947	5.666	1.412	0.460	0.142	0.044
Mission Viejo	240	17.703	9.810	6.175	1.514	0.477	0.142	0.044
Mission Viejo	250	18.448	10.159	6.385	1.543	0.482	0.142	0.044
Mission Viejo	260	18.688	10.195	6.345	1.527	0.475	0.142	0.044
Mission Viejo	270	18.312	9.997	6.229	1.507	0.466	0.142	0.044
Mission Viejo	280	17.601	9.602	5.969	1.441	0.460	0.142	0.044
Mission Viejo	290	16.665	9.158	5.726	1.382	0.452	0.142	0.044
Mission Viejo	300	15.929	8.839	5.514	1.342	0.447	0.143	0.044
Mission Viejo	310	15.441	8.625	5.403	1.331	0.447	0.143	0.044
Mission Viejo	320	15.301	8.485	5.332	1.295	0.443	0.144	0.044
Mission Viejo	330	15.420	8.563	5.301	1.279	0.437	0.145	0.045
Mission Viejo	340	15.770	8.721	5.397	1.279	0.436	0.146	0.045
Mission Viejo	350	16.476	8.880	5.510	1.249	0.422	0.148	0.045
Mission Viejo	360	16.747	8.928	5.507	1.191	0.407	0.150	0.046
Ontario Arpt.	10	5.661	3.155	1.999	0.546	0.236	0.092	0.028
Ontario Arpt.	20	6.348	3.566	2.275	0.636	0.268	0.101	0.031
Ontario Arpt.	30	7.466	4.113	2.647	0.763	0.316	0.116	0.035
Ontario Arpt.	40	9.456	5.031	3.236	0.949	0.400	0.145	0.042
Ontario Arpt.	50	12.886	6.924	4.381	1.288	0.546	0.200	0.058
Ontario Arpt.	60	17.544	9.881	6.378	1.854	0.747	0.270	0.083
Ontario Arpt.	70	20.749	12.202	8.120	2.389	0.908	0.315	0.101
Ontario Arpt.	80	19.996	11.599	7.581	2.216	0.850	0.297	0.094
Ontario Arpt.	90	15.632	8.605	5.452	1.596	0.635	0.231	0.069
Ontario Arpt.	100	10.805	5.756	3.667	1.112	0.457	0.164	0.048
Ontario Arpt.	110	7.546	4.256	2.831	0.852	0.345	0.124	0.037
Ontario Arpt.	120	6.142	3.610	2.381	0.696	0.287	0.105	0.032
Ontario Arpt.	130	5.647	3.375	2.211	0.645	0.267	0.098	0.030
Ontario Arpt.	140	5.575	3.359	2.208	0.631	0.260	0.096	0.030
Ontario Arpt.	150	5.634	3.451	2.265	0.650	0.262	0.096	0.030
Ontario Arpt.	160	5.783	3.503	2.292	0.644	0.259	0.097	0.030
Ontario Arpt.	170	6.190	3.581	2.346	0.641	0.257	0.098	0.031
Ontario Arpt.	180	6.807	3.850	2.523	0.661	0.262	0.102	0.032
Ontario Arpt.	190	7.696	4.344	2.831	0.753	0.289	0.108	0.033
Ontario Arpt.	200	8.712	5.046	3.303	0.900	0.330	0.115	0.036

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Ontario Arpt.	210	9.731	5.696	3.760	1.050	0.368	0.122	0.038
Ontario Arpt.	220	10.296	6.001	3.992	1.102	0.383	0.124	0.039
Ontario Arpt.	230	10.130	5.898	3.880	1.081	0.374	0.119	0.037
Ontario Arpt.	240	9.553	5.475	3.573	0.981	0.343	0.110	0.034
Ontario Arpt.	250	8.866	5.031	3.275	0.896	0.315	0.101	0.031
Ontario Arpt.	260	8.244	4.676	3.023	0.829	0.291	0.094	0.029
Ontario Arpt.	270	7.533	4.274	2.758	0.752	0.264	0.088	0.027
Ontario Arpt.	280	6.770	3.837	2.462	0.667	0.246	0.085	0.026
Ontario Arpt.	290	6.075	3.468	2.231	0.615	0.235	0.083	0.026
Ontario Arpt.	300	5.601	3.216	2.061	0.571	0.226	0.081	0.025
Ontario Arpt.	310	5.313	3.054	1.953	0.543	0.220	0.081	0.025
Ontario Arpt.	320	5.156	2.958	1.888	0.525	0.217	0.081	0.025
Ontario Arpt.	330	5.038	2.911	1.850	0.519	0.216	0.081	0.025
Ontario Arpt.	340	4.954	2.861	1.820	0.505	0.213	0.082	0.025
Ontario Arpt.	350	4.995	2.847	1.809	0.495	0.212	0.083	0.026
Ontario Arpt.	360	5.211	2.919	1.853	0.499	0.217	0.087	0.027
Palm Springs Arpt.	10	6.254	3.492	2.215	0.560	0.217	0.081	0.025
Palm Springs Arpt.	20	6.171	3.519	2.220	0.576	0.222	0.081	0.025
Palm Springs Arpt.	30	6.249	3.573	2.280	0.607	0.229	0.081	0.025
Palm Springs Arpt.	40	6.440	3.692	2.377	0.635	0.238	0.083	0.025
Palm Springs Arpt.	50	6.736	3.891	2.501	0.671	0.249	0.085	0.026
Palm Springs Arpt.	60	7.317	4.213	2.715	0.731	0.267	0.090	0.027
Palm Springs Arpt.	70	8.203	4.712	3.068	0.832	0.296	0.097	0.030
Palm Springs Arpt.	80	9.355	5.344	3.470	0.943	0.328	0.106	0.033
Palm Springs Arpt.	90	10.382	5.916	3.849	1.058	0.361	0.117	0.036
Palm Springs Arpt.	100	11.300	6.391	4.155	1.159	0.407	0.133	0.040
Palm Springs Arpt.	110	12.374	6.957	4.595	1.313	0.473	0.157	0.047
Palm Springs Arpt.	120	14.132	7.960	5.187	1.494	0.561	0.191	0.058
Palm Springs Arpt.	130	15.928	9.199	6.030	1.718	0.650	0.226	0.071
Palm Springs Arpt.	140	16.177	9.541	6.378	1.822	0.689	0.240	0.077
Palm Springs Arpt.	150	14.037	8.198	5.370	1.570	0.609	0.217	0.069
Palm Springs Arpt.	160	10.440	5.726	3.643	1.058	0.447	0.171	0.052
Palm Springs Arpt.	170	7.179	3.779	2.404	0.732	0.325	0.126	0.037
Palm Springs Arpt.	180	5.289	2.912	1.907	0.557	0.249	0.098	0.029
Palm Springs Arpt.	190	4.555	2.622	1.706	0.485	0.217	0.085	0.026

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Palm Springs Arpt.	200	4.315	2.512	1.598	0.451	0.204	0.081	0.025
Palm Springs Arpt.	210	4.277	2.461	1.553	0.442	0.200	0.079	0.024
Palm Springs Arpt.	220	4.306	2.438	1.533	0.438	0.198	0.078	0.024
Palm Springs Arpt.	230	4.409	2.457	1.529	0.435	0.198	0.078	0.024
Palm Springs Arpt.	240	4.676	2.553	1.590	0.452	0.203	0.079	0.024
Palm Springs Arpt.	250	5.120	2.768	1.734	0.490	0.215	0.083	0.025
Palm Springs Arpt.	260	5.990	3.123	1.925	0.538	0.231	0.088	0.026
Palm Springs Arpt.	270	7.011	3.656	2.225	0.602	0.251	0.095	0.029
Palm Springs Arpt.	280	7.893	4.169	2.552	0.684	0.276	0.101	0.031
Palm Springs Arpt.	290	8.306	4.418	2.742	0.725	0.287	0.104	0.031
Palm Springs Arpt.	300	8.268	4.383	2.699	0.713	0.284	0.102	0.030
Palm Springs Arpt.	310	7.914	4.212	2.607	0.693	0.273	0.097	0.029
Palm Springs Arpt.	320	7.517	4.021	2.529	0.671	0.263	0.093	0.028
Palm Springs Arpt.	330	7.129	3.921	2.461	0.649	0.250	0.089	0.027
Palm Springs Arpt.	340	6.805	3.797	2.390	0.626	0.240	0.086	0.026
Palm Springs Arpt.	350	6.619	3.646	2.300	0.583	0.224	0.084	0.026
Palm Springs Arpt.	360	6.443	3.525	2.222	0.546	0.213	0.082	0.025
Perris	10	18.023	9.480	5.810	1.266	0.432	0.154	0.048
Perris	20	16.116	8.682	5.305	1.264	0.443	0.152	0.047
Perris	30	14.541	7.842	4.855	1.206	0.434	0.151	0.047
Perris	40	13.078	7.038	4.351	1.090	0.415	0.149	0.046
Perris	50	11.763	6.359	3.879	0.996	0.397	0.147	0.046
Perris	60	10.737	5.818	3.555	0.935	0.386	0.146	0.046
Perris	70	10.065	5.446	3.338	0.896	0.380	0.145	0.045
Perris	80	9.767	5.271	3.223	0.863	0.371	0.145	0.045
Perris	90	9.817	5.298	3.254	0.877	0.373	0.145	0.045
Perris	100	10.304	5.534	3.404	0.914	0.384	0.146	0.046
Perris	110	11.363	6.046	3.722	0.978	0.400	0.150	0.046
Perris	120	13.177	6.962	4.291	1.110	0.435	0.157	0.048
Perris	130	15.772	8.344	5.147	1.315	0.488	0.169	0.052
Perris	140	18.317	9.850	6.226	1.564	0.553	0.183	0.056
Perris	150	19.734	10.893	6.896	1.754	0.592	0.191	0.059
Perris	160	19.512	10.643	6.633	1.631	0.561	0.189	0.058
Perris	170	17.839	9.353	5.754	1.374	0.495	0.180	0.056
Perris	180	15.286	7.858	4.826	1.141	0.440	0.169	0.052

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Perris	190	12.981	6.751	4.170	1.025	0.418	0.161	0.050
Perris	200	11.455	6.143	3.766	0.977	0.406	0.156	0.048
Perris	210	10.769	5.789	3.570	0.952	0.399	0.153	0.047
Perris	220	10.462	5.629	3.465	0.929	0.394	0.151	0.047
Perris	230	10.286	5.537	3.388	0.914	0.390	0.150	0.047
Perris	240	10.240	5.450	3.324	0.897	0.385	0.149	0.046
Perris	250	10.193	5.414	3.295	0.886	0.380	0.147	0.046
Perris	260	10.304	5.449	3.320	0.892	0.379	0.146	0.045
Perris	270	10.540	5.578	3.401	0.907	0.377	0.145	0.045
Perris	280	10.991	5.789	3.520	0.928	0.381	0.144	0.045
Perris	290	11.682	6.142	3.731	0.962	0.387	0.145	0.045
Perris	300	12.851	6.762	4.097	1.030	0.399	0.145	0.045
Perris	310	14.635	7.724	4.716	1.160	0.423	0.147	0.046
Perris	320	16.797	8.941	5.570	1.351	0.461	0.149	0.046
Perris	330	18.971	10.289	6.394	1.538	0.493	0.152	0.047
Perris	340	20.523	11.222	6.954	1.609	0.498	0.155	0.048
Perris	350	20.930	11.256	6.993	1.539	0.473	0.156	0.049
Perris	360	19.950	10.481	6.392	1.327	0.428	0.155	0.048
Pico Rivera	10	16.929	8.880	5.436	1.181	0.395	0.137	0.041
Pico Rivera	20	17.595	9.295	5.643	1.273	0.422	0.139	0.042
Pico Rivera	30	18.144	9.434	5.766	1.330	0.436	0.141	0.042
Pico Rivera	40	18.117	9.517	5.883	1.370	0.449	0.141	0.042
Pico Rivera	50	17.029	9.184	5.700	1.391	0.454	0.140	0.042
Pico Rivera	60	15.126	8.110	5.002	1.216	0.418	0.136	0.041
Pico Rivera	70	12.677	6.570	3.975	0.964	0.366	0.131	0.040
Pico Rivera	80	10.282	5.219	3.120	0.798	0.332	0.126	0.038
Pico Rivera	90	8.471	4.422	2.691	0.720	0.314	0.123	0.038
Pico Rivera	100	7.563	4.065	2.495	0.684	0.306	0.121	0.037
Pico Rivera	110	7.226	3.932	2.428	0.673	0.304	0.121	0.037
Pico Rivera	120	7.142	3.890	2.391	0.667	0.302	0.120	0.037
Pico Rivera	130	7.072	3.860	2.369	0.660	0.301	0.120	0.037
Pico Rivera	140	6.953	3.820	2.351	0.657	0.300	0.120	0.037
Pico Rivera	150	6.756	3.745	2.313	0.656	0.300	0.120	0.037
Pico Rivera	160	6.548	3.616	2.239	0.634	0.295	0.120	0.037
Pico Rivera	170	6.519	3.506	2.164	0.611	0.291	0.120	0.037

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Pico Rivera	180	7.006	3.634	2.209	0.608	0.290	0.120	0.037
Pico Rivera	190	8.728	4.335	2.558	0.649	0.295	0.120	0.037
Pico Rivera	200	11.448	5.848	3.480	0.819	0.320	0.121	0.037
Pico Rivera	210	14.162	7.685	4.779	1.179	0.383	0.122	0.038
Pico Rivera	220	15.947	8.883	5.714	1.422	0.433	0.123	0.038
Pico Rivera	230	16.099	8.862	5.585	1.369	0.422	0.123	0.038
Pico Rivera	240	14.811	7.846	4.824	1.140	0.380	0.123	0.038
Pico Rivera	250	12.878	6.700	4.073	0.965	0.351	0.122	0.038
Pico Rivera	260	11.368	5.960	3.613	0.891	0.338	0.122	0.037
Pico Rivera	270	10.409	5.574	3.421	0.867	0.333	0.121	0.037
Pico Rivera	280	9.948	5.388	3.302	0.839	0.328	0.121	0.037
Pico Rivera	290	9.702	5.331	3.273	0.829	0.328	0.121	0.037
Pico Rivera	300	9.735	5.388	3.295	0.839	0.331	0.121	0.037
Pico Rivera	310	10.082	5.550	3.389	0.856	0.335	0.122	0.038
Pico Rivera	320	10.670	5.833	3.590	0.887	0.342	0.123	0.038
Pico Rivera	330	11.457	6.305	3.864	0.949	0.353	0.125	0.038
Pico Rivera	340	12.499	6.854	4.190	0.993	0.361	0.127	0.039
Pico Rivera	350	14.128	7.450	4.570	1.018	0.361	0.130	0.039
Pico Rivera	360	15.780	8.178	4.987	1.049	0.361	0.133	0.040
Redlands	10	7.976	4.634	2.840	0.782	0.363	0.149	0.046
Redlands	20	8.472	4.687	2.849	0.790	0.366	0.149	0.046
Redlands	30	8.843	4.768	2.910	0.809	0.370	0.149	0.046
Redlands	40	9.152	4.914	3.016	0.834	0.376	0.150	0.047
Redlands	50	9.820	5.187	3.181	0.871	0.386	0.151	0.047
Redlands	60	11.354	5.762	3.490	0.935	0.403	0.156	0.048
Redlands	70	14.066	6.998	4.178	1.063	0.435	0.163	0.050
Redlands	80	18.074	9.144	5.454	1.324	0.487	0.171	0.052
Redlands	90	21.113	11.126	6.852	1.707	0.554	0.176	0.054
Redlands	100	21.850	11.587	7.136	1.758	0.569	0.176	0.054
Redlands	110	20.042	10.349	6.345	1.544	0.523	0.170	0.052
Redlands	120	17.069	8.689	5.252	1.291	0.473	0.163	0.050
Redlands	130	14.290	7.287	4.428	1.126	0.437	0.157	0.048
Redlands	140	12.179	6.236	3.799	0.988	0.406	0.153	0.047
Redlands	150	10.623	5.498	3.325	0.889	0.385	0.151	0.047
Redlands	160	9.590	5.010	3.029	0.824	0.372	0.149	0.046

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Redlands	170	8.979	4.715	2.852	0.783	0.363	0.149	0.046
Redlands	180	8.671	4.554	2.761	0.763	0.359	0.148	0.046
Redlands	190	8.438	4.512	2.738	0.765	0.361	0.148	0.046
Redlands	200	8.006	4.528	2.761	0.778	0.365	0.149	0.046
Redlands	210	7.755	4.601	2.839	0.800	0.370	0.150	0.047
Redlands	220	7.971	4.740	2.968	0.831	0.377	0.151	0.047
Redlands	230	8.689	4.960	3.114	0.858	0.382	0.151	0.047
Redlands	240	10.588	5.523	3.363	0.900	0.388	0.151	0.047
Redlands	250	14.273	7.128	4.099	0.974	0.399	0.151	0.047
Redlands	260	21.578	10.549	6.059	1.201	0.421	0.150	0.047
Redlands	270	30.712	16.466	9.941	2.068	0.535	0.150	0.047
Redlands	280	37.628	21.938	14.366	3.603	0.847	0.152	0.047
Redlands	290	38.370	22.653	15.102	3.889	0.916	0.152	0.046
Redlands	300	32.611	18.028	11.205	2.437	0.615	0.150	0.046
Redlands	310	23.669	11.888	6.922	1.364	0.440	0.149	0.046
Redlands	320	16.063	7.825	4.516	1.010	0.398	0.149	0.046
Redlands	330	11.431	5.885	3.529	0.911	0.385	0.149	0.046
Redlands	340	9.169	5.099	3.161	0.849	0.374	0.149	0.046
Redlands	350	8.239	4.790	2.985	0.806	0.366	0.149	0.046
Redlands	360	7.933	4.665	2.878	0.779	0.361	0.149	0.046
Riverside Arpt.	10	6.357	3.639	2.288	0.613	0.264	0.105	0.033
Riverside Arpt.	20	6.310	3.706	2.336	0.638	0.272	0.105	0.033
Riverside Arpt.	30	6.442	3.819	2.427	0.668	0.280	0.107	0.033
Riverside Arpt.	40	6.745	3.984	2.559	0.705	0.293	0.109	0.034
Riverside Arpt.	50	7.413	4.314	2.781	0.760	0.311	0.115	0.035
Riverside Arpt.	60	9.199	5.012	3.206	0.887	0.359	0.129	0.038
Riverside Arpt.	70	13.463	6.819	4.219	1.126	0.446	0.159	0.046
Riverside Arpt.	80	20.625	11.038	6.721	1.654	0.589	0.200	0.061
Riverside Arpt.	90	25.743	14.771	9.612	2.578	0.786	0.229	0.073
Riverside Arpt.	100	25.145	14.315	9.200	2.349	0.739	0.222	0.070
Riverside Arpt.	110	19.505	10.310	6.423	1.630	0.565	0.185	0.055
Riverside Arpt.	120	13.201	6.887	4.304	1.147	0.428	0.145	0.042
Riverside Arpt.	130	9.196	5.061	3.246	0.883	0.342	0.120	0.035
Riverside Arpt.	140	7.145	4.113	2.648	0.724	0.295	0.109	0.033
Riverside Arpt.	150	6.054	3.619	2.314	0.644	0.276	0.106	0.033

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Riverside Arpt.	160	5.536	3.373	2.156	0.606	0.267	0.106	0.033
Riverside Arpt.	170	5.448	3.289	2.100	0.588	0.265	0.107	0.033
Riverside Arpt.	180	5.739	3.364	2.153	0.597	0.271	0.110	0.034
Riverside Arpt.	190	6.370	3.648	2.325	0.648	0.289	0.115	0.035
Riverside Arpt.	200	7.372	4.109	2.612	0.736	0.319	0.124	0.038
Riverside Arpt.	210	8.992	4.917	3.106	0.874	0.362	0.136	0.041
Riverside Arpt.	220	11.154	6.197	3.979	1.088	0.421	0.151	0.047
Riverside Arpt.	230	13.274	7.585	4.930	1.355	0.487	0.163	0.051
Riverside Arpt.	240	14.706	8.420	5.477	1.485	0.513	0.166	0.053
Riverside Arpt.	250	14.894	8.404	5.440	1.467	0.502	0.159	0.050
Riverside Arpt.	260	14.126	7.830	4.991	1.330	0.454	0.145	0.045
Riverside Arpt.	270	12.798	7.053	4.497	1.194	0.403	0.131	0.040
Riverside Arpt.	280	11.479	6.350	4.050	1.069	0.370	0.121	0.037
Riverside Arpt.	290	10.340	5.802	3.740	0.989	0.346	0.114	0.035
Riverside Arpt.	300	9.542	5.415	3.477	0.921	0.331	0.111	0.034
Riverside Arpt.	310	8.966	5.105	3.269	0.865	0.317	0.109	0.034
Riverside Arpt.	320	8.471	4.818	3.091	0.818	0.308	0.108	0.033
Riverside Arpt.	330	7.946	4.528	2.884	0.780	0.299	0.106	0.033
Riverside Arpt.	340	7.424	4.186	2.644	0.704	0.282	0.105	0.033
Riverside Arpt.	350	6.983	3.859	2.426	0.640	0.268	0.105	0.033
Riverside Arpt.	360	6.615	3.672	2.299	0.603	0.260	0.105	0.032
Santa Monica Arpt.	10	9.279	5.039	3.170	0.803	0.326	0.124	0.038
Santa Monica Arpt.	20	10.948	5.830	3.622	0.927	0.365	0.133	0.040
Santa Monica Arpt.	30	13.763	7.058	4.334	1.106	0.417	0.147	0.043
Santa Monica Arpt.	40	16.856	8.913	5.505	1.349	0.486	0.165	0.049
Santa Monica Arpt.	50	18.698	10.346	6.544	1.662	0.563	0.178	0.053
Santa Monica Arpt.	60	18.443	10.217	6.470	1.639	0.556	0.177	0.053
Santa Monica Arpt.	70	16.029	8.563	5.282	1.312	0.474	0.160	0.047
Santa Monica Arpt.	80	12.608	6.506	3.989	1.047	0.399	0.139	0.041
Santa Monica Arpt.	90	9.678	5.214	3.277	0.877	0.344	0.125	0.038
Santa Monica Arpt.	100	8.248	4.610	2.923	0.786	0.318	0.119	0.036
Santa Monica Arpt.	110	7.741	4.435	2.828	0.765	0.312	0.116	0.036
Santa Monica Arpt.	120	7.727	4.477	2.842	0.769	0.311	0.116	0.036
Santa Monica Arpt.	130	7.864	4.586	2.901	0.785	0.314	0.116	0.036
Santa Monica Arpt.	140	8.083	4.689	2.987	0.797	0.318	0.117	0.036

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Santa Monica Arpt.	150	8.335	4.838	3.056	0.813	0.322	0.118	0.037
Santa Monica Arpt.	160	8.677	5.009	3.160	0.819	0.322	0.120	0.037
Santa Monica Arpt.	170	9.256	5.228	3.338	0.835	0.321	0.121	0.038
Santa Monica Arpt.	180	9.909	5.461	3.470	0.829	0.315	0.122	0.038
Santa Monica Arpt.	190	10.848	5.850	3.679	0.878	0.327	0.122	0.038
Santa Monica Arpt.	200	12.075	6.672	4.183	1.015	0.354	0.122	0.038
Santa Monica Arpt.	210	13.681	7.639	4.869	1.220	0.393	0.123	0.038
Santa Monica Arpt.	220	14.854	8.372	5.416	1.347	0.419	0.123	0.038
Santa Monica Arpt.	230	14.984	8.444	5.420	1.367	0.426	0.124	0.038
Santa Monica Arpt.	240	14.156	7.850	4.977	1.238	0.401	0.123	0.038
Santa Monica Arpt.	250	12.754	6.925	4.346	1.085	0.374	0.122	0.038
Santa Monica Arpt.	260	11.407	6.134	3.811	0.967	0.351	0.121	0.037
Santa Monica Arpt.	270	10.262	5.602	3.497	0.909	0.337	0.120	0.037
Santa Monica Arpt.	280	9.397	5.202	3.273	0.863	0.331	0.119	0.037
Santa Monica Arpt.	290	8.629	4.843	3.063	0.818	0.323	0.119	0.037
Santa Monica Arpt.	300	8.066	4.530	2.834	0.763	0.314	0.118	0.036
Santa Monica Arpt.	310	7.653	4.314	2.693	0.731	0.308	0.118	0.036
Santa Monica Arpt.	320	7.402	4.184	2.630	0.721	0.307	0.117	0.036
Santa Monica Arpt.	330	7.233	4.141	2.592	0.709	0.303	0.117	0.036
Santa Monica Arpt.	340	7.270	4.158	2.594	0.698	0.301	0.117	0.036
Santa Monica Arpt.	350	7.614	4.295	2.707	0.708	0.300	0.118	0.036
Santa Monica Arpt.	360	8.227	4.559	2.889	0.731	0.304	0.120	0.037
Upland	10	7.802	4.149	2.507	0.687	0.323	0.132	0.041
Upland	20	8.204	4.377	2.650	0.718	0.332	0.134	0.041
Upland	30	9.156	4.805	2.921	0.778	0.347	0.137	0.042
Upland	40	10.985	5.637	3.430	0.879	0.372	0.142	0.043
Upland	50	13.809	7.049	4.257	1.054	0.413	0.149	0.045
Upland	60	17.733	9.053	5.449	1.301	0.464	0.157	0.047
Upland	70	21.393	11.297	6.925	1.611	0.520	0.162	0.049
Upland	80	23.496	12.789	7.924	1.888	0.566	0.160	0.048
Upland	90	22.593	12.344	7.701	1.889	0.550	0.153	0.046
Upland	100	19.098	10.221	6.250	1.485	0.469	0.144	0.043
Upland	110	14.548	7.879	4.882	1.174	0.409	0.137	0.041
Upland	120	11.568	6.503	4.051	1.008	0.376	0.132	0.040
Upland	130	10.809	6.097	3.792	0.950	0.362	0.130	0.040

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Upland	140	12.523	6.761	4.165	0.982	0.366	0.129	0.040
Upland	150	16.613	9.007	5.450	1.194	0.392	0.129	0.040
Upland	160	21.627	12.273	7.657	1.665	0.460	0.129	0.040
Upland	170	24.921	14.374	9.376	2.076	0.503	0.129	0.040
Upland	180	24.141	13.366	8.431	1.672	0.414	0.129	0.040
Upland	190	19.586	10.080	6.220	1.215	0.378	0.129	0.040
Upland	200	14.389	7.660	4.586	1.044	0.370	0.129	0.040
Upland	210	11.447	6.079	3.736	0.926	0.355	0.129	0.040
Upland	220	9.718	5.267	3.241	0.833	0.342	0.129	0.040
Upland	230	8.818	4.806	2.929	0.783	0.335	0.129	0.040
Upland	240	8.379	4.496	2.731	0.743	0.329	0.129	0.040
Upland	250	8.153	4.276	2.594	0.719	0.325	0.129	0.040
Upland	260	8.073	4.135	2.494	0.698	0.322	0.129	0.040
Upland	270	7.991	4.043	2.427	0.683	0.318	0.129	0.040
Upland	280	7.945	3.995	2.396	0.675	0.318	0.129	0.040
Upland	290	7.956	3.994	2.399	0.676	0.318	0.130	0.040
Upland	300	7.980	4.007	2.407	0.681	0.320	0.130	0.040
Upland	310	7.984	4.007	2.405	0.679	0.320	0.130	0.040
Upland	320	7.951	3.982	2.390	0.675	0.319	0.130	0.040
Upland	330	7.875	3.966	2.372	0.670	0.318	0.130	0.040
Upland	340	7.777	3.961	2.365	0.666	0.317	0.130	0.040
Upland	350	7.699	3.978	2.384	0.665	0.317	0.131	0.040
Upland	360	7.676	4.031	2.426	0.669	0.318	0.131	0.041
USC/Downtown L.A.	10	8.044	4.490	2.745	0.716	0.319	0.128	0.039
USC/Downtown L.A.	20	8.748	4.883	2.979	0.768	0.329	0.128	0.040
USC/Downtown L.A.	30	10.150	5.600	3.449	0.875	0.349	0.130	0.040
USC/Downtown L.A.	40	12.335	6.696	4.172	1.030	0.382	0.132	0.040
USC/Downtown L.A.	50	15.352	8.188	5.073	1.230	0.422	0.137	0.041
USC/Downtown L.A.	60	19.864	10.224	6.209	1.437	0.465	0.143	0.043
USC/Downtown L.A.	70	24.785	13.090	8.009	1.778	0.524	0.149	0.045
USC/Downtown L.A.	80	28.548	15.697	9.827	2.300	0.623	0.153	0.046
USC/Downtown L.A.	90	28.601	15.843	10.033	2.435	0.635	0.151	0.045
USC/Downtown L.A.	100	24.758	13.189	8.038	1.839	0.525	0.144	0.043
USC/Downtown L.A.	110	18.513	9.666	5.925	1.372	0.442	0.137	0.041
USC/Downtown L.A.	120	13.661	7.415	4.579	1.119	0.394	0.132	0.040

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
USC/Downtown L.A.	130	10.902	6.259	3.948	1.000	0.371	0.129	0.040
USC/Downtown L.A.	140	9.581	5.668	3.614	0.939	0.361	0.128	0.040
USC/Downtown L.A.	150	9.017	5.315	3.339	0.874	0.347	0.128	0.040
USC/Downtown L.A.	160	8.915	5.111	3.167	0.814	0.335	0.128	0.039
USC/Downtown L.A.	170	9.400	5.156	3.193	0.798	0.328	0.128	0.039
USC/Downtown L.A.	180	10.331	5.508	3.413	0.820	0.326	0.127	0.039
USC/Downtown L.A.	190	11.199	6.069	3.775	0.912	0.343	0.127	0.039
USC/Downtown L.A.	200	11.548	6.385	3.991	1.000	0.364	0.128	0.039
USC/Downtown L.A.	210	11.419	6.236	3.920	1.009	0.368	0.128	0.039
USC/Downtown L.A.	220	10.860	5.799	3.625	0.926	0.355	0.127	0.039
USC/Downtown L.A.	230	10.167	5.390	3.322	0.868	0.347	0.128	0.039
USC/Downtown L.A.	240	9.851	5.197	3.201	0.844	0.343	0.128	0.039
USC/Downtown L.A.	250	10.020	5.275	3.249	0.858	0.347	0.129	0.040
USC/Downtown L.A.	260	10.764	5.631	3.439	0.893	0.353	0.129	0.040
USC/Downtown L.A.	270	11.494	6.104	3.755	0.970	0.363	0.130	0.040
USC/Downtown L.A.	280	11.879	6.341	3.929	1.026	0.377	0.131	0.040
USC/Downtown L.A.	290	11.678	6.188	3.844	0.994	0.372	0.130	0.040
USC/Downtown L.A.	300	11.096	5.803	3.550	0.920	0.359	0.130	0.040
USC/Downtown L.A.	310	10.406	5.435	3.325	0.870	0.351	0.130	0.040
USC/Downtown L.A.	320	9.778	5.126	3.162	0.837	0.346	0.129	0.040
USC/Downtown L.A.	330	9.187	4.887	2.993	0.801	0.338	0.129	0.040
USC/Downtown L.A.	340	8.666	4.666	2.851	0.759	0.329	0.129	0.040
USC/Downtown L.A.	350	8.226	4.483	2.747	0.729	0.322	0.128	0.040
USC/Downtown L.A.	360	7.931	4.394	2.689	0.704	0.316	0.128	0.039
Van Nuys Arpt.	10	7.308	4.096	2.608	0.693	0.294	0.114	0.035
Van Nuys Arpt.	20	6.654	3.889	2.465	0.668	0.281	0.108	0.033
Van Nuys Arpt.	30	6.514	3.829	2.442	0.669	0.277	0.104	0.032
Van Nuys Arpt.	40	6.590	3.870	2.482	0.681	0.278	0.103	0.032
Van Nuys Arpt.	50	6.857	3.995	2.552	0.700	0.282	0.104	0.032
Van Nuys Arpt.	60	7.522	4.280	2.725	0.739	0.292	0.106	0.032
Van Nuys Arpt.	70	8.714	4.912	3.132	0.834	0.313	0.110	0.034
Van Nuys Arpt.	80	10.486	5.904	3.761	0.989	0.347	0.114	0.035
Van Nuys Arpt.	90	12.121	6.862	4.405	1.157	0.375	0.118	0.037
Van Nuys Arpt.	100	13.086	7.385	4.725	1.224	0.393	0.120	0.037
Van Nuys Arpt.	110	13.199	7.453	4.815	1.249	0.399	0.120	0.037

Table 2: Annual Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{ton/yr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Van Nuys Arpt.	120	12.821	7.276	4.695	1.214	0.392	0.118	0.036
Van Nuys Arpt.	130	12.232	6.950	4.494	1.168	0.381	0.116	0.036
Van Nuys Arpt.	140	11.568	6.539	4.260	1.108	0.373	0.116	0.035
Van Nuys Arpt.	150	10.900	6.213	4.011	1.057	0.366	0.120	0.037
Van Nuys Arpt.	160	10.318	5.883	3.783	0.990	0.361	0.126	0.039
Van Nuys Arpt.	170	9.793	5.508	3.528	0.916	0.352	0.132	0.041
Van Nuys Arpt.	180	8.749	4.881	3.106	0.801	0.330	0.131	0.041
Van Nuys Arpt.	190	7.325	4.055	2.590	0.709	0.312	0.124	0.038
Van Nuys Arpt.	200	6.095	3.550	2.273	0.649	0.291	0.115	0.035
Van Nuys Arpt.	210	5.585	3.291	2.105	0.608	0.273	0.108	0.033
Van Nuys Arpt.	220	5.391	3.173	2.026	0.585	0.263	0.104	0.032
Van Nuys Arpt.	230	5.358	3.158	2.017	0.586	0.261	0.102	0.032
Van Nuys Arpt.	240	5.562	3.221	2.067	0.600	0.264	0.103	0.032
Van Nuys Arpt.	250	6.141	3.468	2.226	0.637	0.276	0.106	0.032
Van Nuys Arpt.	260	7.517	4.139	2.628	0.740	0.306	0.114	0.035
Van Nuys Arpt.	270	9.582	5.285	3.371	0.947	0.361	0.128	0.039
Van Nuys Arpt.	280	11.940	6.646	4.251	1.172	0.426	0.146	0.045
Van Nuys Arpt.	290	13.781	7.748	5.036	1.390	0.492	0.162	0.051
Van Nuys Arpt.	300	14.699	8.257	5.318	1.452	0.519	0.171	0.053
Van Nuys Arpt.	310	14.663	8.126	5.188	1.399	0.512	0.173	0.053
Van Nuys Arpt.	320	13.864	7.557	4.837	1.295	0.489	0.167	0.050
Van Nuys Arpt.	330	12.590	6.864	4.320	1.158	0.447	0.158	0.047
Van Nuys Arpt.	340	11.154	6.065	3.794	1.002	0.399	0.146	0.044
Van Nuys Arpt.	350	9.767	5.290	3.330	0.873	0.355	0.134	0.040
Van Nuys Arpt.	360	8.435	4.601	2.900	0.751	0.314	0.123	0.037

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	10	433.580	276.782	196.085	54.156	10.231	2.277	0.686
Azusa	20	467.766	288.074	205.455	59.742	12.978	2.473	0.736
Azusa	30	510.124	323.855	228.526	68.556	16.279	2.398	0.663
Azusa	40	481.466	308.540	218.634	66.134	15.775	2.781	0.722
Azusa	50	511.151	318.042	222.273	67.045	15.589	4.757	1.427
Azusa	60	538.165	318.042	225.857	68.822	16.055	4.757	1.427
Azusa	70	586.371	339.921	237.971	71.847	17.600	5.328	1.627
Azusa	80	565.047	340.581	236.999	72.081	17.010	5.037	1.489
Azusa	90	542.467	336.756	235.966	70.065	15.892	3.069	0.974
Azusa	100	614.922	349.672	238.565	72.586	17.833	5.365	1.636
Azusa	110	607.164	355.932	231.982	70.431	18.908	5.640	1.716
Azusa	120	527.612	317.347	225.746	68.708	16.022	4.386	1.116
Azusa	130	492.207	311.400	220.306	66.929	15.927	2.557	0.717
Azusa	140	473.942	305.203	217.901	66.167	15.365	2.544	0.704
Azusa	150	509.106	323.265	228.171	68.515	16.279	3.978	1.226
Azusa	160	488.820	308.533	216.918	62.076	13.850	3.858	1.230
Azusa	170	474.521	294.724	205.088	55.785	10.957	2.824	0.871
Azusa	180	447.019	272.619	188.262	49.244	7.846	2.433	0.707
Azusa	190	438.760	279.736	198.311	53.940	10.326	2.778	0.684
Azusa	200	477.243	299.939	211.343	60.724	13.607	3.983	1.268
Azusa	210	485.428	308.451	217.084	65.677	15.328	3.996	1.231
Azusa	220	478.712	305.976	218.563	66.452	15.436	2.191	0.662
Azusa	230	491.823	312.849	220.538	66.848	15.768	1.484	0.435
Azusa	240	492.745	315.951	224.802	68.480	15.976	1.442	0.435
Azusa	250	514.036	327.024	231.450	70.431	16.494	2.544	0.754
Azusa	260	537.949	335.881	236.425	71.897	17.161	2.717	0.843
Azusa	270	536.017	337.025	236.135	70.047	15.883	3.628	0.930
Azusa	280	630.768	364.745	235.829	71.699	18.944	5.618	1.736
Azusa	290	544.213	340.528	238.086	71.613	17.152	4.114	1.022
Azusa	300	534.678	336.959	236.612	71.024	16.904	1.958	0.582
Azusa	310	483.645	309.306	220.574	67.081	15.603	1.871	0.522
Azusa	320	494.781	314.487	221.905	66.528	15.826	1.508	0.435
Azusa	330	471.888	301.467	212.957	64.335	15.247	2.520	0.685
Azusa	340	449.591	290.486	207.638	60.450	13.133	2.896	0.853

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Azusa	350	436.092	278.335	196.824	55.810	10.244	2.160	0.662
Azusa	360	421.269	266.487	187.160	48.989	7.785	2.856	0.864
Banning	10	554.346	364.800	262.791	71.439	14.362	4.446	1.659
Banning	20	596.001	396.902	288.965	86.236	18.404	4.725	1.752
Banning	30	594.233	397.580	290.305	90.953	20.925	4.483	1.647
Banning	40	612.146	406.329	295.145	91.478	20.955	4.546	1.674
Banning	50	625.483	415.541	302.092	94.277	21.675	4.728	1.745
Banning	60	683.136	426.510	309.257	96.568	22.264	4.818	1.776
Banning	70	721.488	454.938	322.115	100.376	23.237	4.831	1.782
Banning	80	720.974	468.071	334.658	103.656	24.088	4.901	1.813
Banning	90	731.700	471.192	334.277	100.346	22.355	4.872	1.805
Banning	100	717.088	465.196	332.446	102.900	23.912	4.770	1.758
Banning	110	738.775	464.251	323.879	97.986	22.661	4.856	1.795
Banning	120	716.795	443.738	315.825	96.733	22.756	4.717	1.741
Banning	130	623.234	412.909	299.427	92.896	21.368	4.686	1.730
Banning	140	610.281	406.098	295.717	92.404	21.251	4.582	1.689
Banning	150	600.895	402.542	294.187	92.294	21.227	4.543	1.675
Banning	160	574.150	381.015	276.699	82.214	17.582	4.453	1.651
Banning	170	571.386	375.988	271.119	73.971	14.616	4.583	1.711
Banning	180	573.584	371.358	263.553	63.917	12.582	4.546	1.696
Banning	190	579.439	378.212	270.892	72.578	14.544	4.577	1.705
Banning	200	591.171	393.751	286.609	85.436	18.233	4.562	1.695
Banning	210	602.800	403.740	295.097	92.684	21.326	4.794	1.771
Banning	220	613.939	408.986	297.907	93.002	21.352	4.687	1.730
Banning	230	627.951	417.714	304.001	95.146	21.898	4.699	1.735
Banning	240	646.658	427.608	309.808	96.638	22.273	4.657	1.722
Banning	250	666.322	434.388	311.527	95.955	22.134	4.655	1.715
Banning	260	715.455	463.999	331.529	102.590	23.840	4.693	1.727
Banning	270	714.319	458.232	324.190	97.132	21.705	4.687	1.730
Banning	280	684.571	444.547	317.276	97.635	22.656	4.645	1.709
Banning	290	658.096	426.825	304.750	93.424	21.699	4.650	1.708
Banning	300	644.285	425.800	308.381	96.133	22.154	4.571	1.684
Banning	310	606.459	402.794	292.735	91.342	21.036	4.586	1.691
Banning	320	606.234	401.343	291.014	89.925	20.584	4.934	1.829
Banning	330	580.172	385.842	280.465	87.481	20.170	4.877	1.807

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Banning	340	580.914	383.135	276.663	80.992	17.291	4.410	1.610
Banning	350	553.212	356.598	252.231	70.550	13.649	4.506	1.675
Banning	360	549.834	354.097	250.074	59.580	12.358	4.732	1.760
Burbank Arpt.	10	541.054	352.228	252.106	68.460	13.057	3.552	1.317
Burbank Arpt.	20	578.562	378.340	271.184	78.469	16.812	3.563	1.315
Burbank Arpt.	30	557.610	366.833	266.238	83.004	19.163	3.437	1.258
Burbank Arpt.	40	575.304	377.234	271.670	83.533	19.283	3.415	1.250
Burbank Arpt.	50	588.731	386.506	278.806	86.076	19.882	3.396	1.239
Burbank Arpt.	60	615.120	399.190	286.845	88.691	20.543	3.513	1.282
Burbank Arpt.	70	641.687	415.706	296.760	90.909	21.052	3.571	1.274
Burbank Arpt.	80	660.244	424.449	301.817	93.097	21.747	3.597	1.306
Burbank Arpt.	90	687.435	434.806	304.744	89.865	20.223	3.542	1.298
Burbank Arpt.	100	672.130	432.422	307.495	94.765	22.143	3.632	1.327
Burbank Arpt.	110	635.094	407.801	292.012	90.100	20.953	3.603	1.318
Burbank Arpt.	120	604.909	392.453	282.115	87.634	20.295	3.596	1.317
Burbank Arpt.	130	613.604	401.912	289.017	88.758	20.526	3.608	1.320
Burbank Arpt.	140	576.286	377.054	271.074	83.020	19.160	3.648	1.339
Burbank Arpt.	150	569.984	373.168	268.503	83.053	19.136	3.627	1.330
Burbank Arpt.	160	616.124	398.931	283.546	80.611	17.228	3.493	1.287
Burbank Arpt.	170	599.553	382.886	268.786	73.996	13.363	3.554	1.282
Burbank Arpt.	180	554.869	355.187	249.758	59.157	9.772	3.364	1.246
Burbank Arpt.	190	542.899	353.276	252.966	68.443	13.083	3.400	1.257
Burbank Arpt.	200	553.559	364.262	263.019	77.523	16.662	3.452	1.268
Burbank Arpt.	210	566.089	369.143	267.499	83.140	19.201	3.320	1.203
Burbank Arpt.	220	576.031	377.598	271.814	83.303	19.237	3.560	1.298
Burbank Arpt.	230	602.883	397.805	287.167	88.591	20.495	4.829	1.320
Burbank Arpt.	240	638.055	409.069	289.104	87.266	20.196	3.846	1.312
Burbank Arpt.	250	634.772	411.620	294.363	90.784	21.104	3.542	1.289
Burbank Arpt.	260	661.431	425.245	302.242	92.953	21.708	3.503	1.277
Burbank Arpt.	270	672.155	430.127	304.179	91.056	20.408	3.541	1.295
Burbank Arpt.	280	648.430	414.348	294.553	90.935	21.312	3.610	1.318
Burbank Arpt.	290	626.525	407.193	291.818	90.277	20.967	3.596	1.316
Burbank Arpt.	300	599.500	390.215	279.668	85.626	19.768	3.607	1.322
Burbank Arpt.	310	579.116	378.881	272.313	84.388	19.476	3.610	1.323
Burbank Arpt.	320	590.622	390.245	282.052	86.973	20.109	3.567	1.306

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Burbank Arpt.	330	564.230	375.329	272.203	84.414	19.614	3.574	1.310
Burbank Arpt.	340	609.268	399.376	287.078	83.965	18.047	3.594	1.326
Burbank Arpt.	350	564.386	364.773	258.552	69.076	13.186	4.339	1.328
Burbank Arpt.	360	524.268	336.139	237.092	58.758	11.506	4.339	1.315
Central L.A.	10	458.924	256.779	161.946	40.115	10.961	3.766	1.235
Central L.A.	20	403.176	223.906	156.117	44.204	10.032	3.042	0.841
Central L.A.	30	368.585	220.870	152.750	45.912	10.970	2.957	0.841
Central L.A.	40	378.495	238.491	167.689	50.144	12.037	2.765	0.903
Central L.A.	50	373.399	233.364	162.877	48.107	11.583	2.267	0.712
Central L.A.	60	386.567	237.565	164.019	48.339	11.583	2.911	0.945
Central L.A.	70	390.714	241.397	167.478	49.932	12.087	2.416	0.766
Central L.A.	80	414.962	251.547	174.822	52.845	12.897	2.918	0.945
Central L.A.	90	409.895	249.212	171.563	50.272	11.874	2.616	0.786
Central L.A.	100	406.610	250.177	173.193	51.862	12.650	2.781	0.879
Central L.A.	110	401.968	245.932	170.342	50.645	12.262	1.665	0.479
Central L.A.	120	389.493	242.901	169.770	50.791	12.244	1.512	0.411
Central L.A.	130	366.688	226.574	157.332	47.045	11.251	2.004	0.496
Central L.A.	140	371.073	233.737	164.267	49.093	11.804	2.473	0.706
Central L.A.	150	361.926	226.270	158.334	47.011	11.326	2.194	0.650
Central L.A.	160	371.758	231.657	161.767	45.892	10.362	1.882	0.574
Central L.A.	170	362.817	224.408	155.788	43.725	8.212	1.801	0.494
Central L.A.	180	350.878	213.518	146.505	36.475	6.085	1.536	0.445
Central L.A.	190	360.185	221.110	152.318	40.059	8.195	1.276	0.399
Central L.A.	200	371.554	231.583	161.771	45.985	10.382	1.454	0.432
Central L.A.	210	373.431	234.286	164.258	48.856	11.738	1.977	0.555
Central L.A.	220	373.121	233.474	163.844	48.785	11.730	1.977	0.632
Central L.A.	230	379.190	237.886	166.780	49.800	11.978	1.391	0.399
Central L.A.	240	395.634	246.673	172.205	51.315	12.352	1.768	0.543
Central L.A.	250	401.306	249.544	174.102	52.382	12.687	1.709	0.495
Central L.A.	260	398.143	244.435	169.665	51.033	12.345	2.741	0.832
Central L.A.	270	396.548	242.555	167.680	49.202	11.470	2.392	0.657
Central L.A.	280	415.222	256.352	178.107	53.786	13.103	2.139	0.665
Central L.A.	290	412.005	255.325	177.788	53.312	12.879	1.911	0.637
Central L.A.	300	394.906	243.682	168.845	50.024	12.116	1.506	0.399
Central L.A.	310	371.185	231.695	161.634	47.728	11.507	2.252	0.636

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Central L.A.	320	378.480	238.283	167.455	50.036	12.008	2.030	0.533
Central L.A.	330	363.531	224.012	154.343	46.045	11.000	2.349	0.740
Central L.A.	340	338.080	212.744	149.555	43.531	9.588	2.203	0.657
Central L.A.	350	331.086	206.685	144.388	40.762	7.643	2.457	0.807
Central L.A.	360	377.507	205.938	140.780	36.081	6.938	2.734	0.721
Chino Arpt.	10	642.820	428.216	312.459	86.815	18.768	6.392	2.409
Chino Arpt.	20	658.643	440.731	321.231	97.027	21.657	6.361	2.388
Chino Arpt.	30	679.461	451.408	327.573	104.315	23.958	6.355	2.375
Chino Arpt.	40	669.257	451.269	330.861	104.267	23.956	6.476	2.421
Chino Arpt.	50	713.376	475.740	344.156	106.218	24.407	6.423	2.399
Chino Arpt.	60	709.037	473.530	344.838	108.750	25.052	6.489	2.407
Chino Arpt.	70	771.709	511.866	369.159	114.255	26.321	6.422	2.400
Chino Arpt.	80	787.976	518.345	373.529	117.083	27.169	6.488	2.419
Chino Arpt.	90	813.547	528.522	376.868	113.774	25.509	6.412	2.399
Chino Arpt.	100	784.545	516.206	371.538	115.710	26.860	6.516	2.433
Chino Arpt.	110	781.782	514.951	368.553	112.053	25.746	6.442	2.405
Chino Arpt.	120	751.814	505.139	368.673	116.136	26.748	6.422	2.400
Chino Arpt.	130	682.399	458.600	335.529	107.116	24.647	6.418	2.401
Chino Arpt.	140	699.885	474.511	347.812	109.316	25.162	6.379	2.384
Chino Arpt.	150	725.822	480.500	345.576	107.154	24.636	6.433	2.405
Chino Arpt.	160	652.541	434.845	318.104	96.883	21.896	6.284	2.357
Chino Arpt.	170	675.411	439.337	312.013	85.807	18.746	6.016	2.263
Chino Arpt.	180	675.411	439.337	311.114	80.185	16.344	6.311	2.382
Chino Arpt.	190	678.733	450.371	324.577	89.041	18.892	6.200	2.331
Chino Arpt.	200	694.365	464.951	337.163	100.011	21.655	6.299	2.354
Chino Arpt.	210	697.271	469.451	341.698	104.959	23.890	6.548	2.452
Chino Arpt.	220	742.258	501.383	367.149	115.339	26.455	6.331	2.366
Chino Arpt.	230	733.230	495.541	362.154	113.704	26.227	6.370	2.372
Chino Arpt.	240	756.945	505.687	366.429	113.449	26.057	6.343	2.358
Chino Arpt.	250	824.293	542.745	390.087	120.048	27.515	6.413	2.396
Chino Arpt.	260	793.377	519.273	372.869	116.455	27.034	6.446	2.392
Chino Arpt.	270	858.058	559.710	399.935	121.272	26.903	6.410	2.399
Chino Arpt.	280	792.414	518.142	373.586	117.465	27.263	6.305	2.349
Chino Arpt.	290	747.233	494.276	359.136	113.260	26.162	6.452	2.405
Chino Arpt.	300	747.004	501.161	365.297	114.666	26.374	6.241	2.329

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Chino Arpt.	310	728.322	485.528	351.550	107.460	24.462	6.212	2.321
Chino Arpt.	320	692.396	470.521	346.640	110.013	25.218	6.300	2.351
Chino Arpt.	330	658.701	444.741	328.257	105.077	24.218	6.396	2.390
Chino Arpt.	340	698.645	471.429	344.896	102.921	21.783	6.285	2.358
Chino Arpt.	350	679.521	451.753	326.532	88.800	18.792	6.188	2.329
Chino Arpt.	360	658.509	432.601	307.741	72.625	16.363	6.176	2.331
Desert Hot Springs Arpt.	10	616.051	411.060	299.674	83.098	19.813	6.741	2.533
Desert Hot Springs Arpt.	20	602.597	402.856	293.538	87.310	21.941	6.641	2.483
Desert Hot Springs Arpt.	30	647.392	433.381	315.602	98.303	23.991	6.795	2.549
Desert Hot Springs Arpt.	40	643.973	435.465	320.031	101.279	24.343	6.762	2.524
Desert Hot Springs Arpt.	50	655.740	432.912	314.644	98.330	24.729	6.792	2.543
Desert Hot Springs Arpt.	60	655.545	436.321	317.406	99.849	24.676	6.699	2.496
Desert Hot Springs Arpt.	70	674.313	448.026	325.319	102.144	25.515	6.642	2.484
Desert Hot Springs Arpt.	80	760.018	495.818	354.924	109.571	26.511	6.722	2.505
Desert Hot Springs Arpt.	90	757.749	491.091	350.540	106.194	25.657	6.801	2.550
Desert Hot Springs Arpt.	100	743.577	485.593	348.353	108.538	26.472	6.873	2.564
Desert Hot Springs Arpt.	110	695.010	459.705	332.992	104.606	25.722	6.790	2.534
Desert Hot Springs Arpt.	120	674.819	444.109	320.026	99.766	24.692	6.897	2.578
Desert Hot Springs Arpt.	130	644.117	433.517	317.848	100.698	24.472	7.102	2.656
Desert Hot Springs Arpt.	140	645.680	431.013	313.911	98.476	24.090	7.112	2.671
Desert Hot Springs Arpt.	150	673.601	449.706	326.197	99.766	24.155	7.015	2.632
Desert Hot Springs Arpt.	160	614.019	411.537	300.373	89.586	22.006	7.120	2.682
Desert Hot Springs Arpt.	170	603.086	402.742	293.212	81.153	19.660	6.989	2.645
Desert Hot Springs Arpt.	180	594.892	392.076	281.420	68.031	17.292	6.978	2.642
Desert Hot Springs Arpt.	190	616.760	407.582	294.161	80.603	19.622	6.934	2.622
Desert Hot Springs Arpt.	200	615.267	413.514	302.641	91.073	22.089	7.057	2.663
Desert Hot Springs Arpt.	210	609.461	409.584	300.702	95.822	24.064	6.791	2.545
Desert Hot Springs Arpt.	220	634.278	426.107	311.893	98.100	23.921	6.939	2.590
Desert Hot Springs Arpt.	230	641.944	427.461	313.074	99.815	24.604	6.751	2.526
Desert Hot Springs Arpt.	240	644.397	433.001	317.204	100.772	25.052	6.834	2.558
Desert Hot Springs Arpt.	250	654.935	431.954	311.615	98.551	25.660	6.832	2.559
Desert Hot Springs Arpt.	260	714.189	465.132	332.345	103.319	26.540	6.911	2.590
Desert Hot Springs Arpt.	270	741.377	483.935	346.776	105.777	25.500	6.624	2.480
Desert Hot Springs Arpt.	280	731.496	480.302	345.713	108.156	26.261	7.150	2.536
Desert Hot Springs Arpt.	290	693.493	462.531	336.871	106.711	25.818	6.951	2.603

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Desert Hot Springs Arpt.	300	658.657	436.567	316.313	98.620	24.760	7.035	2.630
Desert Hot Springs Arpt.	310	639.979	428.610	313.687	98.949	24.476	6.995	2.626
Desert Hot Springs Arpt.	320	612.227	407.998	298.945	93.971	24.229	7.011	2.620
Desert Hot Springs Arpt.	330	622.008	419.929	308.241	97.350	23.995	7.065	2.655
Desert Hot Springs Arpt.	340	595.034	401.576	295.061	89.424	22.254	6.942	2.616
Desert Hot Springs Arpt.	350	601.417	399.314	289.481	79.570	19.679	6.805	2.558
Desert Hot Springs Arpt.	360	593.815	384.390	272.049	66.295	17.432	6.941	2.631
Fontana	10	595.555	377.378	264.406	69.409	13.551	2.997	0.914
Fontana	20	558.453	367.146	265.183	78.168	16.718	2.565	0.928
Fontana	30	568.348	375.919	272.629	84.547	19.462	2.542	0.908
Fontana	40	607.773	388.602	277.117	85.655	19.696	3.007	0.918
Fontana	50	643.346	410.444	290.140	86.977	20.279	3.827	1.179
Fontana	60	655.366	415.194	292.242	88.447	20.483	3.665	1.100
Fontana	70	666.016	414.313	296.167	91.137	21.102	4.890	1.350
Fontana	80	703.606	437.337	304.288	93.426	21.768	4.890	1.350
Fontana	90	685.202	432.209	305.001	91.089	20.370	3.357	1.010
Fontana	100	670.533	429.270	304.755	93.515	21.771	4.644	1.303
Fontana	110	639.042	413.596	295.608	90.943	21.056	3.432	0.930
Fontana	120	632.945	396.839	285.370	88.128	20.345	2.580	0.923
Fontana	130	664.414	425.919	301.345	89.954	20.859	2.521	0.897
Fontana	140	594.281	383.149	277.041	85.623	19.687	2.578	0.907
Fontana	150	599.345	381.320	271.172	83.925	19.315	3.542	0.909
Fontana	160	612.520	391.623	276.191	78.206	16.947	5.360	1.478
Fontana	170	632.113	401.589	282.922	75.204	14.649	3.542	0.889
Fontana	180	593.428	368.582	255.055	61.815	10.057	2.499	0.913
Fontana	190	599.418	378.157	266.689	71.025	13.936	5.166	1.344
Fontana	200	599.418	377.714	266.840	78.838	18.321	6.007	1.720
Fontana	210	635.062	400.025	278.641	84.740	19.518	3.268	0.905
Fontana	220	649.915	414.477	292.037	85.964	19.848	2.949	0.924
Fontana	230	673.775	431.912	305.588	91.200	21.134	4.569	1.258
Fontana	240	686.103	433.875	305.162	91.589	21.375	4.186	1.087
Fontana	250	698.135	440.737	309.706	93.568	22.004	2.527	0.898
Fontana	260	735.305	460.142	321.242	96.745	22.843	2.543	0.903
Fontana	270	680.570	433.174	305.581	91.132	20.365	2.523	0.901
Fontana	280	669.126	427.978	303.768	93.183	21.693	2.589	0.891

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fontana	290	637.369	412.604	294.999	90.886	21.059	2.983	0.903
Fontana	300	609.149	397.720	286.050	88.360	20.399	2.983	0.889
Fontana	310	657.164	415.923	291.100	86.140	19.831	2.931	0.889
Fontana	320	671.836	433.820	308.972	93.549	21.752	2.519	0.899
Fontana	330	596.176	375.953	272.453	84.453	19.436	4.087	1.207
Fontana	340	584.230	370.838	265.321	78.206	16.722	3.610	1.000
Fontana	350	553.310	355.549	254.271	69.346	13.044	2.471	0.897
Fontana	360	582.813	365.363	253.511	61.815	9.583	2.514	0.918
Fullerton Arpt.	10	525.005	334.672	238.339	64.012	12.246	3.316	0.944
Fullerton Arpt.	20	557.124	353.135	252.693	73.676	15.895	3.750	1.049
Fullerton Arpt.	30	572.146	367.322	261.743	80.101	18.510	3.414	0.998
Fullerton Arpt.	40	627.931	407.311	291.064	88.334	20.424	3.481	0.969
Fullerton Arpt.	50	593.830	380.314	268.901	80.659	18.613	3.481	0.969
Fullerton Arpt.	60	594.858	381.074	271.852	83.062	19.216	2.529	0.775
Fullerton Arpt.	70	634.716	403.605	284.740	86.230	20.174	2.718	0.827
Fullerton Arpt.	80	635.022	401.222	282.655	86.473	20.215	2.557	0.813
Fullerton Arpt.	90	663.283	414.079	288.279	84.435	19.035	2.753	0.818
Fullerton Arpt.	100	675.205	427.228	300.456	91.209	21.360	3.119	0.951
Fullerton Arpt.	110	619.212	394.592	279.182	84.761	19.713	2.602	0.790
Fullerton Arpt.	120	594.910	383.434	273.541	83.422	19.303	2.690	0.819
Fullerton Arpt.	130	594.651	385.436	274.916	83.183	19.281	2.145	0.751
Fullerton Arpt.	140	623.123	403.084	287.325	86.605	19.982	2.367	0.771
Fullerton Arpt.	150	576.506	367.470	263.186	80.248	18.574	2.642	0.771
Fullerton Arpt.	160	576.506	367.470	258.761	75.528	16.070	3.928	1.069
Fullerton Arpt.	170	532.633	340.325	242.018	66.266	12.434	2.750	0.794
Fullerton Arpt.	180	554.115	345.538	238.696	59.212	8.951	2.281	0.752
Fullerton Arpt.	190	579.269	369.050	259.861	68.490	13.259	2.309	0.719
Fullerton Arpt.	200	565.356	366.331	261.786	75.924	16.318	2.076	0.737
Fullerton Arpt.	210	595.546	387.817	277.954	84.562	19.499	2.118	0.746
Fullerton Arpt.	220	572.559	373.643	268.128	81.923	18.938	2.017	0.717
Fullerton Arpt.	230	572.990	370.075	264.598	80.550	18.590	2.123	0.751
Fullerton Arpt.	240	600.959	386.486	274.545	83.019	19.244	2.742	0.781
Fullerton Arpt.	250	613.452	391.759	277.664	84.484	19.619	2.843	0.838
Fullerton Arpt.	260	645.870	408.495	287.624	87.556	20.508	2.254	0.791
Fullerton Arpt.	270	636.814	401.552	281.815	83.641	18.784	2.664	0.792

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Fullerton Arpt.	280	641.722	405.069	284.863	86.605	20.309	3.417	1.061
Fullerton Arpt.	290	612.941	389.952	276.159	84.380	19.643	3.797	1.104
Fullerton Arpt.	300	624.531	401.216	284.659	85.904	19.899	2.413	0.755
Fullerton Arpt.	310	609.877	392.743	279.003	83.570	19.225	2.218	0.780
Fullerton Arpt.	320	619.069	398.742	283.094	84.576	19.504	2.689	0.762
Fullerton Arpt.	330	590.374	371.235	260.143	78.967	18.220	2.689	0.775
Fullerton Arpt.	340	540.904	350.722	250.857	72.899	15.660	3.011	0.861
Fullerton Arpt.	350	529.475	339.387	241.264	64.591	12.414	2.678	0.819
Fullerton Arpt.	360	516.116	325.842	227.460	58.332	8.708	2.954	0.868
Hawthorne Arpt.	10	514.012	332.066	236.785	63.747	12.249	1.864	0.667
Hawthorne Arpt.	20	530.824	343.533	247.007	72.430	15.598	2.177	0.644
Hawthorne Arpt.	30	550.972	358.509	257.044	78.728	18.216	2.730	0.743
Hawthorne Arpt.	40	562.194	368.460	264.675	80.954	18.820	3.308	0.906
Hawthorne Arpt.	50	570.513	370.223	265.147	80.996	18.733	3.144	0.928
Hawthorne Arpt.	60	582.449	374.945	267.638	82.103	19.036	2.669	0.746
Hawthorne Arpt.	70	606.229	388.947	276.336	84.392	19.633	2.900	0.893
Hawthorne Arpt.	80	626.651	398.669	281.745	86.178	20.189	2.707	0.761
Hawthorne Arpt.	90	625.889	397.677	280.269	83.676	18.838	2.982	0.865
Hawthorne Arpt.	100	622.488	395.017	278.901	85.402	20.058	2.031	0.687
Hawthorne Arpt.	110	641.584	409.857	289.986	88.034	20.510	3.025	0.884
Hawthorne Arpt.	120	585.272	377.689	269.419	82.255	19.092	2.429	0.658
Hawthorne Arpt.	130	569.815	369.734	264.366	80.566	18.692	1.936	0.680
Hawthorne Arpt.	140	559.409	361.095	259.599	79.519	18.361	1.931	0.679
Hawthorne Arpt.	150	565.898	368.396	263.926	80.106	18.470	1.892	0.662
Hawthorne Arpt.	160	537.302	348.900	249.932	72.833	15.697	1.923	0.685
Hawthorne Arpt.	170	523.917	338.942	241.508	65.550	12.568	1.893	0.629
Hawthorne Arpt.	180	503.721	318.747	223.846	58.110	8.671	1.836	0.661
Hawthorne Arpt.	190	519.397	334.440	237.845	63.909	12.300	1.825	0.654
Hawthorne Arpt.	200	546.776	355.361	254.383	74.063	15.973	1.766	0.629
Hawthorne Arpt.	210	546.705	354.200	254.101	78.098	18.056	4.053	0.974
Hawthorne Arpt.	220	554.677	360.863	258.708	79.060	18.358	4.858	1.304
Hawthorne Arpt.	230	562.160	364.705	261.610	80.148	18.529	2.368	0.654
Hawthorne Arpt.	240	582.472	375.399	267.638	82.103	19.036	2.508	0.738
Hawthorne Arpt.	250	599.180	382.983	271.602	83.145	19.338	2.634	0.746
Hawthorne Arpt.	260	624.632	397.667	281.071	85.986	20.154	1.942	0.676

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Hawthorne Arpt.	270	629.694	398.270	280.084	83.503	18.838	2.042	0.692
Hawthorne Arpt.	280	619.889	393.652	277.692	84.424	19.721	2.015	0.692
Hawthorne Arpt.	290	606.451	387.577	274.550	83.534	19.464	2.031	0.679
Hawthorne Arpt.	300	583.728	376.852	268.866	82.037	19.020	2.039	0.687
Hawthorne Arpt.	310	594.130	383.905	273.481	82.686	19.170	2.996	0.844
Hawthorne Arpt.	320	552.100	355.399	254.474	77.758	17.976	2.279	0.680
Hawthorne Arpt.	330	553.507	359.399	257.323	78.276	18.099	2.585	0.748
Hawthorne Arpt.	340	549.534	357.058	255.071	73.921	16.004	2.488	0.712
Hawthorne Arpt.	350	515.084	332.354	236.846	65.593	12.204	1.898	0.681
Hawthorne Arpt.	360	496.248	314.588	220.472	55.587	8.609	1.856	0.668
John Wayne Int'l Arpt.	10	672.584	448.902	327.400	90.651	16.954	5.348	2.008
John Wayne Int'l Arpt.	20	684.277	455.972	331.174	100.572	21.353	5.438	2.034
John Wayne Int'l Arpt.	30	694.227	470.709	347.135	110.291	25.263	5.453	2.028
John Wayne Int'l Arpt.	40	706.756	477.146	350.068	110.588	25.341	5.471	2.038
John Wayne Int'l Arpt.	50	749.656	506.504	371.481	117.427	26.944	5.469	2.036
John Wayne Int'l Arpt.	60	747.612	499.657	363.834	114.205	26.226	5.463	2.032
John Wayne Int'l Arpt.	70	784.338	519.645	376.088	118.198	27.276	5.416	2.013
John Wayne Int'l Arpt.	80	869.571	571.658	410.973	128.176	29.651	6.062	2.011
John Wayne Int'l Arpt.	90	858.802	559.722	399.805	121.070	26.855	5.452	2.029
John Wayne Int'l Arpt.	100	833.291	543.403	389.033	122.093	28.297	5.391	1.997
John Wayne Int'l Arpt.	110	787.108	521.703	377.701	118.210	27.229	5.327	1.974
John Wayne Int'l Arpt.	120	745.760	491.031	357.709	113.562	26.087	5.336	1.977
John Wayne Int'l Arpt.	130	724.852	488.513	357.906	112.832	25.829	5.473	2.037
John Wayne Int'l Arpt.	140	706.012	474.936	347.541	110.416	25.271	5.286	1.965
John Wayne Int'l Arpt.	150	704.566	469.779	341.396	108.245	24.874	5.479	2.041
John Wayne Int'l Arpt.	160	679.070	456.664	335.596	101.386	21.509	5.225	1.951
John Wayne Int'l Arpt.	170	677.735	447.792	324.677	89.106	16.684	5.243	1.968
John Wayne Int'l Arpt.	180	658.425	435.075	312.482	75.529	13.949	5.016	1.879
John Wayne Int'l Arpt.	190	663.378	438.551	320.360	88.977	16.647	5.197	1.936
John Wayne Int'l Arpt.	200	679.578	454.315	330.584	99.726	21.186	5.351	1.993
John Wayne Int'l Arpt.	210	703.370	473.049	348.677	110.815	25.415	5.290	1.966
John Wayne Int'l Arpt.	220	684.206	461.165	339.671	107.759	24.676	5.431	2.020
John Wayne Int'l Arpt.	230	712.029	482.109	354.715	112.850	25.881	5.405	2.011
John Wayne Int'l Arpt.	240	746.784	495.189	359.199	111.542	25.580	5.429	2.014
John Wayne Int'l Arpt.	250	780.123	516.807	374.222	117.326	27.047	5.444	2.022

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
John Wayne Int'l Arpt.	260	822.658	538.223	386.169	120.130	27.805	5.434	2.016
John Wayne Int'l Arpt.	270	844.205	550.887	393.599	119.066	26.366	5.358	1.992
John Wayne Int'l Arpt.	280	823.780	543.240	391.875	122.773	28.398	5.480	2.033
John Wayne Int'l Arpt.	290	776.427	507.796	364.044	113.395	26.193	5.391	2.001
John Wayne Int'l Arpt.	300	726.295	490.217	359.843	114.644	26.380	5.391	2.003
John Wayne Int'l Arpt.	310	719.546	482.031	353.887	112.000	25.653	5.416	2.015
John Wayne Int'l Arpt.	320	702.156	473.574	348.395	110.323	25.236	5.381	2.003
John Wayne Int'l Arpt.	330	687.064	468.444	346.688	111.026	25.489	5.374	2.000
John Wayne Int'l Arpt.	340	686.520	463.780	340.188	102.409	21.722	5.349	1.998
John Wayne Int'l Arpt.	350	675.337	449.787	326.875	90.603	16.949	5.348	2.006
John Wayne Int'l Arpt.	360	654.879	427.582	306.953	73.901	14.214	5.332	2.003
Lake Elsinore	10	636.760	403.326	283.088	74.359	15.684	5.359	1.461
Lake Elsinore	20	625.700	403.902	287.331	83.141	18.128	4.361	1.051
Lake Elsinore	30	570.221	377.969	274.533	85.418	19.681	4.019	1.132
Lake Elsinore	40	655.738	412.641	287.053	85.940	19.763	3.905	1.040
Lake Elsinore	50	672.002	428.493	301.747	88.916	20.513	5.117	1.543
Lake Elsinore	60	700.117	445.534	313.813	93.552	21.718	3.068	1.051
Lake Elsinore	70	648.060	420.911	301.535	93.171	21.588	3.854	1.107
Lake Elsinore	80	671.257	431.070	306.377	94.255	21.961	3.386	1.023
Lake Elsinore	90	685.093	437.386	308.973	92.395	20.659	2.914	1.012
Lake Elsinore	100	673.177	432.455	307.427	94.606	22.043	2.999	1.043
Lake Elsinore	110	641.603	414.178	296.335	91.393	21.178	3.189	1.031
Lake Elsinore	120	617.332	401.714	289.277	89.528	20.672	3.745	1.036
Lake Elsinore	130	638.325	408.202	288.454	87.752	20.209	5.063	1.408
Lake Elsinore	140	666.795	430.069	306.035	92.479	21.513	5.885	1.625
Lake Elsinore	150	668.214	431.577	307.388	93.022	21.632	4.906	1.214
Lake Elsinore	160	643.136	410.065	288.832	81.409	17.745	3.869	1.165
Lake Elsinore	170	627.579	398.611	279.563	77.855	14.354	3.143	1.039
Lake Elsinore	180	600.062	373.940	258.680	62.191	10.117	2.911	1.016
Lake Elsinore	190	615.221	381.525	262.637	70.240	13.760	2.823	1.032
Lake Elsinore	200	659.608	424.340	301.215	86.617	18.763	2.840	1.029
Lake Elsinore	210	663.508	429.330	305.968	92.594	21.552	3.354	1.030
Lake Elsinore	220	623.978	401.975	284.530	85.862	19.747	2.915	1.052
Lake Elsinore	230	631.352	407.454	288.998	87.666	20.329	2.888	1.040
Lake Elsinore	240	646.089	406.425	288.257	89.028	20.540	4.365	1.191

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Lake Elsinore	250	710.866	435.906	304.074	91.128	21.377	3.924	1.015
Lake Elsinore	260	732.227	454.975	315.484	93.889	21.858	3.247	0.907
Lake Elsinore	270	717.379	444.254	308.488	91.523	20.763	2.916	1.053
Lake Elsinore	280	674.102	432.896	307.606	94.507	22.002	2.658	0.955
Lake Elsinore	290	668.206	428.447	302.988	92.245	21.789	2.833	1.014
Lake Elsinore	300	615.267	402.382	289.639	89.501	20.650	3.134	1.006
Lake Elsinore	310	643.741	414.338	293.540	87.814	20.432	3.829	1.017
Lake Elsinore	320	624.249	400.635	284.055	86.730	20.051	3.829	1.050
Lake Elsinore	330	614.059	394.279	278.695	86.320	19.888	3.594	1.051
Lake Elsinore	340	626.730	404.841	288.174	83.529	18.219	2.983	1.034
Lake Elsinore	350	561.500	361.045	258.946	70.182	13.335	3.416	1.016
Lake Elsinore	360	608.113	376.331	258.658	62.338	10.189	3.308	1.044
Long Beach Arpt.	10	561.864	368.062	266.119	73.148	15.861	5.377	1.787
Long Beach Arpt.	20	568.663	376.957	273.281	80.765	17.346	4.825	1.803
Long Beach Arpt.	30	578.747	386.111	282.832	89.227	20.600	4.775	1.770
Long Beach Arpt.	40	573.930	382.945	279.309	87.490	20.181	4.719	1.753
Long Beach Arpt.	50	600.972	396.822	287.085	88.667	20.389	4.825	1.790
Long Beach Arpt.	60	608.618	401.531	290.407	90.189	20.870	4.723	1.754
Long Beach Arpt.	70	636.495	416.971	300.375	93.642	21.771	4.747	1.756
Long Beach Arpt.	80	685.865	442.980	315.701	97.562	22.813	4.754	1.762
Long Beach Arpt.	90	693.527	445.966	317.426	95.973	21.451	4.843	1.800
Long Beach Arpt.	100	683.641	442.079	317.093	99.116	23.125	4.853	1.801
Long Beach Arpt.	110	662.380	427.858	303.807	95.205	22.116	4.796	1.779
Long Beach Arpt.	120	627.923	415.032	300.561	93.817	21.713	4.874	1.812
Long Beach Arpt.	130	613.124	399.384	289.849	90.519	20.870	4.845	1.801
Long Beach Arpt.	140	612.776	406.607	294.992	92.402	21.293	4.865	1.799
Long Beach Arpt.	150	593.134	397.271	289.452	90.361	20.933	4.804	1.787
Long Beach Arpt.	160	573.722	381.007	276.988	82.637	17.707	4.806	1.794
Long Beach Arpt.	170	561.254	369.045	265.902	72.898	14.049	4.712	1.764
Long Beach Arpt.	180	553.595	359.623	255.712	62.926	12.213	4.484	1.685
Long Beach Arpt.	190	592.449	387.971	278.560	76.021	14.469	4.525	1.696
Long Beach Arpt.	200	627.987	411.614	295.010	85.665	18.354	4.593	1.708
Long Beach Arpt.	210	575.765	386.312	282.637	88.889	20.514	4.653	1.725
Long Beach Arpt.	220	605.752	404.892	295.431	92.491	21.300	4.781	1.777
Long Beach Arpt.	230	606.743	400.120	291.671	91.643	21.189	5.729	1.747

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Long Beach Arpt.	240	687.635	452.494	325.678	100.495	23.269	4.699	1.743
Long Beach Arpt.	250	701.405	450.380	317.945	98.168	22.835	4.851	1.801
Long Beach Arpt.	260	689.597	446.988	320.348	99.634	23.221	4.721	1.749
Long Beach Arpt.	270	698.948	452.024	321.744	97.216	21.712	4.753	1.766
Long Beach Arpt.	280	699.315	450.848	320.131	98.277	22.937	4.778	1.769
Long Beach Arpt.	290	691.388	443.360	313.024	95.202	22.070	4.830	1.794
Long Beach Arpt.	300	625.467	412.914	298.726	93.292	21.604	4.795	1.781
Long Beach Arpt.	310	648.092	429.344	310.731	95.890	22.038	4.855	1.804
Long Beach Arpt.	320	592.319	393.929	286.612	89.434	20.625	4.831	1.797
Long Beach Arpt.	330	584.150	384.544	279.132	88.056	20.320	4.800	1.786
Long Beach Arpt.	340	569.299	380.223	277.276	82.969	17.781	4.805	1.795
Long Beach Arpt.	350	559.539	364.519	263.799	72.448	14.140	4.784	1.793
Long Beach Arpt.	360	559.539	361.978	256.504	66.872	12.479	4.755	1.788
Los Angeles Int'l Arpt.	10	524.309	343.509	247.218	67.434	14.102	4.786	1.795
Los Angeles Int'l Arpt.	20	525.659	344.867	250.963	75.306	16.211	4.805	1.794
Los Angeles Int'l Arpt.	30	557.611	368.902	266.822	82.151	19.000	4.811	1.788
Los Angeles Int'l Arpt.	40	567.866	375.357	271.838	83.923	19.324	4.833	1.794
Los Angeles Int'l Arpt.	50	555.677	366.342	265.941	82.979	19.194	4.861	1.809
Los Angeles Int'l Arpt.	60	572.781	374.771	271.636	84.975	19.719	4.891	1.817
Los Angeles Int'l Arpt.	70	608.763	397.144	285.299	88.594	20.638	4.923	1.825
Los Angeles Int'l Arpt.	80	634.590	411.301	293.970	91.283	21.362	4.913	1.822
Los Angeles Int'l Arpt.	90	650.555	417.801	296.104	89.135	19.995	4.899	1.824
Los Angeles Int'l Arpt.	100	632.373	405.683	288.973	89.653	20.959	4.960	1.841
Los Angeles Int'l Arpt.	110	604.793	393.080	282.629	87.798	20.433	4.841	1.798
Los Angeles Int'l Arpt.	120	577.878	377.385	272.358	85.495	19.858	4.907	1.824
Los Angeles Int'l Arpt.	130	548.860	363.684	264.414	82.728	19.138	4.798	1.779
Los Angeles Int'l Arpt.	140	551.873	365.153	265.005	82.449	19.059	4.743	1.765
Los Angeles Int'l Arpt.	150	535.862	356.837	259.886	81.222	18.811	4.826	1.796
Los Angeles Int'l Arpt.	160	531.963	351.845	254.994	75.643	16.298	4.833	1.804
Los Angeles Int'l Arpt.	170	517.601	336.477	242.314	66.447	13.996	4.805	1.796
Los Angeles Int'l Arpt.	180	508.330	329.034	233.677	57.189	12.645	4.825	1.814
Los Angeles Int'l Arpt.	190	512.158	336.791	242.877	66.416	14.195	4.783	1.793
Los Angeles Int'l Arpt.	200	529.070	349.210	254.128	75.970	16.366	4.853	1.812
Los Angeles Int'l Arpt.	210	539.389	358.287	260.418	81.104	18.787	4.824	1.794
Los Angeles Int'l Arpt.	220	552.269	364.247	264.757	82.821	19.163	4.853	1.804

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Los Angeles Int'l Arpt.	230	561.648	367.355	265.284	82.089	18.948	4.772	1.774
Los Angeles Int'l Arpt.	240	577.281	378.378	273.521	85.157	19.743	4.808	1.786
Los Angeles Int'l Arpt.	250	602.865	392.604	282.492	87.857	20.444	4.884	1.811
Los Angeles Int'l Arpt.	260	636.961	411.469	293.371	90.725	21.221	4.850	1.798
Los Angeles Int'l Arpt.	270	649.458	415.717	294.682	88.603	19.872	4.795	1.783
Los Angeles Int'l Arpt.	280	635.583	410.477	292.619	90.395	21.142	4.927	1.829
Los Angeles Int'l Arpt.	290	615.390	394.402	283.301	87.971	20.479	4.876	1.812
Los Angeles Int'l Arpt.	300	575.238	375.899	270.975	84.681	19.646	4.841	1.794
Los Angeles Int'l Arpt.	310	576.275	380.358	274.785	85.049	19.763	4.801	1.783
Los Angeles Int'l Arpt.	320	549.724	364.766	264.937	82.446	19.083	4.821	1.790
Los Angeles Int'l Arpt.	330	540.473	359.274	261.291	81.541	18.891	4.946	1.842
Los Angeles Int'l Arpt.	340	537.820	355.379	256.947	75.696	16.307	4.866	1.813
Los Angeles Int'l Arpt.	350	523.409	342.469	246.192	67.020	14.009	4.582	1.707
Los Angeles Int'l Arpt.	360	512.168	328.519	231.905	58.686	12.419	4.636	1.741
Mission Viejo	10	546.318	344.817	241.122	63.808	13.548	5.058	1.388
Mission Viejo	20	572.494	343.564	247.163	72.531	18.193	5.895	1.785
Mission Viejo	30	565.874	365.304	259.700	78.453	18.446	4.045	1.157
Mission Viejo	40	581.806	375.778	267.363	80.908	19.020	4.513	1.411
Mission Viejo	50	577.239	370.567	262.190	79.768	18.455	3.081	0.810
Mission Viejo	60	573.800	371.372	265.719	81.424	18.840	3.540	1.048
Mission Viejo	70	597.791	383.317	272.586	83.452	19.384	5.152	1.536
Mission Viejo	80	626.255	397.709	280.863	85.814	20.038	5.152	1.536
Mission Viejo	90	633.207	400.583	281.755	83.856	18.820	3.639	1.062
Mission Viejo	100	627.415	398.729	281.758	86.072	20.094	3.618	1.002
Mission Viejo	110	599.830	384.536	273.427	83.627	19.409	3.791	1.029
Mission Viejo	120	574.738	371.656	266.004	81.640	18.890	3.707	1.007
Mission Viejo	130	587.715	373.781	263.988	79.768	18.666	5.435	1.600
Mission Viejo	140	578.338	367.776	259.297	78.697	18.121	5.435	1.600
Mission Viejo	150	535.646	350.630	252.725	77.669	17.905	2.913	0.600
Mission Viejo	160	524.760	341.963	245.767	72.000	15.454	2.562	0.699
Mission Viejo	170	506.339	325.089	231.693	64.061	11.918	3.144	0.977
Mission Viejo	180	499.342	316.845	222.378	55.811	8.511	1.947	0.470
Mission Viejo	190	511.851	328.918	233.817	62.584	11.987	1.500	0.520
Mission Viejo	200	526.301	342.920	246.439	72.186	15.490	1.572	0.546
Mission Viejo	210	536.436	351.397	253.438	78.023	17.998	1.646	0.567

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Mission Viejo	220	578.811	371.161	263.252	79.430	18.692	2.907	0.611
Mission Viejo	230	593.698	378.853	267.791	80.403	18.874	5.306	1.611
Mission Viejo	240	598.736	383.232	270.943	81.810	19.308	4.967	1.449
Mission Viejo	250	602.267	387.241	275.788	84.533	19.631	2.370	0.575
Mission Viejo	260	628.255	400.216	283.110	86.502	20.192	1.657	0.556
Mission Viejo	270	634.709	401.066	281.997	83.820	18.804	3.130	0.880
Mission Viejo	280	626.255	397.709	281.028	85.941	20.079	4.294	1.315
Mission Viejo	290	614.176	388.852	273.697	83.829	19.646	3.694	1.034
Mission Viejo	300	575.513	371.681	265.963	81.510	18.849	2.012	0.556
Mission Viejo	310	624.468	399.667	283.169	85.409	20.002	2.694	0.793
Mission Viejo	320	549.546	357.454	256.909	78.697	18.121	3.576	1.111
Mission Viejo	330	574.008	366.978	259.854	78.305	18.355	4.741	1.467
Mission Viejo	340	541.271	348.804	247.595	72.374	15.782	3.565	0.997
Mission Viejo	350	552.198	332.630	237.132	64.938	13.910	5.483	1.497
Mission Viejo	360	579.253	338.189	232.376	57.604	14.954	5.989	1.741
Ontario Arpt.	10	649.504	429.317	309.962	85.052	19.102	6.234	2.350
Ontario Arpt.	20	652.071	441.825	325.423	98.883	21.703	6.485	2.441
Ontario Arpt.	30	678.047	451.873	326.037	100.921	24.070	6.448	2.409
Ontario Arpt.	40	666.527	442.956	321.979	103.669	23.887	6.476	2.423
Ontario Arpt.	50	694.737	455.955	327.177	105.008	24.263	6.455	2.416
Ontario Arpt.	60	693.489	463.020	340.308	108.604	25.022	6.496	2.427
Ontario Arpt.	70	769.133	510.561	369.258	115.357	26.695	6.545	2.444
Ontario Arpt.	80	792.792	518.811	372.411	115.909	26.879	6.497	2.425
Ontario Arpt.	90	807.524	524.613	373.884	112.789	25.739	6.520	2.440
Ontario Arpt.	100	799.188	522.771	375.576	117.152	27.156	6.435	2.400
Ontario Arpt.	110	778.701	494.883	358.216	113.632	26.275	6.458	2.414
Ontario Arpt.	120	707.846	472.323	343.826	107.921	24.838	6.447	2.410
Ontario Arpt.	130	681.123	452.332	327.590	104.979	24.390	6.448	2.410
Ontario Arpt.	140	657.305	445.039	327.248	103.265	24.113	6.431	2.396
Ontario Arpt.	150	648.905	442.670	327.696	105.075	28.218	8.934	2.675
Ontario Arpt.	160	670.531	453.979	333.516	100.791	21.785	6.430	2.415
Ontario Arpt.	170	688.415	460.366	334.656	92.160	18.987	6.338	2.387
Ontario Arpt.	180	626.400	411.989	296.445	71.719	16.420	6.214	2.339
Ontario Arpt.	190	671.731	451.230	328.246	90.595	19.029	6.348	2.382
Ontario Arpt.	200	667.587	441.475	323.373	98.383	21.755	6.400	2.401

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Ontario Arpt.	210	690.623	466.574	341.206	106.357	24.328	6.404	2.393
Ontario Arpt.	220	712.190	476.477	346.557	107.696	24.788	6.415	2.399
Ontario Arpt.	230	729.053	481.309	345.290	107.545	24.684	6.454	2.419
Ontario Arpt.	240	715.497	477.131	348.521	110.223	25.360	6.484	2.430
Ontario Arpt.	250	844.385	556.268	400.184	123.954	28.564	6.271	2.323
Ontario Arpt.	260	811.582	530.195	379.621	118.594	27.494	6.359	2.349
Ontario Arpt.	270	863.865	548.714	383.454	116.473	25.819	6.490	2.426
Ontario Arpt.	280	819.640	519.952	375.681	118.085	27.369	6.279	2.339
Ontario Arpt.	290	822.950	544.825	393.255	122.583	28.318	6.423	2.400
Ontario Arpt.	300	743.175	479.231	348.941	110.455	25.453	6.254	2.330
Ontario Arpt.	310	691.632	463.786	338.808	106.728	24.480	6.303	2.352
Ontario Arpt.	320	672.170	454.780	334.021	106.026	24.346	6.276	2.346
Ontario Arpt.	330	702.993	472.220	345.599	109.165	25.085	6.487	2.431
Ontario Arpt.	340	651.630	440.843	323.814	97.801	21.475	6.234	2.335
Ontario Arpt.	350	647.998	431.897	313.832	86.532	18.737	6.042	2.273
Ontario Arpt.	360	641.171	423.108	302.877	72.702	16.333	6.282	2.369
Palm Springs Arpt.	10	592.111	388.129	279.026	75.827	15.623	5.128	1.920
Palm Springs Arpt.	20	618.813	410.336	297.233	87.886	18.812	5.169	1.927
Palm Springs Arpt.	30	603.837	402.722	294.117	92.294	21.274	5.298	1.969
Palm Springs Arpt.	40	616.962	410.878	299.229	93.489	21.513	5.382	2.002
Palm Springs Arpt.	50	633.729	419.432	304.832	95.083	21.881	5.230	1.939
Palm Springs Arpt.	60	665.961	440.035	318.191	98.868	22.810	5.142	1.906
Palm Springs Arpt.	70	674.857	442.877	319.171	99.370	23.005	5.330	1.975
Palm Springs Arpt.	80	710.665	459.228	327.893	101.814	23.712	5.250	1.934
Palm Springs Arpt.	90	729.571	466.569	331.384	99.656	22.215	5.305	1.968
Palm Springs Arpt.	100	713.628	460.682	328.141	101.383	23.585	5.400	2.003
Palm Springs Arpt.	110	685.959	448.983	322.818	100.126	23.174	5.277	1.958
Palm Springs Arpt.	120	637.042	419.708	304.530	95.261	21.986	5.291	1.960
Palm Springs Arpt.	130	633.387	412.586	294.436	89.740	20.689	5.292	1.964
Palm Springs Arpt.	140	611.230	403.900	293.115	91.097	20.948	5.313	1.976
Palm Springs Arpt.	150	604.482	402.145	292.390	90.965	20.957	5.318	1.978
Palm Springs Arpt.	160	603.329	394.578	281.721	82.878	17.782	5.345	1.999
Palm Springs Arpt.	170	647.504	424.601	304.665	82.433	15.921	5.333	1.993
Palm Springs Arpt.	180	567.831	368.159	261.581	62.295	13.941	5.154	1.933
Palm Springs Arpt.	190	570.803	378.316	274.381	75.656	15.767	5.234	1.937

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Palm Springs Arpt.	200	611.611	405.976	294.359	86.890	18.513	5.213	1.939
Palm Springs Arpt.	210	642.190	421.056	303.056	92.911	21.506	5.209	1.931
Palm Springs Arpt.	220	584.013	390.074	285.912	90.492	20.868	5.348	1.987
Palm Springs Arpt.	230	596.520	398.383	290.921	91.596	21.108	5.216	1.926
Palm Springs Arpt.	240	641.947	421.237	303.571	94.529	21.830	5.283	1.959
Palm Springs Arpt.	250	661.955	429.377	307.321	95.653	22.173	5.381	1.995
Palm Springs Arpt.	260	703.428	453.903	323.370	100.375	23.354	5.343	1.973
Palm Springs Arpt.	270	718.818	460.958	326.387	97.893	21.889	5.460	2.025
Palm Springs Arpt.	280	706.459	455.590	324.948	100.325	23.346	5.469	2.016
Palm Springs Arpt.	290	659.585	427.504	307.548	96.412	22.371	5.384	1.995
Palm Springs Arpt.	300	660.549	429.858	306.655	95.344	22.013	5.401	1.999
Palm Springs Arpt.	310	620.197	406.640	293.391	92.190	21.251	5.332	1.981
Palm Springs Arpt.	320	626.626	414.324	299.554	91.823	21.126	5.296	1.965
Palm Springs Arpt.	330	607.725	402.861	292.147	91.442	21.090	5.343	1.979
Palm Springs Arpt.	340	641.907	424.620	306.766	89.993	19.199	5.765	1.908
Palm Springs Arpt.	350	618.954	405.994	291.561	78.756	15.779	5.152	1.929
Palm Springs Arpt.	360	640.610	408.409	286.509	67.215	13.757	5.059	1.892
Perris	10	640.494	404.997	283.474	74.662	14.536	4.847	1.415
Perris	20	658.164	423.836	301.012	86.640	18.781	3.544	1.298
Perris	30	618.951	396.124	284.519	89.012	20.507	3.640	1.324
Perris	40	679.281	440.055	313.958	95.317	22.184	3.870	1.349
Perris	50	701.790	453.640	323.219	98.243	22.886	4.469	1.362
Perris	60	682.369	418.501	298.768	92.706	21.378	3.620	1.315
Perris	70	721.544	454.685	318.378	94.960	22.140	3.596	1.311
Perris	80	759.480	477.468	334.486	101.568	24.022	3.615	1.309
Perris	90	704.472	451.438	319.530	95.777	21.388	3.529	1.287
Perris	100	691.910	446.228	317.995	98.176	22.857	3.536	1.280
Perris	110	659.349	429.782	308.531	95.611	22.145	3.648	1.322
Perris	120	646.275	415.642	300.330	93.424	21.565	3.712	1.359
Perris	130	679.540	436.767	309.420	92.487	21.435	4.651	1.403
Perris	140	664.688	429.729	306.145	92.647	21.553	4.428	1.413
Perris	150	665.679	424.130	297.794	89.395	20.589	3.834	1.405
Perris	160	665.679	424.130	297.794	86.347	18.755	3.803	1.397
Perris	170	646.917	411.257	289.547	76.659	14.900	3.704	1.372
Perris	180	615.476	381.420	262.171	64.202	10.967	3.844	1.429

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Perris	190	646.099	410.346	288.380	75.837	14.705	3.621	1.332
Perris	200	659.930	421.850	297.449	83.863	18.067	3.719	1.370
Perris	210	679.020	437.322	310.222	92.551	21.388	3.682	1.344
Perris	220	682.453	441.499	314.684	95.309	22.155	3.707	1.353
Perris	230	702.862	454.469	323.856	98.459	22.940	5.709	1.761
Perris	240	630.490	414.426	299.201	92.856	21.412	3.839	1.373
Perris	250	654.862	426.451	305.952	94.721	21.937	3.704	1.343
Perris	260	746.468	463.474	321.214	98.357	22.882	3.727	1.354
Perris	270	736.970	452.229	318.803	95.374	21.281	3.520	1.280
Perris	280	753.436	471.961	329.667	99.317	23.421	3.336	1.200
Perris	290	719.787	458.067	323.007	97.939	23.019	3.554	1.279
Perris	300	682.810	434.237	306.222	92.659	21.446	4.324	1.338
Perris	310	684.950	439.901	311.531	93.059	21.551	4.576	1.362
Perris	320	681.393	441.268	314.666	95.344	22.163	3.743	1.298
Perris	330	684.114	443.216	316.207	95.935	22.313	4.595	1.319
Perris	340	657.980	423.609	301.065	86.947	18.859	3.771	1.385
Perris	350	656.023	416.802	292.963	77.190	15.006	3.849	1.427
Perris	360	644.530	402.016	278.241	71.463	10.724	3.800	1.405
Pico Rivera	10	478.965	285.177	202.573	55.113	11.726	4.250	1.278
Pico Rivera	20	489.809	306.183	213.410	61.832	13.421	3.148	1.002
Pico Rivera	30	489.809	306.183	219.195	67.016	15.583	2.886	0.860
Pico Rivera	40	480.930	310.024	221.486	67.309	15.616	2.637	0.817
Pico Rivera	50	532.023	336.690	236.832	70.649	16.716	4.367	1.359
Pico Rivera	60	515.684	320.750	228.229	69.498	16.193	3.117	0.760
Pico Rivera	70	522.311	332.105	234.828	71.467	16.723	2.910	0.925
Pico Rivera	80	542.386	342.295	240.878	73.237	17.226	2.211	0.583
Pico Rivera	90	541.415	340.321	238.532	70.781	16.035	2.483	0.696
Pico Rivera	100	543.657	342.943	241.629	73.559	17.499	2.388	0.621
Pico Rivera	110	520.628	330.360	233.529	70.765	16.532	2.016	0.474
Pico Rivera	120	502.496	322.180	229.264	69.831	16.266	2.136	0.617
Pico Rivera	130	488.571	314.053	223.912	68.019	15.795	1.827	0.559
Pico Rivera	140	484.897	306.941	219.255	66.616	15.461	1.725	0.530
Pico Rivera	150	468.816	302.709	216.391	65.795	15.285	1.407	0.440
Pico Rivera	160	455.806	293.345	209.411	61.422	13.218	1.415	0.440
Pico Rivera	170	442.751	283.621	201.380	56.701	10.495	1.407	0.440

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Pico Rivera	180	430.585	272.862	191.811	50.224	7.400	1.407	0.440
Pico Rivera	190	440.846	282.554	200.591	53.961	10.454	1.407	0.440
Pico Rivera	200	493.785	309.461	215.641	62.621	13.391	1.428	0.440
Pico Rivera	210	500.888	316.369	222.075	67.168	15.620	1.935	0.570
Pico Rivera	220	484.562	310.330	221.787	67.481	15.736	1.935	0.570
Pico Rivera	230	511.640	315.104	224.894	68.470	15.912	2.477	0.653
Pico Rivera	240	546.345	344.976	242.625	73.068	17.374	3.016	0.959
Pico Rivera	250	532.478	331.912	234.613	71.361	16.691	2.279	0.601
Pico Rivera	260	541.603	342.571	241.354	73.471	17.294	1.562	0.440
Pico Rivera	270	544.924	342.563	240.265	71.395	16.178	2.403	0.536
Pico Rivera	280	540.087	340.599	239.893	73.070	17.202	3.523	0.983
Pico Rivera	290	565.215	354.720	248.514	75.010	17.918	3.378	0.919
Pico Rivera	300	518.053	322.316	228.630	69.630	16.334	3.506	0.951
Pico Rivera	310	534.590	338.445	238.109	71.042	16.808	4.152	1.266
Pico Rivera	320	499.869	317.300	223.765	68.093	15.925	2.255	0.653
Pico Rivera	330	469.382	304.451	218.364	66.734	15.514	2.873	0.860
Pico Rivera	340	458.852	296.889	212.411	61.910	13.431	3.231	0.908
Pico Rivera	350	450.806	286.528	203.539	56.900	12.334	4.201	1.325
Pico Rivera	360	571.323	332.609	213.343	50.236	15.621	5.850	1.813
Redlands	10	576.613	376.579	270.751	73.544	13.947	4.128	1.474
Redlands	20	588.707	389.680	282.468	83.745	17.924	3.823	1.329
Redlands	30	633.441	416.761	299.889	91.025	20.882	4.467	1.648
Redlands	40	627.425	402.005	290.147	89.277	20.554	5.255	1.646
Redlands	50	642.785	422.245	302.740	91.891	21.146	4.698	1.724
Redlands	60	702.885	456.924	325.898	98.220	22.459	4.316	1.572
Redlands	70	662.181	431.540	309.641	95.781	22.158	4.843	1.787
Redlands	80	709.941	457.530	325.181	99.551	23.099	4.806	1.768
Redlands	90	735.347	469.947	331.745	98.622	21.960	4.767	1.765
Redlands	100	736.785	471.812	333.569	101.480	23.621	4.673	1.717
Redlands	110	680.453	436.071	312.778	96.804	22.414	4.635	1.704
Redlands	120	636.207	416.048	298.928	92.310	21.315	4.632	1.709
Redlands	130	617.736	408.070	295.555	91.784	21.142	4.085	1.439
Redlands	140	615.451	401.661	289.373	88.503	20.355	4.622	1.702
Redlands	150	602.479	397.398	288.809	89.783	20.671	4.214	1.371
Redlands	160	611.678	403.666	291.523	85.771	18.353	3.954	1.232

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Redlands	170	579.258	377.362	270.291	73.093	13.907	4.482	1.670
Redlands	180	564.701	361.492	254.649	63.685	12.200	4.419	1.653
Redlands	190	568.385	373.163	268.840	73.247	14.183	5.149	1.698
Redlands	200	566.930	371.606	267.069	79.859	17.144	5.541	1.644
Redlands	210	606.104	404.772	294.310	91.452	21.119	4.867	1.746
Redlands	220	611.676	408.270	297.215	92.705	21.381	5.735	1.790
Redlands	230	621.010	409.257	295.831	91.478	21.052	4.624	1.710
Redlands	240	651.272	415.215	300.166	93.320	21.512	4.779	1.731
Redlands	250	652.837	417.081	299.160	93.337	21.641	5.190	1.713
Redlands	260	708.194	457.382	325.942	100.653	23.467	4.614	1.700
Redlands	270	716.497	457.051	324.107	97.390	21.744	5.477	1.673
Redlands	280	709.317	449.416	318.363	97.683	22.803	4.544	1.667
Redlands	290	678.989	433.692	311.235	96.565	22.351	4.447	1.629
Redlands	300	657.823	417.741	298.207	92.508	21.366	4.021	1.459
Redlands	310	632.875	416.380	299.982	92.691	21.323	3.052	1.048
Redlands	320	607.183	402.861	292.661	90.985	20.910	3.362	1.149
Redlands	330	596.310	395.093	286.617	89.245	20.546	4.200	1.541
Redlands	340	584.242	384.328	277.218	81.605	17.450	3.602	1.249
Redlands	350	614.221	383.305	269.975	73.641	14.090	3.996	1.483
Redlands	360	633.248	400.669	278.982	64.709	12.063	4.449	1.653
Riverside Arpt.	10	581.233	381.838	274.554	74.573	14.541	4.583	1.711
Riverside Arpt.	20	585.687	387.514	280.828	83.250	17.821	4.316	1.598
Riverside Arpt.	30	661.657	433.936	311.693	95.142	21.984	5.265	1.628
Riverside Arpt.	40	654.897	431.263	310.635	95.317	22.030	4.748	1.755
Riverside Arpt.	50	688.876	454.024	327.394	100.737	23.171	4.864	1.803
Riverside Arpt.	60	698.454	453.881	323.672	97.547	22.317	4.901	1.678
Riverside Arpt.	70	673.005	437.533	311.569	95.258	22.082	6.079	1.764
Riverside Arpt.	80	711.703	457.234	324.501	99.179	23.042	4.875	1.797
Riverside Arpt.	90	731.616	467.406	329.901	98.066	21.844	4.872	1.805
Riverside Arpt.	100	738.288	472.739	334.215	101.672	23.659	4.787	1.767
Riverside Arpt.	110	671.009	433.950	311.679	96.658	22.405	5.422	1.787
Riverside Arpt.	120	650.172	418.086	301.254	93.528	21.583	4.602	1.697
Riverside Arpt.	130	629.644	406.347	293.623	91.142	21.000	4.451	1.635
Riverside Arpt.	140	626.504	401.572	290.373	90.606	20.832	4.801	1.680
Riverside Arpt.	150	646.144	420.770	299.947	89.797	20.596	4.704	1.739

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Riverside Arpt.	160	605.754	399.189	288.063	84.672	18.134	4.629	1.721
Riverside Arpt.	170	577.305	376.045	269.477	73.305	13.914	4.446	1.653
Riverside Arpt.	180	561.432	359.273	253.038	63.325	12.355	4.547	1.689
Riverside Arpt.	190	575.815	375.347	268.922	72.883	14.292	4.686	1.740
Riverside Arpt.	200	614.044	404.482	291.184	85.340	18.383	4.848	1.776
Riverside Arpt.	210	602.938	402.443	292.525	90.860	20.988	4.722	1.746
Riverside Arpt.	220	609.336	406.498	295.835	92.234	21.275	4.724	1.746
Riverside Arpt.	230	629.513	416.009	300.642	92.552	21.251	4.722	1.746
Riverside Arpt.	240	632.878	415.288	299.832	93.037	21.470	4.767	1.762
Riverside Arpt.	250	674.205	440.760	316.849	98.398	22.801	4.724	1.744
Riverside Arpt.	260	754.931	481.116	338.511	101.773	23.588	4.711	1.727
Riverside Arpt.	270	730.748	466.353	327.994	98.285	22.074	4.802	1.780
Riverside Arpt.	280	734.225	473.488	336.095	103.101	24.066	4.612	1.694
Riverside Arpt.	290	692.212	448.422	318.948	96.482	22.229	4.723	1.739
Riverside Arpt.	300	734.082	474.512	337.028	101.127	23.204	4.722	1.745
Riverside Arpt.	310	686.085	450.346	325.216	100.316	23.142	4.703	1.738
Riverside Arpt.	320	608.193	401.391	290.779	90.358	20.771	4.753	1.759
Riverside Arpt.	330	656.550	434.385	314.721	97.188	22.321	4.517	1.667
Riverside Arpt.	340	615.341	391.241	280.852	83.465	17.853	4.433	1.641
Riverside Arpt.	350	576.745	376.403	269.922	73.043	14.358	4.938	1.846
Riverside Arpt.	360	584.631	366.613	256.632	64.432	12.127	4.467	1.660
Santa Monica Arpt.	10	513.453	321.659	229.388	61.802	11.916	3.066	1.128
Santa Monica Arpt.	20	515.244	335.646	240.491	69.811	15.085	3.669	1.138
Santa Monica Arpt.	30	515.292	336.137	241.940	74.927	17.372	3.235	1.181
Santa Monica Arpt.	40	528.389	345.063	248.325	76.272	17.667	3.943	1.180
Santa Monica Arpt.	50	539.651	351.089	251.917	77.178	17.889	3.545	1.181
Santa Monica Arpt.	60	555.259	359.488	257.125	78.790	18.300	4.377	1.310
Santa Monica Arpt.	70	577.798	370.847	264.510	81.248	18.942	3.412	1.164
Santa Monica Arpt.	80	639.846	408.589	288.547	88.304	20.869	3.180	1.150
Santa Monica Arpt.	90	632.742	396.929	277.366	81.623	18.411	3.944	1.115
Santa Monica Arpt.	100	614.499	391.470	276.603	84.249	19.719	3.039	1.105
Santa Monica Arpt.	110	585.384	377.222	268.815	82.478	19.227	3.078	1.115
Santa Monica Arpt.	120	588.200	381.315	272.587	83.442	19.405	2.935	1.060
Santa Monica Arpt.	130	540.228	353.099	253.351	77.427	18.012	3.113	1.132
Santa Monica Arpt.	140	558.320	364.914	261.977	80.061	18.615	2.923	1.056

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Santa Monica Arpt.	150	539.842	354.577	255.352	78.365	18.228	3.235	1.180
Santa Monica Arpt.	160	540.485	350.663	250.283	72.129	15.542	3.063	1.122
Santa Monica Arpt.	170	516.809	331.685	234.453	62.883	12.164	3.042	1.121
Santa Monica Arpt.	180	504.542	320.143	224.433	56.366	9.113	3.100	1.147
Santa Monica Arpt.	190	512.408	331.917	236.960	63.902	12.320	3.073	1.110
Santa Monica Arpt.	200	508.222	331.679	238.433	69.892	15.089	3.160	1.156
Santa Monica Arpt.	210	540.629	350.288	251.636	76.800	17.822	3.105	1.129
Santa Monica Arpt.	220	547.961	358.307	257.049	78.270	18.160	3.084	1.124
Santa Monica Arpt.	230	599.969	387.745	276.199	83.520	19.384	3.077	1.120
Santa Monica Arpt.	240	557.751	361.651	259.182	79.648	18.488	2.988	1.078
Santa Monica Arpt.	250	573.624	367.906	262.373	80.723	18.833	3.081	1.116
Santa Monica Arpt.	260	602.666	384.114	271.749	83.215	19.544	3.168	1.149
Santa Monica Arpt.	270	607.503	385.793	271.794	81.078	18.240	3.108	1.132
Santa Monica Arpt.	280	604.616	384.744	271.964	83.126	19.493	3.145	1.139
Santa Monica Arpt.	290	607.704	388.857	275.558	83.843	19.558	3.205	1.162
Santa Monica Arpt.	300	551.207	357.441	255.959	78.577	18.249	3.753	1.121
Santa Monica Arpt.	310	537.824	347.600	249.702	76.838	17.789	3.127	1.135
Santa Monica Arpt.	320	527.903	343.266	246.138	74.961	17.335	2.992	1.084
Santa Monica Arpt.	330	521.972	336.759	240.162	73.850	17.125	4.306	1.148
Santa Monica Arpt.	340	505.633	330.271	237.573	69.887	15.085	3.315	1.095
Santa Monica Arpt.	350	494.878	319.054	227.175	60.912	11.723	2.929	1.075
Santa Monica Arpt.	360	513.453	321.659	222.704	56.436	9.196	3.079	1.139
Upland	10	555.373	345.876	239.980	63.174	12.070	2.793	0.750
Upland	20	555.373	345.876	245.990	71.955	15.439	2.554	0.674
Upland	30	538.038	349.286	251.434	77.169	17.789	3.822	1.069
Upland	40	550.750	358.150	257.230	78.714	18.122	3.028	0.915
Upland	50	561.055	364.068	261.063	79.916	18.425	3.495	0.954
Upland	60	611.698	386.244	271.072	81.271	18.947	4.127	1.261
Upland	70	598.834	383.543	272.526	83.246	19.321	3.901	1.164
Upland	80	626.468	397.965	281.130	85.801	20.033	3.624	0.978
Upland	90	645.363	401.670	282.193	83.845	18.833	3.848	1.183
Upland	100	627.698	398.667	281.537	85.816	20.024	3.728	1.053
Upland	110	607.091	383.543	272.526	83.246	19.321	3.950	1.212
Upland	120	597.761	380.200	268.225	81.414	19.134	3.836	0.999
Upland	130	562.165	364.808	261.616	80.103	18.472	3.203	0.874

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Upland	140	553.217	357.852	257.001	78.637	18.104	2.558	0.714
Upland	150	574.559	364.124	256.266	78.343	18.070	2.394	0.714
Upland	160	552.555	355.209	252.039	72.840	16.058	3.199	0.684
Upland	170	532.439	337.016	237.260	64.983	14.553	5.052	1.475
Upland	180	554.323	341.406	234.907	58.933	10.880	4.156	1.063
Upland	190	546.571	342.042	238.299	63.932	12.307	2.771	0.812
Upland	200	572.130	353.008	247.315	72.389	15.533	4.951	1.463
Upland	210	608.407	387.571	273.800	81.780	19.093	4.951	1.463
Upland	220	552.614	357.603	256.809	78.572	18.090	2.576	0.770
Upland	230	561.542	364.421	261.334	80.007	18.446	2.120	0.596
Upland	240	576.691	372.635	266.372	81.561	18.857	3.009	0.817
Upland	250	622.700	390.231	272.968	82.243	19.365	3.009	0.817
Upland	260	622.159	394.920	278.858	85.058	19.862	2.872	0.832
Upland	270	652.561	402.430	280.564	83.325	18.739	2.608	0.719
Upland	280	622.953	394.720	278.198	84.657	19.756	1.892	0.484
Upland	290	587.508	373.630	265.074	80.913	18.804	1.942	0.560
Upland	300	570.809	368.203	262.872	80.275	18.549	1.680	0.462
Upland	310	589.492	374.574	263.399	77.861	18.191	2.048	0.635
Upland	320	614.264	391.550	276.708	82.720	19.302	3.078	0.978
Upland	330	577.430	356.281	250.972	76.828	17.700	2.876	0.810
Upland	340	512.649	333.122	238.925	69.750	14.983	1.701	0.462
Upland	350	516.291	331.570	235.612	63.320	12.060	1.476	0.462
Upland	360	492.585	311.580	218.245	56.352	8.367	2.268	0.595
USC/Downtown L.A.	10	555.030	358.365	254.880	68.522	13.060	3.593	0.938
USC/Downtown L.A.	20	562.801	368.086	264.743	77.494	16.603	2.991	0.700
USC/Downtown L.A.	30	592.076	387.124	278.295	85.022	19.559	2.440	0.656
USC/Downtown L.A.	40	602.648	393.365	282.960	86.681	19.938	2.976	0.746
USC/Downtown L.A.	50	614.124	399.781	286.461	87.395	20.132	4.794	1.304
USC/Downtown L.A.	60	631.676	408.685	292.512	89.748	20.723	3.708	1.082
USC/Downtown L.A.	70	657.404	421.964	299.537	91.465	21.217	3.962	1.230
USC/Downtown L.A.	80	675.915	429.241	303.600	92.951	21.713	3.721	1.090
USC/Downtown L.A.	90	687.531	435.333	306.198	91.214	20.482	3.345	0.937
USC/Downtown L.A.	100	683.125	434.911	306.890	93.513	21.845	2.690	0.798
USC/Downtown L.A.	110	653.006	417.949	297.275	90.856	21.058	2.766	0.833
USC/Downtown L.A.	120	632.879	408.930	291.561	88.740	20.492	2.924	0.803

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
USC/Downtown L.A.	130	606.811	395.355	283.751	86.863	20.006	3.122	0.892
USC/Downtown L.A.	140	602.738	393.235	282.629	86.448	19.873	1.721	0.475
USC/Downtown L.A.	150	589.748	385.841	277.525	84.919	19.547	1.464	0.473
USC/Downtown L.A.	160	575.464	374.176	267.923	77.890	16.698	1.821	0.555
USC/Downtown L.A.	170	558.237	359.730	255.783	68.331	13.047	2.013	0.531
USC/Downtown L.A.	180	542.473	343.367	240.155	62.497	9.174	1.732	0.453
USC/Downtown L.A.	190	557.701	360.758	257.299	69.138	13.182	1.481	0.449
USC/Downtown L.A.	200	574.258	373.296	267.214	77.711	16.661	1.374	0.451
USC/Downtown L.A.	210	585.007	383.088	275.740	84.405	19.407	1.665	0.465
USC/Downtown L.A.	220	587.948	384.194	276.152	84.437	19.437	2.723	0.784
USC/Downtown L.A.	230	591.821	385.746	276.694	84.365	19.385	2.723	0.784
USC/Downtown L.A.	240	618.542	400.640	286.224	87.507	20.188	2.498	0.752
USC/Downtown L.A.	250	652.415	418.877	297.483	90.746	21.048	2.301	0.655
USC/Downtown L.A.	260	652.146	418.631	296.528	90.887	21.310	2.084	0.596
USC/Downtown L.A.	270	678.838	427.251	299.018	88.006	19.699	1.586	0.464
USC/Downtown L.A.	280	667.871	425.785	300.762	91.753	21.420	1.885	0.558
USC/Downtown L.A.	290	656.229	420.935	298.632	90.895	21.080	1.879	0.472
USC/Downtown L.A.	300	633.849	409.623	292.127	89.482	20.648	2.010	0.528
USC/Downtown L.A.	310	612.292	399.690	287.244	88.112	20.285	4.585	1.199
USC/Downtown L.A.	320	575.652	376.567	271.420	83.393	19.225	5.297	1.506
USC/Downtown L.A.	330	590.769	385.805	277.025	84.493	19.458	3.155	0.856
USC/Downtown L.A.	340	573.616	373.199	267.953	78.074	16.692	3.016	0.798
USC/Downtown L.A.	350	560.344	359.733	254.478	71.575	13.003	2.831	0.804
USC/Downtown L.A.	360	532.392	340.413	239.858	62.506	9.002	2.728	0.604
Van Nuys Arpt.	10	558.302	365.479	264.072	72.342	13.756	4.517	1.685
Van Nuys Arpt.	20	592.389	392.286	283.480	83.593	18.035	4.551	1.697
Van Nuys Arpt.	30	597.720	384.318	280.689	88.215	20.383	4.461	1.652
Van Nuys Arpt.	40	658.752	436.741	315.843	97.024	22.288	4.485	1.663
Van Nuys Arpt.	50	614.608	399.740	288.973	90.061	20.797	4.464	1.652
Van Nuys Arpt.	60	626.171	411.689	297.042	92.188	21.349	4.629	1.676
Van Nuys Arpt.	70	725.166	472.205	337.669	104.025	24.173	4.582	1.692
Van Nuys Arpt.	80	731.068	463.729	325.032	100.088	23.486	4.589	1.687
Van Nuys Arpt.	90	706.819	455.542	323.352	97.210	21.747	4.597	1.706
Van Nuys Arpt.	100	683.826	442.860	316.402	98.507	23.039	4.662	1.726
Van Nuys Arpt.	110	652.865	429.447	308.992	96.072	22.419	4.650	1.720

Table 3: Hourly Receptor Proximity Adjustment Factors $\left(\frac{\mu g/m^3}{lb/hr}\right)$ cont'd

Met Station	Angle	50 M	75 M	100 M	200 M	300 M	500 M	1,000 M
Van Nuys Arpt.	120	622.516	412.135	297.765	92.985	21.521	4.659	1.724
Van Nuys Arpt.	130	616.357	406.555	292.462	90.401	20.877	4.583	1.699
Van Nuys Arpt.	140	632.597	415.919	299.022	92.257	21.280	4.514	1.669
Van Nuys Arpt.	150	637.603	420.278	302.227	91.647	21.047	4.516	1.664
Van Nuys Arpt.	160	605.417	403.244	292.414	86.598	18.637	4.569	1.702
Van Nuys Arpt.	170	564.595	371.010	267.227	72.893	13.888	4.488	1.672
Van Nuys Arpt.	180	601.593	378.819	262.689	61.024	11.975	4.535	1.701
Van Nuys Arpt.	190	601.593	378.819	262.689	71.059	13.643	4.482	1.668
Van Nuys Arpt.	200	552.865	362.991	263.745	78.847	16.950	4.433	1.650
Van Nuys Arpt.	210	567.556	376.987	274.109	85.194	19.692	4.482	1.662
Van Nuys Arpt.	220	595.902	395.564	287.344	89.335	20.581	4.467	1.645
Van Nuys Arpt.	230	592.632	390.765	283.514	88.957	20.534	4.610	1.711
Van Nuys Arpt.	240	633.214	414.703	299.160	93.212	21.555	4.626	1.709
Van Nuys Arpt.	250	639.235	415.988	297.654	93.230	21.646	4.434	1.638
Van Nuys Arpt.	260	680.823	441.840	315.877	97.901	22.829	4.589	1.689
Van Nuys Arpt.	270	684.276	442.358	314.657	94.888	21.199	4.567	1.693
Van Nuys Arpt.	280	671.009	435.283	311.742	96.907	22.588	4.645	1.720
Van Nuys Arpt.	290	650.303	424.821	305.275	94.676	21.944	4.642	1.720
Van Nuys Arpt.	300	619.218	409.041	296.153	92.337	21.351	4.641	1.722
Van Nuys Arpt.	310	607.361	400.941	290.100	89.883	20.742	4.644	1.724
Van Nuys Arpt.	320	613.330	409.890	298.947	93.583	21.574	4.589	1.702
Van Nuys Arpt.	330	581.125	388.721	283.205	88.614	20.500	4.609	1.712
Van Nuys Arpt.	340	572.079	374.397	271.579	81.056	17.381	5.158	1.678
Van Nuys Arpt.	350	558.115	364.863	262.802	72.374	13.764	4.664	1.741
Van Nuys Arpt.	360	546.746	353.689	249.904	60.581	11.944	4.526	1.692

South Coast Air Quality Management District

South Coast AQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402

Updated ~~October 2016~~October 2020

Table of Contents

I. Introduction

The Air Toxics "Hot Spots" Information and Assessment Act of 1987 (AB 2588) and its subsequent amendments established a statewide program to inventory ~~air toxics~~ emissions of toxic air contaminants (TACs) from individual facilities as well as requirements for risk assessment, public notification of potential health risks, and risk reduction. South Coast Air Quality Management District (South Coast AQMD) Rule 1402 – Control of Toxic Air Contaminants from Existing Sources establishes facility-wide requirements for existing facilities that emit toxic air contaminants (TACs) and implements AB 2588. This document specifies the South Coast AQMD's public notification procedures for any facility with an approved Health Risk Assessment (HRA) exceeding the Notification Risk Level of Rule 1402. ~~that a facility must follow if the facility has an approved Health Risk Assessment that shows a cancer risk greater than or equal to the Rule 1402 Notification Risk Level of ten in one million (10 x 10-6), a total acute or chronic Hazard Index (HI) of one (1.0) for any target organ system at any receptor location, or if the facility exceeds the more stringent of either the National Ambient Air Quality Standard (NAAQS) for lead or applicable ambient lead limit in an South Coast AQMD rule.~~ This document also provides the public notification procedures for a facility that is participating in the Voluntary Risk Reduction Program under Rule 1402. The public notification procedures in this document apply to all AB 2588 and Rule 1402 facilities except for facilities in the industrywide inventory program.[1] Compliance with AB 2588 and Rule 1402 Public Notification requirements does not replace Proposition 65 and its Public Notification requirements or any other regulatory requirements. For questions regarding the public notification procedures, please contact the AB 2588 Section at (909) 396-3616 or AB2588@aqmd.gov.

II. Background

Facility owners or operators subject to AB 2588 must submit a comprehensive air toxics emissions inventory every four years (referred to as a "quadrennial update"). Based on this quadrennial update, along with other parameters such as receptor distance, potency, and multi-pathway exposures, the South Coast AQMD staff prioritizes the facility and calculates a Total Facility Score.[2] Upon initial prioritization of facilities, the South Coast AQMD staff conducts further auditing to verify the Total Facility Score. If the Total Facility Score is greater than 10, the South Coast AQMD staff notifies the facility that they are subject to Rule 1402 and they will be required to prepare an Air Toxics Inventory Report and ~~Health Risk Assessment~~HRA. If the health risk reported in the approved ~~Health Risk Assessment~~HRA is greater than or equal to the Rule 1402 Notification Risk Level, then the facility owner or operator must provide public notification. Public notification is also required for facilities that elect to participate in the Rule 1402 Voluntary Risk Reduction Program. Public notification informs the public of their exposure to toxic air contaminants from facilities and the potential health risks associated with those exposures.

Under Health and Safety Code Section 44362(b), the operator of a facility must provide notice to all exposed persons if, in the judgment of the local air district, the facility's AB 2588 ~~Health Risk~~

[1] Separate notification procedures were approved by the South Coast AQMD Governing Board in January 2007 for three industry-wide categories, including gas stations, dry cleaners using perchloroethylene, and emergency diesel engines. (Available here: http://www3.aqmd.gov/hb/2007/January/070128a.html)

[2] Total Facility Scores are calculated using South Coast AQMD's "Facility Prioritization Procedures for AB 2588".

~~Assessment~~HRA indicates there is a "significant health risk" associated with air toxic emissions from the facility. ~~The notice is to be made in accordance with procedures specified by the district.~~ The South Coast AQMD Governing Board adopted the Rule 1402 Notification Risk Level which represents the "significant health risk" levels requiring public notification under AB 2588. Health and Safety Code Section 44362(b) specifies that the notification threshold and notification procedures be determined by each local air district.

III. ~~Health Risk Thresholds for~~When Public Notification Is Required

Rule 1402 establishes the health risk thresholds and specific conditions in which public notification is required. ~~This document establishes the public notification procedures~~ for an owner or operator ~~of a facility that is subject to public notification requirements under Rule 1402 subdivision (q) must follow. Facility owners or operators required to conduct public notification will receive a notice to perform public notification from the Executive Officer by certified mail.~~ Pursuant to Rule 1402, there are two scenarios when public notification is required ~~(Table 1)~~:

- An ~~Approved~~ approved ~~Health Risk Assessment~~HRA shows the total facility risk ~~that~~ is greater than or equal to the Rule 1402 Notification Risk Level pursuant to ~~(~~Rule 1402~~, paragraph~~ (q)(1)~~)~~; or
- Total facility risk as determined through a Risk Reduction Plan Progress Report is greater than or equal to the Action Risk Level ~~(~~pursuant to Rule 1402~~, paragraph~~ (q)(2)~~)~~.

Facility owners or operators required to conduct public notification will receive a directive from South Coast AQMD to perform public notification by certified mail. For approved HRAs, this notification may be in the form of the HRA approval. The following sub-sections provides more details regarding the public notification procedures for these two scenarios.

Public Notification for an Approved Health Risk Assessment ~~that is Greater than or Equal to the Rule 1402 Notification Risk Level~~

Pursuant to paragraph (q)(1) of Rule 1402, an owner or operator of any facility is required to provide public notification if the total facility risk, as determined through a ~~District~~ South Coast AQMD approved or prepared ~~Health Risk Assessment~~HRA, is greater than or equal to the Notification Risk Level. The Rule 1402 Notification Risk Level is:

- A Maximum Individual Cancer Risk (MICR) of ten chances in ~~-~~one ~~-~~million (10×10^{-6});
- A total acute or chronic HI of one (1.0) for any target organ system at any receptor location; or
- The more stringent of either the NAAQS for lead or the applicable ambient lead concentration in a South Coast AQMD rule.

There are three public notification components that the owner or operator must provide: Distribute Health Risk Assessment (see Section IV), Distribute Public Notification Materials (see Section V), and Public Meetings (see Section VI).

Public Notification for a Progress Report ~~that is Greater than or Equal to the Action Risk Level~~

Under Rule 1402, a facility that is implementing a Risk Reduction Plan is required to submit for review annual progress reports. Pursuant to paragraph (q)(2) of Rule 1402, an owner or operator of any facility for which total facility risk, as determined through a Progress Report is greater than or equal to the Action Risk Level shall provide written public notification 12 months after the Executive Officer approves the Risk Reduction Plan and every 12 months thereafter, until the total facility risk is below the Action Risk Level. The Rule 1402 Action Risk Level is:

- A MICR of twenty-five chances in one million (25×10^{-6});
- A 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 NAAQS for lead.

For Progress Reports where the health risk is greater than the Action Risk Level, there is one public notification component: Distribute Public Notification Materials (see Section V).

~~In addition to Health Risk Assessment distribution,~~ Rule 1402 requires that an owner or operator of any facility for which total facility risk, as determined through a Progress Report, is greater than or equal to the Significant Risk Level[3] shall have public meetings conducted by South Coast AQMD. Under Rule 1402, the Significant Risk Level is:

- A MICR of one hundred chances in one million (100×10^{-6}); or
- A total acute or chronic HI of five (5.0) for any target organ system at any receptor location.

For Progress Reports where the health risk is greater than or equal to the Significant Risk Level, there are two public notification components: Distribute Public Notification Materials (see Section V) and Public Meetings (see Section VI).

Table 1 — Summary of Threshold Requirements for Public Notifications

Thresholds and Requirements for Public Notifications	~~Health Risk Assessment~~ Distribution of Health Risk	Distribution of Public Notification Materials	Public Meetings
Approved Health Risk Assessment ≥ Notification Risk Threshold	Yes	Yes	Yes
Progress Report ≥ Action Risk Threshold	No	Yes	No

[3] The Significant Risk Level under Rule 1402 is a separate definition than the "significant health risk" of Health and Safety Code Section 44362(b).

Progress Report ≥ Significant Risk Threshold	No	Yes	Yes

IV. ~~Procedures to Distribute~~ Making Health Risk Assessments Available to the Publics

~~This section discusses the procedures for Health Risk Assessment Distribution (summarized in Table 2). Health Risk Assessment Distribution is required after the approved Health Risk Assessment determines the health risk is greater than or equal the Notification Risk Level.~~ Within ~~30~~ 10 days of the directive to conduct ~~date of notice to perform~~ public notification, the owner or operator shall provide to South Coast AQMD staff a copy of the approved HRA with any required redactions of trade secrets. The copy shall be provided in softcopy and one hardcopy report. South Coast AQMD staff will maintain the hardcopy report at the South Coast AQMD Library for no less than 18 months following approval of the HRA. South Coast AQMD staff will also provide the HRA, with any necessary redactions, along with the HRA approval letter on South Coast AQMD website. These documents shall also be available on the website for no less than 18 months following approval of the HRA.. ~~must distribute a copy of the facility's approved Health Risk Assessment, with a cover letter provided by the South Coast AQMD (sample provided in Appendix D) to all school libraries and schools[4] in the area of impact and the public library closest to the facility. Proof of Health Risk Assessment distribution will be submitted along with proof of Public Notification Materials distribution. The facility owner or operator must verify distribution of Health Risk Assessment and Public Notification Materials using the verification form provided in Appendix A within 15 days of the date of Public Notification Materials distribution.~~

~~In addition, within 15 days of the date of Health Risk Assessment approval, South Coast AQMD staff will post the approved Health Risk Assessment (or an approved version with Business Confidential Information redacted, if appropriate) and the Health Risk Assessment approval letter on the South Coast AQMD website.~~

~~Procedures to Distribute Health Risk Assessment~~

~~Procedure~~	~~Schedule~~	~~Responsibility~~
~~Distribute copy of facility's approved Health Risk Assessment to all school libraries and schools in the area of impact and public library closest to the facility~~	~~Within 30 days of the date of notice to perform public notification~~	~~Owner or operator of facility~~
~~Submit to South Coast AQMD proof of Health Risk Assessment distribution~~	~~Within 15 days of the date of Public Notification Materials distribution~~	~~Owner or operator of facility~~

~~[4] For the purpose of these public notification procedures, the definition of "school" under Health and Safety Code Section 42301.9 shall be used. Under this definition, "school" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grade 1 to 12, but does not include, any school in which education is primarily conducted in private homes~~.

~~Post approved Health Risk Assessment and Health Risk Assessment approval letter on South Coast AQMD website~~	~~Within 15 days of the date of Health Risk Assessment approval~~	~~South Coast AQMD staff~~

Procedures to Distribute Public Notification Materials

This section ~~discusses~~ outlines the procedures for distributing Public Notification Materials ~~(Table 3)~~. Distributing Public Notification Materials is required following the issuance of the directive to conduct public notification by South Coast AQMD~~after the approved Health Risk Assessment determines the health risk is greater than or equal to the Notification Risk Level or the health risk of a Risk Reduction Plan Progress Report is greater than or equal to the Action Risk Level~~. The Public Notification Materials must include a ~~notification letter~~public notice developed by the South Coast AQMD (sample provided in Appendix B). The ~~notification letter~~public notice will include information about the facility such as facility address and type of business. The ~~notification letter~~public notice will also include information about the specific toxic air contaminants (TACs) that are contributing substantially to the health risk, the ~~particular~~ health risk ~~notification~~ levels that are exceeding the Notification Risk Level~~ed~~, and the estimated health risks. If a public meeting is required, the ~~notice letter~~public notice will include information about the time, date, location, and purpose of the public meeting. ~~The Executive Officer will determine if other languages, in addition to English, should be used. In the past, District staff has required t~~Translation for all languages spoken by ≥10% of a census tract in a public notification area may be required, and is based on South Coast AQMD staff discretion. ~~Translation can be arranged by the South Coast AQMD and the cost charged to the facility.~~ The schedule for producing the Public Notification Materials is shown in Table 2. Table 2 also shows the party responsible for each item.

Optional Facility ~~Public Notice~~ Letter

The facility has the option of including a letter of its own authorship which has been reviewed and approved by the Executive Officer. If a facility operator chooses to include their own letter as part of the Public Notification Materials, a draft of the facility letter must be submitted to the South Coast AQMD within 15 days of the ~~date of notice~~directive to ~~perform~~ conduct public notification for review and approval.

~~The facility operator may choose to prepare a~~The optional facility ~~brief~~ letter ~~that~~ may be brief and simply refer~~s~~ to the enclosed South Coast AQMD materials or may be ~~a~~ longer ~~letter~~while providing additional information. In either case, the letter ~~should~~ shall consist of brief paragraphs in non-technical language. Some acceptable information includes:

- A description of the facility and its products or services;
- An explanation of why the facility emits toxic air contaminants;
- Steps the facility has taken or will take to reduce emissions;
- ~~An invitation to the public meeting;~~
- Identification of the facility contact person with a phone number; and

- Other information relating to facility emissions or the ~~Health Risk Assessment~~HRA.

Certain content ~~will not be accepted~~ within the facility letter are not allowable, such as ~~.~~ ~~S~~statements that undermine the risk assessment process or trivialize the risk associated with air toxics ~~are not considered appropriate to include in the facility letter and will be disapproved by the South Coast AQMD~~. ~~For example, the~~Furthermore, the facility letter ~~should~~ shall not discredit the risk assessment methodology used in the AB 2588 ~~program~~ Program or imply that it is overly conservative. As with all public notification material, ~~The~~ the facility letter must be translated to other languages ~~as determined by the Executive Officer~~based on South Coast AQMD staff determination~~;. Translation can b arranged by the South Coast AQMD and the cost charged to the facility~~.

Area of Impact

For cancer risk, the area of impact is the geographic area encompassed by the ten chances in ~~-~~one ~~-~~million (10×10^{-6}) MICR isopleth.[5] For non-cancer health risk, the area of impact is the geographic area encompassed by the 1.0 HI isopleth or the isopleth corresponding to the lead threshold that triggered notification.

Distribution List

Within 15 days of the ~~date of notice~~directive to ~~perform~~ conduct public notification, the facility owner or operator shall ~~is responsible for~~ submit~~ting to the Executive Officer for approval,~~ a list of all addresses (individual residences and workplaces) subject to notification to South Coast AQMD staff for review and approval. Within 25 days of ~~notice to perform~~the directive to conduct public notification, the facility owner or operator must ~~provide~~ inform South Coast AQMD staff of ~~the Executive Officer~~ the exact method of distribution to parents of children attending schools in the area of impact.[6] The method for informing students and parents of students~~For children~~ attending schools in the notification area is left to the discretion of the~~,~~ school administrators ~~typically determine how they wish for the notification to occur~~ . Some examples for distribution for~~(e.g.,~~ school administrators ~~may~~ include providing information on school website, providing~~e~~ a mailing list to South Coast AQMD for distribution by South Coast AQMD staff, or ~~they may ask for~~requesting Public Notification Materials in ~~pre-stuffed~~prepared envelopes for distribution by the school staff~~, or they may choose other methods)~~.

In addition, the South Coast AQMD staff ~~typically~~ provide~~s~~ the notice materials to local government representatives with jurisdiction within the notification area ~~receiving public notice~~.

[5] Note that the "area of impact" has a separate meaning than the "zone of impact" term used in HRAs.

[6] For the purpose of these public notification procedures, the definition of "school" under Health and Safety Code Section 42301.9 shall be used. Under this definition, "school" means any public or private school used for purposes of the education of more than 12 children in kindergarten or any of grade 1 to 12, but does not include, any school in which education is primarily conducted in private homes.

Note that ~~Extra time is given for providing the method of~~ distribution to students and parents of students can be a lengthy process and therefore, contacting ~~' families due to extra time needed for~~ school administrators, who are responsible for~~to~~ approve ~~and coordinate this notification~~ing the distribution, must be the first step taken. ~~Even though there is more time provided for this incremental step, given the extra coordination needed, this process should typically begin first.~~

Schedule and Method of Distribution

Public Notification Materials must be distributed within 30 days of the ~~date of notice to perform~~directive to conduct public notification. The facility owner or operator is responsible for reproducing and distributing copies of the Public Notification Materials. All Public Notification Materials are to be enclosed in envelopes with South Coast AQMD return address labels. These envelopes may be obtained from the South Coast AQMD for a fee and upon request ~~and the cost charged to the facility~~. Distribution of the Public Notification Materials must be conducted by a third party which specializes in mail or delivery services, such as the U.S. Postal Service or other mailing or distribution services. ~~Door-to-door hand delivery is not acceptable, in part because~~ U.S. Postal Service regulations prohibit the use of individual's mail boxes by unauthorized persons.

Verification of Distribution

Within 15 days of the date of distribution of Public Notification Materials, the facility operator must verify distribution of the ~~Health Risk Assessment and~~ Public Notification Materials using the verification form provided in Appendix A. Proof of distribution must be included with the verification and may be in the form of receipts from delivery or mail service agencies or the post office which describe the boundaries of notification and/or the addresses included in the mailing.

Table 2 — Procedures ~~to Distribute~~For Public Notification Materials

Procedure	Schedule	Responsibility
Prepare ~~South Coast AQMD notification materials that includes information about the facility, specific toxic air contaminants and estimated health risk.~~public notice	After ~~Health Risk Assessment~~HRA is approved	South Coast AQMD staff
Determine if Public Notification Materials ~~need to be translated into other languages~~require translation.	Within 15 days following directive to conduct public notification~~After notification letter is completed and area of impact is determined~~	South Coast AQMD staff
Prepare a facility letter ~~from the responsible facility~~ – (Optional).	Within 15 days following~~of the date of notice to perform~~directive to conduct public notification	Owner or operator of facility
Provide a list of all addresses (individual residences and workplaces).	Within 15 days following ~~of the date of notice to perform~~ directive to conduct public notification	Owner or operator of facility
Provide the exact method of distribution to the parents of children in schools within the area of impact.	Within 25 days following~~of the date of~~ directive to conduct ~~notice to perform~~ public notification	Owner or operator of facility

Reproduce and distribute Public Notification Materials to individual residences, workplaces, and parents of children attending school in the area of impact.	Within 30 days following ~~of the date of~~ directive to conduct ~~notice to perform~~ public notification	Owner or operator of facility
Verification of distribution; such as receipts from delivery or mail service.	Within 15 days following~~of the date of~~ distribution of Public Notification Materials	Owner or operator of facility

V. Procedures for Public Meetings

This section establishes the procedures for scheduling and other logistics for public meetings (Table ~~4~~3). Public meetings are required after the approval of a ~~Health Risk Assessment~~HRA where the health risk is greater than or equal to the Notification Risk Level or the health risk of a Risk Reduction Plan Progress Report is greater than or equal to the Significant Risk Level. Public meetings offer the public an opportunity to learn more about the results of the ~~Health Risk Assessment~~HRA and how ~~toxic~~ health risk is determined and mitigated, and to directly ask questions of the South Coast AQMD staff and facility representatives. As a result, the facility owner or operator or representative that can respond on behalf of the facility must be present at the public meeting. The South Coast AQMD staff will work with the facility owner or operator to schedule a date for the public meeting that is typically within 30 days of distribution of Public Notification Materials. The date, time, and location of a public meeting must be provided within the Public Notification Materials. The South Coast AQMD staff will schedule the meeting on a weekday evening or weekend and at a location that is ADA compliant. South Coast AQMD staff will prioritize selection of locations that are ~~and~~ convenient for community members. The South Coast AQMD staff will reserve a venue for the public meeting, arrange for audio and visual equipment and personnel, and language translation, if necessary~~. Pursuant to Rule 307.1, the facility owner or operator shall either directly pay or reimburse the South Coast AQMD for the public meeting costs, including, but not limited to renting of the venue, audio visual equipment and personnel, translation, and any other costs (e.g., parking, etc.)~~.

Facility operators are encouraged to work closely with the South Coast AQMD staff regarding the meeting agenda. The recommended agenda includes a presentation followed by a question and answer period. -It is recommended that the following topics be included in the presentation:

- Purpose of the meeting;
- Overview of the AB 2588 program;
- Description of the facility: type of operation, processes involved, and materials used or produced at the facility;
- Description of the health risk assessment process;
- Description of facility emissions and results of the Health Risk Assessment;
- Description of facility's recent compliance history with South Coast AQMD;
- Facility's projects or plans to reduce toxic emissions or risk; and
- Applicable current or future regulatory programs to reduce risks from air toxics.

A pre-meeting should be arranged between the South Coast AQMD and facility staff to finalize meeting plans, including the appropriate persons to attend and assist in the presentation. The South Coast AQMD staff will be prepared to modify the meeting agenda in response to reasonable needs of the attendees. These sessions provide the public with an opportunity to ask questions directly to experts, learn more generally about toxic risk and provide feedback to the South Coast AQMD and facility. Informational materials should also be made available at the sessions.

Table 3 — Procedures for Public Meetings

Procedure	Schedule	Responsibility
Coordination meeting to identify the appropriate date for public meeting	Before distribution of Public Notification materials	South Coast AQMD staff and owner or operator of facility
Arrange for venue, audio visual equipment and personnel, translation (if necessary), parking, security, and any other meeting logistics.	Within 30 days of distribution of Public Notification Materials	South Coast AQMD staff
Pay for venue, audio visual equipment and personnel, translation, and any other costs	Within 60 days of facility's receipt of invoice	Owner or operator of facility
Participate in public meeting.	Public notification meeting	South Coast AQMD staff and owner or operator of facility

VI. Costs Related to Public Notification

Pursuant to Rule 307.1, the facility owner or operator is responsible for all costs relating to the public notification. Examples of these items include, but are not limited, to the following:

- renting of the venue, audio visual equipment and personnel, translators, parking rental, security (if necessary);
- printing and distribution of all Public Notification Material;
- translation of all Public Notification Material;
- envelopes necessary for public distribution of material.: and
- necessary postage.

~~VI.~~VII. Public Notification Procedures for Facilities Participating in the Voluntary Risk Reduction Program

This section provides the public notification procedures for facilities participating in the Rule 1402 Voluntary Risk Reduction Program. Pursuant to ~~paragraph (q)(3) of~~ Rule 1402 (q)(3), the South

Coast AQMD staff will conduct public notification for facilities that are eligible and that elect to participate in the Rule 1402 Voluntary Risk Reduction Program. Under Rule 1402, facilities that elect to participate in the Voluntary Risk Reduction Program commit to implementing risk reduction measures that will reduce their total facility risk below the Rule 1402 Voluntary Risk Threshold which is a Maximum Individual Cancer Risk of ten chances in ~~-~~ one ~~-~~ million (10×10^{-6}), a total acute or chronic HI of one (1.0) for any target organ system at any receptor location, or the more stringent of either the NAAQS for lead or applicable ambient lead concentration limit in a South Coast AQMD rule. The public notification for facilities participating in the Rule 1402 Voluntary Risk Reduction Program will be placed on the South Coast AQMD's website and will be included in the AB 2588 annual report. The public notification will include the following information:

- Background information about the 2015 update to the Office of Environmental Health Hazard Assessment (OEHHA) Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments that includes:
    - A description of how the updated OEHHA Guidance results in a higher estimated health risk from the facility compared to the previous Guidance;
    - Explanation that a facility's estimated health risk will increase using OEHHA's updated Guidance compared to estimates using the previous OEHHA Guidance even if emissions at the facility stay the same and potentially even if emissions decrease.
- Background information about the Voluntary Risk Reduction Program and that facilities that are participating are committing to risk reductions that:
    - Account for changes in risk estimates based on the Revised OEHHA Guidance; and
    - Risk reductions go beyond what is required through regulatory requirements.
- A list of participating facilities – Facility Name, Facility ID, and Street Address

~~VII.~~VIII. ~~Additional Suggestions on~~ Risk Communication Following Public Notification Process

Facility operators may choose to continue their dialogue with the community after they have completed their notification requirements. This dialogue could take the form of newsletters, facility tours, or additional public meetings. The South Coast AQMD encourages these efforts and requests that facilities keep the South Coast AQMD informed about their communication activities.

~~VIII.~~IX. Additional Resources

CARB AB 2588 Air Toxics "Hot Spots" Program

OEHHA Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments

South Coast AQMD Air Toxics "Hot Spots" Program (AB 2588)

South Coast AQMD Facility Prioritization Procedures for AB 2588 Program

South Coast AQMD Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program

~~South Coast AQMD Rules 307.1, 1401, and 1402 Staff Report~~

South Coast AQMD Rule 307.1 - Alternative Fees for Air Toxics Emissions Inventory

South Coast AQMD Rule 1402 – Control of Toxic Substance from Existing Sources

South Coast AQMD Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot -Spots" Information and Assessment Act

Appendix A – Verification Form for Distribution of Public Notification Materials~~ces and Health Risk Assessments~~

South Coast Air Quality Management District

Form R1402

Verification Form for Distribution of Public Notices and Health Risk Assessments

Mail To:
South Coast AQMD - AB 2588 Program
21865 Copley Dr.
Diamond Bar, CA 91765

Tel: (909) 396-3616
www.aqmd.gov

Section A – Facility Information			
Facility Name (Business Name of Operator):			**South Coast AQMD Facility ID:**
Facility Location Address:		**Facility Mailing Address:** ☐ Check here if same as facility location address	
Street Address _____ , CA _____ City Zip Code		Street Address _____ , _____ City State Zip Code	
Facility Contact:			
Name	Title	Phone Number	E-Mail
Section B – Verification of Public Notification Requirements			
Dates of Distribution:			
	Public notice materials to all addresses in the area of impact.		
	Public notice materials to students and parents of students attending schools in the area of impact.		
Section C – List of Attachments			
The following documents have been attached:			
☐	Proof of distribution of the notice materials to all addresses required.		
☐	List of schools for which notices were distributed to parents of attending children.		
Section D – Authorization/Signature: I hereby certify that all the information contained herein are true and correct.			
Signature of Responsible Official:		Title of Responsible Official:	
Print Name of Responsible Official:		Date Signed (mm/dd/yy):	
Phone Number of Responsible Official:		Email Address of Responsible Official:	

Appendix B – Sample South Coast AQMD Public Notification Materials

South Coast Air Quality Management District

NOTICE OF PUBLIC MEETING TO DISCUSS HEALTH RISK ASSESSMENT FOR A FACILITY IN YOUR NEIGHBORHOOD

The following business in your neighborhood has been emitting toxic air pollutants that could potentially cause a risk to public health. ***[FACILITY NAME]*** has been required to conduct a Health Risk Assessment (HRA) to evaluate how emissions are released and dispersed from ***[FACILITY NAME]***, and the potential impact those releases may have to public health.

Business Name	Location Address	Type of Business
[FACILITY NAME]	*[FACILITY ADDRESS]*	*[TYPE OF BUSINESS]*

As the air pollution control agency for this area, South Coast Air Quality Management District (South Coast AQMD) will hold a public meeting to answer questions about the results of ***[FACILITY NAME] [INVENTORY YEAR]*** Approved HRA. Officials from ***[FACILITY NAME]*** will also attend the meeting to answer questions about their operations and future plans to reduce emissions impacting your neighborhood. South Coast AQMD will hold the public meeting via video conferencing and by telephone. The audience will be able to participate during the public comment period.

Date & Time	Meeting Details
[DATE & TIME]	*[MEETING DETAILS]*

INSTRUCTIONS FOR ELECTRONIC PARTICIPATION

Instructions for Participating in a Virtual Meeting as an Attendee

- As an attendee, you will have the opportunity to virtually raise your hand and provide public comment.
- Before joining the call, please silence your other communication devices such as your cell phone or desk phone. This will prevent any feedback or interruptions during the meeting.
- Please Note: During the meeting, all participants will be placed on mute by the host. You will not be able to mute or unmute your lines manually.
- Speakers will be limited to a total of three (3) minutes for their opportunity to provide comments. This time may be reduced if there are a large number of commenters to ensure that all comments can be heard. A countdown timer will be displayed on the screen for each public comment.
- Once you raise your hand to provide public comment, your name will be added to the speaker list. Your name will be called when it is your turn to comment. The host will then unmute your line.

Directions for Video Zoom on a Desktop/Laptop/Smartphone

- If you would like to make a public comment, please click on the “Participants” button on the bottom of the screen.
- A list of participants will appear on the right side of the screen for computers and on a new screen for smartphones. At the bottom of the list, please click on the grey “Raise Hand” button.
- This will signal to the host that you would like to provide a public comment and you will be added to the list.
- Please Note: At the bottom of your screen, please click the “Interpretation” button and select either “English” or “Spanish”.

Directions for Telephone Line Only

- If you would like to make a public comment, please dial *9 on your keypad to signal that you would like to comment
- Please Note: There is no interpretation feature available when joining via telephone dial-in.

South Coast Air Quality Management District

Summary of Health Risk Assessment

The approved HRA, which used ***[INVENTORY YEAR]*** data, showed that pollutants (***[PRIMARY TAC RISK DRIVER]***) from ***[FACILITY NAME]*** may cause an increased health risk for people who live and work in the area as seen in the attached Facility Risk Map (***[Figure 1]***).

The attached information sheet provides additional background on the business, air pollutants and health risks. The following table shows the estimated, potential health risks from the ***[INVENTORY YEAR]*** Approved HRA.

	[INVENTORY YEAR] **Approved HRA**
Maximum probability of cancer for those living closest to the facility (30 year exposure)	***[XX]*** chances in-one-million
Maximum additional cases of cancer (70 year exposure)	***[XX]***
Maximum short-term non-cancer health effects (1 hour exposure)	***[XX]*** times higher than state health based guidelines

For more information about South Coast AQMD programs to control toxic air pollution or the public meeting, please contact Victoria Moaveni of South Coast AQMD at (909) 396-2455 or vmoaveni@aqmd.gov. For more information about the facility, please contact ***[FACILITY CONTACT NAME]*** at ***[FACILITY CONTACT NAME]*** or ***[CONTACT EMAIL]***.

---

*Disability and language-related accommodations can be requested to allow participation in the **[FACILITY NAME]** Rule 1402 public notification meeting. The agenda will be made available, upon request, in appropriate alternative formats to assist persons with a disability (Gov't Code Section 54954.2(a)). In addition, other documents may be requested in alternative formats and languages. Any disability or language-related accommodation must be requested as soon as practicable. Requests will be accommodated unless providing the accommodation would result in a fundamental alteration or undue burden to the District. Please contact the AB 2588 Hotline at (909) 396-3610 from 7:00 a.m. to 5:30 p.m., Tuesday through Friday, or send the request to AB2588@aqmd.gov.*

South Coast Air Quality Management District

[INVENTORY YEAR] Approved HRA Facility Risk Map (Figure 1)
[FACILITY NAME]
(South Coast AQMD ID No. **[FACILITY ID]**)
[FACILITY CITY], California

[FACILITY NAME]
Public Notification Area Map

Cancer Risk 10 chances in-one-million (Yellow Contour)

[FACILITY NAME] (Red Outline)

Public Notification Required if:

- Maximum probability of cancer for those living closest to the facility is greater than 10 chances in-one-million
- Maximum probability of cancer for those working closest to the facility is greater than 10 chances in-one-million
- Long-term non-cancer health effects are greater than state health-based guidelines
- Short-term non-cancer health effects are greater than state health-based guidelines

South Coast Air Quality Management District

INFORMATION SHEET

What are toxic air pollutants?
Chemicals that can cause cancer and other adverse health effects such as harm to the human respiratory system are known as toxic substances. When these toxic substances are released in the air, they are called toxic air pollutants. Toxic air pollutants come from a variety of sources including chemical plants, large manufacturers, businesses and cars and trucks. Many products used at home, such as cleaners and paint thinners also contain toxic air pollutants.

What toxic air pollutants does this facility emit?
Exposure to elevated concentrations of ***[PRIMARY TAC RISK DRIVERS]*** can have potential cancer and non-cancer health risks. Long and short term health-based levels have been established by the California Office of Environmental Health Hazard Assessment (OEHHA).

The facility emits the following toxic air pollutants as a result of ***[MAJOR FACILITY PROCESSES PRODUCING PRIMARY TAC DRIVERS]***:

Pollutants	Possible Health Effects

How was the health risk from this facility determined?
The ***[INVENTORY YEAR]*** Approved HRA used estimated amounts of pollutants released from operations at ***[FACILITY NAME].*** That information is inputted into a computer-based model that evaluates air quality dispersion and predicts air pollution concentrations throughout the community. The results are then measured against exposure levels determined by OEHHA to predict potential impacts to people's health.

OEHHA updated their health effects guidance in March 2015 to specifically include new information that provides more insight on how toxic air pollutants can have a greater impact on children than they do on adults. This newer methodology led to stricter health standards, which in turn resulted in health risk estimates that are approximately 3.7 times more conservative than those using previous methods. This method of determining risk may differ from other regulatory programs, such as public notification being carried out under Proposition 65.

What did the Health Risk Assessment find?
An HRA is currently the best method for estimating the amount of exposure to a chemical over a long period of time and the potential health impacts.

The ***[INVENTORY YEAR]*** Approved HRA for ***[FACILITY NAME]*** was calculated using a 30-year conservative exposure measurement that assumed a person would be continually exposed to emissions from a facility for 30 years.

The ***[INVENTORY YEAR]*** Approved HRA, based on known information at the time, found that people who live in the area shown on the Facility Risk Map (Figure 1), if continuously exposed for 30 years, would have a maximum of ***[xx]*** chances in-one-million of developing cancer mainly due to ***[PRIMARY TAC RISK DRIVERS]*** emissions from this facility. Those who work in the area would have a maximum of ***[XX]*** chances in-one-million of developing cancer. The risk is primarily due to ***[MAJOR FACILITY PROCESSES PRODUCING PRIMARY TAC DRIVERS]***.

What is being done to reduce the health risks from this facility?
South Coast AQMD Rule 1402 — Control of Toxic Air Contaminants from Existing Sources applies to facilities that exceed specific risk thresholds (e.g., cancer risk greater than 25 chances chances in-one-million) and requires the facility to submit a plan to reduce its risk below thresholds and implement this risk reduction plan within two and a half years after approval.

In this case, ***[FACILITY NAME]*** is required to conduct both public notification and risk reduction. South Coast AQMD has also developed other programs designed to prevent pollution and reduce exposure to toxic air pollution, such as air toxic regulations specific to certain sources.

What is the cancer risk from toxic air contaminants in general?
The Multiple Air Toxics Exposure Study IV (MATES IV) presents estimates of cancer risk throughout South Coast AQMD's four county jurisdiction. The estimated risk for cancer from all toxic air contaminants emitted from all sources (cars, trucks, factories, power plants, etc.) is about 900 chances in-one-million .

How can I get more information?
Page ES-3 of MATES IV Executive Summary, available at: http://www.aqmd.gov/docs/default-source/air-quality/air-toxic-studies/mates-iv/mates-iv-final-draft-report-4-1-15

A copy of South Coast AQMD's approved health risk assessment for ***[FACILITY NAME]*** is available online at: [URL] or at the following library:

South Coast AQMD Library

21865 Copley Drive Diamond Bar, CA 91765
(909) 396 - 2600
Tue - Thu: 10 AM - 5 PM Fri: 8 AM - 3 PM
Sat, Sun, Mon: Closed

Appendix C – Sample South Coast AQMD Modified Public Notification

Notification of Facilities Participating in the Rule 1402 Voluntary Risk Reduction Program

Updated September18, 2019

South Coast AQMD's Rule 1402 – Control of Toxic Air Contaminants from Existing Sources includes a Voluntary Risk Reduction Program. Facilities that participate in the Voluntary Risk Reduction Program reduce their health risks sooner and below the thresholds required under Rule 1402. Facilities that participate in this program have already had a Health Risk Assessment (HRA) approved by South Coast AQMD that shows the facility's risks were below risk reduction thresholds at the time of HRA approval. An HRA is a study that estimates how a facility's emissions affect people's health risks in the surrounding community.

On March 6, 2015, the California Office of Environmental Health Hazard Assessment (OEHHA) approved revisions to its guidelines (2015 OEHHA Guidelines) that are used by all air districts throughout the state to prepare HRAs. The 2015 OEHHA Guidelines incorporates age sensitivity factors which will increase 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. 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. The Voluntary Risk Reduction Program provides an opportunity for participating facilities to address the increase in their estimated cancer risk due to the 2015 OEHHA Guidelines.

Table 1 below lists the facilities that have elected to participate in the Voluntary Risk Reduction Program and have an approved Voluntary Risk Reduction Plan.

Questions about the South Coast AQMD's Voluntary Risk Reduction Program or this Notification can be directed to AB 2588 staff at (909) 396-3616 or AB2588@aqmd.gov.

Table 1
List of Facilities with an Approved Voluntary Risk Reduction Plan

South Coast AQMD Facility ID	Facility Name	Address

South Coast Air Quality Management District

AB 2588 and Rule 1402 Supplemental Guidelines

(Supplemental Guidelines for Preparing Risk Assessments for the Air Toxics "Hot Spots" Information and Assessment Act)

~~September~~ October ~~2018~~2020

Preface

This document (Supplemental Guidelines) is a supplementary guide to the State of California Office of Environmental Health Hazard Assessment (OEHHA) document entitled *Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments* (2015 OEHHA Guidance Manual). The 2015 OEHHA Guidance Manual contains several sections that refer users to their local air district for specific or additional requirements and this document describes and clarifies the requirements for the South Coast Air Quality Management District (South Coast AQMD). This version of the Supplemental Guidelines updates the previous September 2018 version.

The Supplemental Guidelines are intended to be a "living" document, which staff will update periodically as needed. The major revisions to this document from the previous September 2018 version include:

- Reorganizing the document to improve readability and more closely follow the paths a facility may take under Assembly Bill 2588 (AB 2588) and South Coast AQMD Rule 1402

- ~~Adding additional guidelines, including~~Providing additional guidance on source tests, clarifying requirements for receptor grids, Air Toxics Inventory Reports (ATIR), Risk Reduction Plans (RRP), and Potentially High Risk Level facilities

The major revisions to this document from the previous November 2016 version include:

- Adding a description for the Voluntary Risk Reduction Program (refer to Section 1.5 ~~3.6~~ and Table 2~~3~~; note that these references are for the current version of this guideline dated ~~September~~October 2020);

- Adding a~~n~~ Health Risk Assessment (HRA) Summary Form (refer to Attachment A to Appendix B);

- Removing tables that are updated frequently and are listed in other South Coast AQMD rules or guidelines and including a reference to the applicable table(s) in the existing South Coast AQMD rule or guidelines instead; and

- Updating terms and acronyms (refer to Appendix G).

Table of Contents

List of Figures

List of Tables

Introduction

In 1987, the California legislature adopted the Air Toxics "Hot Spots" Information and Assessment Act; also known as ~~Assembly Bill 2588 (~~AB 2588~~)~~. The goals of the AB 2588 Program are to collect toxic air contaminant (TAC) emissions data, identify facilities having localized impacts, determine health risks, and notify affected individuals. In 1992, the California legislature added a risk reduction component, the Facility Air Toxic Contaminant Risk Audit and Reduction Plan, or Senate Bill 1731 (SB 1731), which requires facilities to develop and implement measures to reduce impacts if risks are found above thresholds specified by air districts. South Coast AQMD Rule 1402 - Control of Toxic Air Contaminants from Existing Sources implements various aspects of AB 2588 and SB 1731 including public notification and risk reduction requirements for facilities with health risks that are above specified thresholds.

Rule 1402 was amended in October 7, 2016 to include a provision to allow facilities to participate in a Voluntary Risk Reduction Program. This program is an alternative to complying with the traditional AB 2588 Program and Rule 1402 approach that provides qualifying facilities an opportunity to reduce health risks below the Notification Risk Level through a Voluntary Risk Reduction Plan (VRRP) and employ a Modified Public Notification approach as specified in Rule 1402. The Voluntary Risk Reduction Program will achieve risk reductions both sooner and beyond what is required in the traditional AB 2588, SB 1731, and Rule 1402 process.

There are five important components to the AB 2588 program as follows:

- *Emissions Reporting* - Facilities subject to the AB 2588 Program submit an air toxics inventory every four years through South Coast AQMD's Annual Emissions Reporting (AER) Program. Facilities are allowed to simplify AER reporting by aggregating common sources.

- *Prioritization* - From the simplified reported toxic emissions submitted through AER, South Coast AQMD staff prioritizes facilities, using a procedure approved by the Governing Board, into three categories: high, intermediate, and low priority. High priority facilities[1] are then asked to prepare an ~~Air Toxics Inventory Report (~~ATIR~~)~~. In contrast to the simplified reporting allowed under AER, the ATIR requires greater detail which includes process, device, and stack information for each piece of equipment.

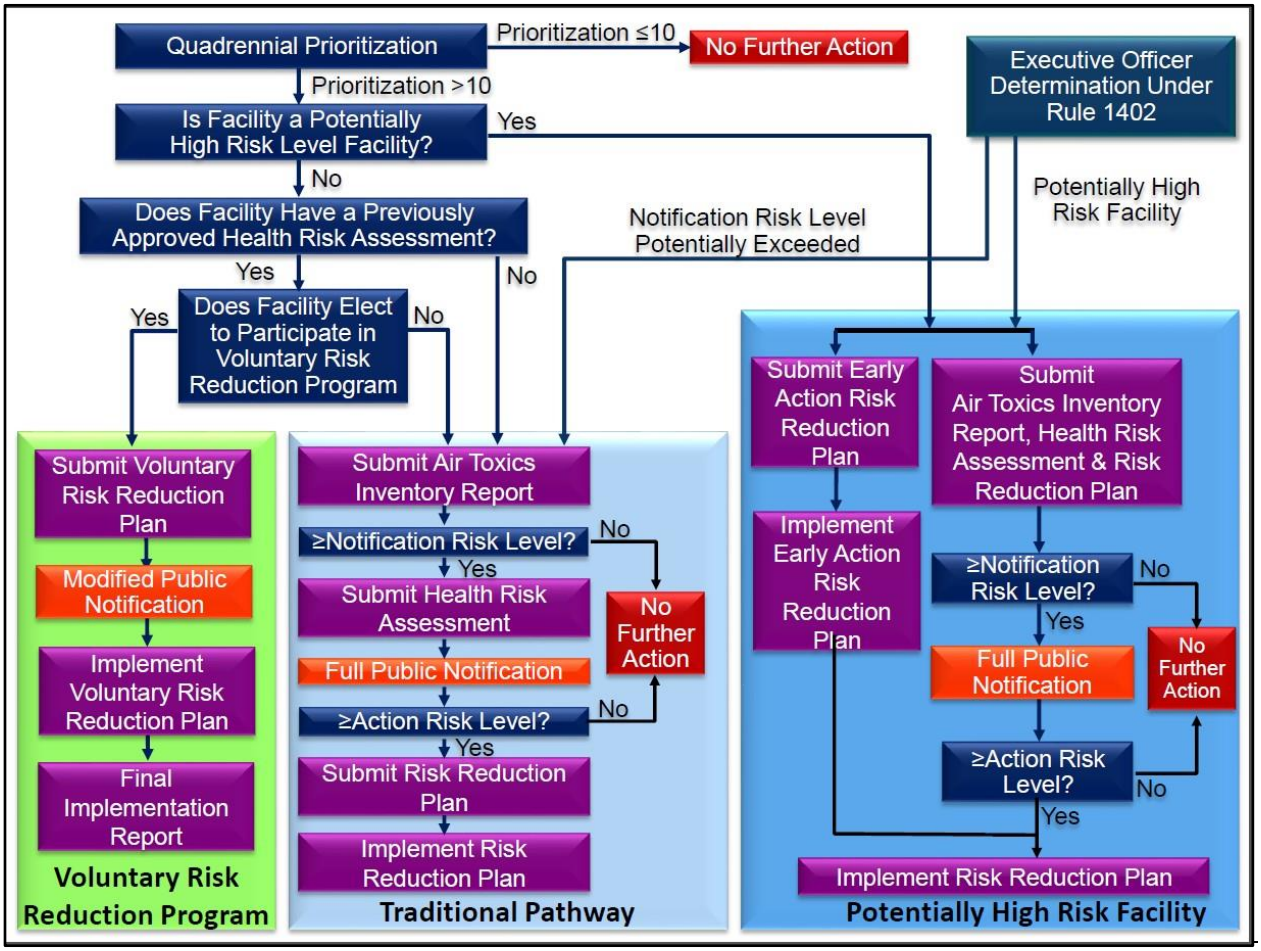
- *Health Risk Assessment* - From the detailed reported toxic emissions submitted through the ATIR, high priority facilities must prepare ~~a Health Risk Assessment (HRA~~an HRA).

- *Public Notice* - If the health risks reported in the HRA exceed specified public notification thresholds, then the facility is required to provide public notice to the affected community.

[1] A high priority facility has separate meaning from the Potentially High Risk Level Facility definition of Rule 1402 (see Chapter 6).

- *Risk Reduction* - If the health risks reported in the HRA exceed specified action risk levels in Rule 1402, then the facility is required to reduce their health risks below the action risk levels.

Figure 1 below provides an overview of the AB 2588 Program and the different paths a facility may follow under Rule 1402.



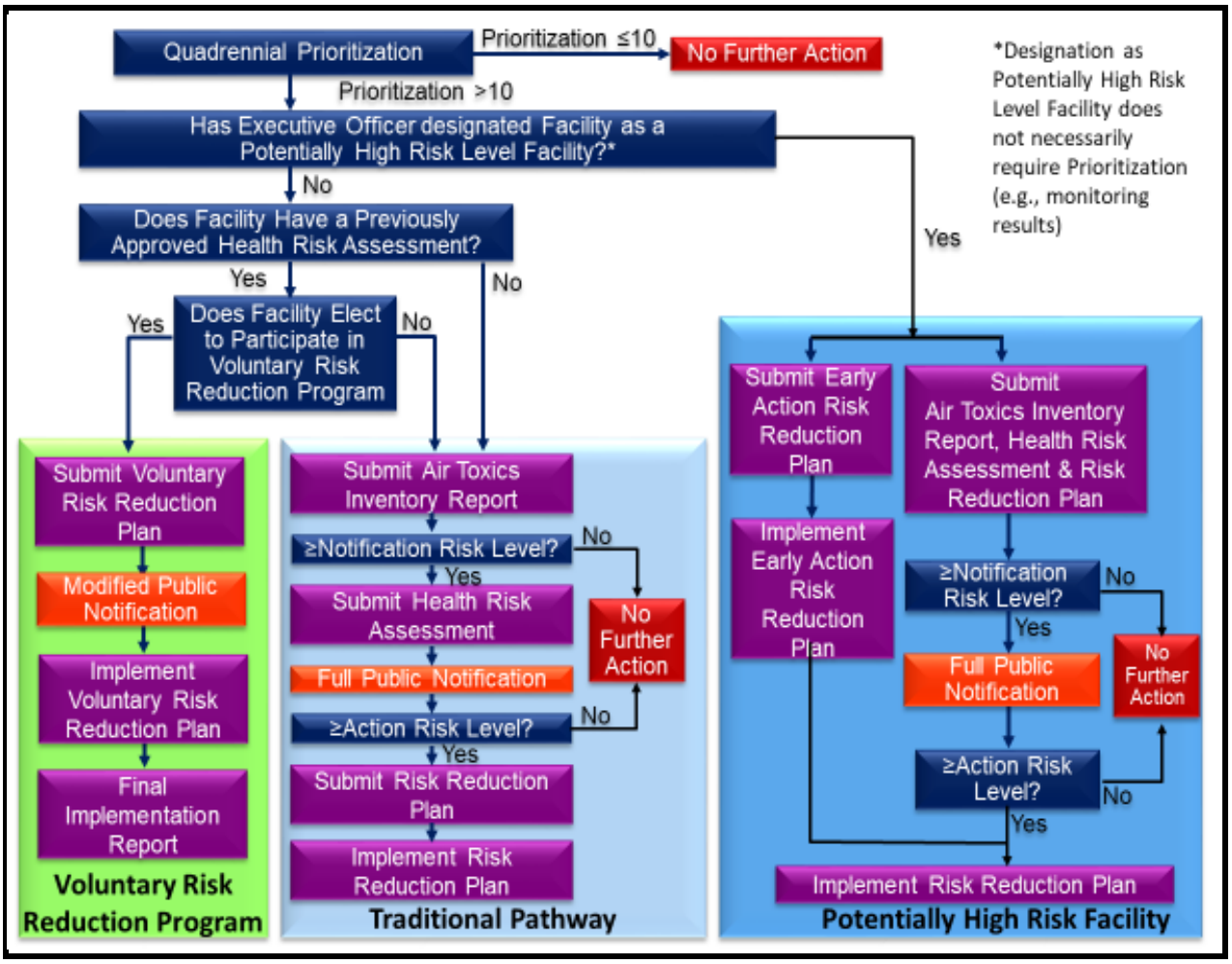


Figure 1 — Overview of the AB 2588 Program and illustration of the paths by which a facility may follow

These Supplemental Guidelines are to be used in conjunction with the ~~document~~ 2015 OEHHA Guidance Manual prepared by ~~the State of California Office of Environmental Health Hazard Assessment (~~OEHHA~~) entitled "Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments" (2015 OEHHA Guidance Manual)~~.[2] Facilities required to submit health risk assessments to the ~~South Coast Air Quality Management District (~~South Coast AQMD~~)~~ must follow the 2015 OEHHA Guidance Manual pursuant to Health and Safety Code 44360(b)(2). Since the 2015 OEHHA Guidance Manual defers to the local air district for specific,

[2] https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

localized, or additional requirements, these Supplemental Guidelines address those areas and other issues that have arisen during the implementation of the AB 2588 Program at South Coast AQMD.

A certification form must be submitted to South Coast AQMD with all documents and correspondence relating to health risk assessments.[3]

Please visit South Coast AQMD's AB 2588 Program webpage provided below for additional information, documents, and any questions regarding this document, health risk assessment methodology, and other AB 2588 Program issues.[4] Questions may be emailed to AB2588@aqmd.gov or asked via phone at (909) 396-3610.

[3] https://www.aqmd.gov/docs/default-source/aqmd-forms/AB2588/ab2588-certification-form.pdf ~~http://www.aqmd.gov/home/research/forms~~

[4] https://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588

1. Emissions Reporting

1.1 Facilities Subject to AB 2588 Reporting Requirements

South Coast AQMD's AER Program is used for:

- All facilities subject to AER, including AB 2588 facilities who report their annual emissions of criteria pollutants and any ~~one~~ of ~~24~~ the ~~toxic air contaminants (TAC)~~TACs and ozone depleting compounds (ODC) specified in South Coast AQMD's Rule 301(e). The list of compounds can be found in Rule 301, Table IV.[5] ~~(shown in Table 1 below).~~ The report comprises the annual emissions report for ~~toxic air contaminants~~TACs.

- AB 2588 facilities which are subject to quadrennial (once in four years) reporting requirements. These facilities report any one of approximately 177 ~~toxic air contaminants~~TACs and ODCs from a detailed list of substances in Table A-1 of ~~*Reporting Procedures for AB 2588 Facilities for Reporting their*~~ *Quadrennial Air Toxics Emissions Inventory Reporting Procedures*.[6] This report comprises the quadrennial emissions report for ~~toxic air contaminants~~TACs.

Facilities subject to the AER Program calculate and report their emissions based on their throughput data (e.g., fuel usage, material usage, etc.), appropriate emission factors, and control efficiency, if applicable. The method for reporting emissions is described on South Coast AQMD's website.[7]

~~Table 1 — Annually Reported Toxic Air Contaminants and ODCs under the AER Program~~

~~Ammonia~~	~~Chlorinated dioxins and dibenzofurans~~	~~Lead~~
~~Asbestos~~	~~Chlorofluorocarbons~~	~~Methylene chloride~~
~~Arsenic (inorganic)~~	~~1,4-Dioxane~~	~~Nickel~~
~~Benzene~~	~~Ethylene dibromide~~	~~Perchloroethylene~~
~~Beryllium~~	~~Ethylene dichloride~~	~~Polynuclear aromatic hydrocarbons (PAH)~~
~~1,3-Butadiene~~	~~Ethylene oxide~~	~~1,1,1-Trichloroethane~~
~~Cadmium~~	~~Formaldehyde~~	~~Trichloroethylene~~
~~Carbon tetrachloride~~	~~Hexavalent chromium~~	~~Vinyl chloride~~

The data collected in the AER Program in addition to information from other sources (i.e. monitoring data, source specific information, etc.~~.~~) are used to determine potential candidates for the AB 2588

[5] https://www.aqmd.gov/docs/default-source/rule-book/reg-iii/rule-301-July-2019.pdf
[6] https://www.aqmd.gov/docs/default-source/planning/risk-assessment/quadrennial_atir_procedure.pdf
[7] https://www.aqmd.gov/home/rules-compliance/compliance/annual-emission-reporting

Program. Facilities that meet one of the following AB 2588 Program qualification conditions are required to prepare and submit a quadrennial air toxics inventory if:

- They emit 10 tons per year or more of VOC, NOx, SOx, or PM;
- They emit 25 tons per year or more of a combination of VOC, NOx, SOx, and PM;
- They emit less than 10 tons per year of VOC, NOx, SOx, or PM, but the facility activity is listed in California Air Resources Board's (CARB) Emission Inventory Criteria and Guidelines for the Air Toxics "Hot Spots" Program;[8]
- Their emissions exceed one or more of the reporting thresholds in Table I or II in *Rule 1402 – Control of Toxic Air Contaminants From Existing Sources*;[9] or
- The Executive Officer of South Coast AQMD determines that emissions levels from the facility have the potential to cause an exceedance of risk reduction thresholds.

1.2 Quadrennial Emissions Reporting and Base Year Emissions Inventory

Facilities subject to the AB 2588 Program must provide a quadrennial emissions report for ~~toxic air contaminants~~TACs. These substances are listed in Table A-1 of ~~*Reporting Procedures for AB 2588 Facilities for Reporting their*~~ *Quadrennial Air Toxics Emissions Inventory Reporting Procedures*, which provides the substance names and associated Chemical Abstracts Service (CAS) numbers. The degree of accuracy is also provided for each substance. The degree of accuracy is a de minimis emission level for reporting. As a result, facility-wide emissions of the substance which are greater than one-half of their corresponding degree of accuracy must be inventoried and reported.

As part of the quadrennial emissions report for ~~toxic air contaminants~~TACs, facilities must also provide the distances to the nearest residential and commercial receptors, and the facility operating schedule (e.g., operating hours per day, operating days per week, and operating weeks per year). It is critical that facilities estimate their toxic emissions as precisely and accurately as possible. These reported emissions are used to prioritize the facility as discussed in ~~the next~~ Section~~,~~ ~~3.2.~~1.4 Prioritization Procedure. A facility's prioritization score determines its fees and ~~if~~ whether it is necessary to prepare an ATIR or VRRP (if eligible).

When a facility is notified to prepare an ATIR or VRRP, the quadrennial ~~toxic air contaminants~~TACs emissions report is used as the 'base year emissions inventory.' This same base year emissions inventory is also used to prepare an HRA, Public Notice, and RRP~~Risk Reduction Plan (RRP)~~.

1.2.1 Toxic Air Contaminants Reporting Requirements

Facilities subject to the submittal of HRAs under the AB 2588 Program must estimate and submit their ATIR using the latest approved version of the Hotspots Analysis and Reporting Program

[8] https://www.arb.ca.gov/ab2588/2588guid.htm
[9] https://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1402.pdf

(HARP).[10] This ATIR ~~should~~ shall include, at a minimum, the elements outlined in Appendix A of these Supplemental Guidelines. OEHHA has grouped the substances to be reported into three groups as shown in Appendix A of the 2015 OEHHA Guidance Manual. ~~–~~There are distinct reporting requirements for the three groups as follows:

- Appendix A-I Substances – All emissions of these substances must be quantified in the ATIR and HRA including those calculated in the ATIR as below the degree of accuracy or below detection limits.

- Appendix A-II Substances – Emissions of these substances do not need to be quantified in the ATIR and HRA; however, facilities must report whether the substances are used, produced, or otherwise present on-site. These substances can be simply listed in a table in the HRA.

- Appendix A-III Substances – These substances only need to be reported in a table in the ATIR and HRA if they are manufactured by the facility.

The intent of the AB 2588 Program is that facilities performing HRAs use the process rates and emissions data submitted in their quadrennial emissions inventory report ~~(see Section 3.1)~~. South Coast AQMD receives requests from facilities to use process rates and emissions data other than those reported in their quadrennial emissions inventory report. As a general policy, South Coast AQMD will allow emission changes only if (1) the changes conform to one of the situations discussed in the following sections and (2) any emission increases are also included.

1.2.2 Diesel Particulate Matter Emissions

Diesel particulate matter ~~emissions~~ was~~ere~~ identified as a ~~toxic air contaminant~~TAC by CARB in 1998~~,~~ and ~~were~~ added to the list of compounds in South Coast AQMD *Rule 1401 – New Source Review* on March 7, 2008. Under the current AB 2588 Air Toxics "Hot Spots" Emission Inventory Criteria and Guidelines Regulation, amended on August 27, 2007, facility operators are required to include health risks of any diesel exhaust particulate emissions from stationary emergency and prime compression ignition internal combustion engines, as well as portable diesel engines. Please clearly identify emergency diesel internal combustion engines (DICEs) and their corresponding emissions. This is essential because, on January 5, 2007, the South Coast AQMD Governing Board adopted separate public notification procedures for emergency DICEs.[11]

1.2.3 Control Efficiencies

Control efficiencies shall be included in emissions calculations when applicable. For example, spray booths may include a transfer efficiency and a filter efficiency. Some devices with air pollution control devices may have a capture efficiency and a collection efficiency. Control efficiencies may not apply to every type of TAC from a device, as some air pollution control devices are designed for only specific types of TACs.

[10] https://ww2.arb.ca.gov/our-work/programs/hot-spots-analysis-reporting-program~~http://www.arb.ca.gov/toxics/harp/harp.htm~~

[11] http://www3.aqmd.gov/hb/2007/January/070128a.html

Please note that control efficiency is an input to both AER and the Emission Inventory Module (EIM) in HARP. However, unlike the AER software, EIM currently does not use the control efficiency for any calculation purposes (i.e., controlled emissions are entered separately). Emissions calculations that include control efficiencies in the EIM shall be included as part of the supporting documentation for the ATIR.

1.3 Changes to Emissions and Process Data

1.3.1 Computational Errors

Computational errors in the quadrennial emissions inventory report must be reported to South Coast AQMD staff as soon as they are detected. Written requests to correct errors for inclusion in the risk assessment must include documentation of the nature of the error and calculations to show how the original emission value was determined and how correcting the computational error changes this value.

If computational errors or conservative assumptions were made in the quadrennial emissions report for ~~toxic air contaminants~~TACs ~~inventory~~ that overestimated emissions and resulted in a High Priority classification, the facility may correct the errors and submit the corrected estimates and supporting documentation to AB 2588 Program staff. The facility must include in their submission the nature of the error and calculations showing how the original emission estimate was determined and how the correction changes this value.

Please note that South Coast AQMD staff must use process rates and emissions from the quadrennial emissions reporting year to prioritize a facility. Changes in emissions estimates due to changes in process rates in years other than the quadrennial emissions reporting year cannot be used to re-categorize a facility. See Section ~~3.3.2~~4.10 for further details.

1.3.2 Source Test Results

Source test results may be used for quadrennial reporting only if they have been previously approved by South Coast AQMD. The source test must be representative of the current operating conditions of the equipment. Additional documentation may be required to demonstrate that the equipment or process has not changed since the time of the source test.

Facilities may conduct a source test after being notified to submit an ATIR. Under these circumstances, the ATIR must still be submitted by the original deadline for all other devices that are not being source tested. Facilities shall submit a source test protocol to South Coast AQMD for approval. Within 120 days of the source test protocol approval date, the facility shall submit a source test report based on the approved source test protocol. The actual source test must be scheduled as soon as possible since it may take some time to prepare the source test report once the source test is completed. Within 30 days of the source test report approval date, the facility shall submit the portion of the ATIR for the specific device or process for which the source test was conducted. ~~If new source test results are available and have been previously submitted to and approved by South Coast AQMD, then the approved source test results may be used with the process rates in the quadrennial emissions inventory report to recalculate emissions and the priority score of a facility.~~Please refer to South Coast AQMD Rule 1402 (d)(3) for more information on source test requirements.

Data from any new or yet to be completed source tests will not be approved for use in the preparation of the required HRA ~~if~~ once an ATIR has already been approved without the use of those source tests. In other words, data from any source tests after the approval of the ATIR~~Under rare instances, a source test may have been conducted prior to approval of ATIR. In such cases, However, if a facility has already conducted and completed the source test with an - approved source test protocol, and all supporting documentation is provided to AB 2588 Program staff, it may be considered for approval. staff will notify the facility in writing if these new source test results are approved for use in the HRA. Please call AB 2588 Program staff if you submit a request and have not been notified regarding approval before submitting the HRA.~~ cannot be used in the HRA.

If a facility wishes to provide unapproved source test data ~~for informational purposes only~~, it must be presented in an alternate HRA for informational purposes only (i.e., as an appendix to the HRA). See Section 4.11 for information and requirements regarding alternate HRAs. The alternate HRA must be presented with separate findings and discussion of cancer risk and hazard indices. Failure to completely separate the alternate HRA from the required analysis is grounds for rejection of the HRA.

1.3.3 Verifiable Emission Reductions

-HRAs in the AB 2588 Program take a 'snapshot' of a base year emissions inventory (or quadrennial emissions inventory report) which is determined by the HRA request letter or notification by the Executive Officer to prepare an ATIR, HRA, or VRRP. This base year is commonly the most recent quadrennial emissions reporting year. Emissions reductions must be verified to be considered as an allowable change. ~~The allowable changes in this section can only be considered as a revision to the quadrennial emissions inventory report that has already been submitted. Modifications after the base year are discussed in Section 3.3.3.~~ Verified emission reductions are those which are permanent and can be substantiated as occurring during the base year. Verification requirements include specifications in South Coast AQMD's permit issued to the facility, a surrender of the existing South Coast AQMD permit, or reductions as required by South Coast AQMD rule(s). Letters of intent or internal memos mandating new company policy are not considered verifiable emission reductions.

~~All supporting documentation regarding equipment shutdowns and process modifications must be received by AB 2588 Program staff in order to recalculate the priority score.~~

Examples of verifiable emission reductions include:

- Misreporting of throughput information, inaccurate emission factors, and incorrect emission calculation methodology. In order for this to be considered as a verified emissions reduction, the facility must provide documentation for the corrections, such as copies of the original records for throughput and calculation methodology to substantiate the corrected emissions. ~~provide ???? to show incorrect information previously used.~~

- A previously operating permitted source has been shut down and therefore has no emissions. In order for this to be considered as a verified emissions reduction, the facility must have surrendered the permit to South Coast AQMD. If a facility chooses to retain the permit for possible use of the equipment in the future, that source cannot be considered a permanent

verified emissions reduction. Please send a copy of the letter requesting inactivation of the permit and any other supporting documentation to AB 2588 Program staff.

- A listed substance was no longer used and therefore not emitted in a process at the facility. The permit conditions have previously been modified to reflect this change. A copy of the modified permit or, if not yet available, a copy of the 400A application form requesting a change of permit conditions and a copy of the check for filing fee submitted to South Coast AQMD must be sent to AB 2588 Program staff.

- Air ~~P~~pollution control equipment which has been issued a ~~p~~Permit~~ to~~ C~~c~~onstruct, has been installed, and was in operation. A ~~Provide a~~ copy of the ~~permit~~Permit~~ to~~ ~~C~~c~~onstruct (and P~~p~~ermit~~ to~~ O~~o~~perate, if issued)~~, and show~~ calculations for emission reductions, and~~. Provide the~~ references for any emission factors used in the calculations must be provided. If source testing data was used to calculate the emissions, provide a copy of the source test protocol and all documentation relating to the results.

- Requirements of new South Coast AQMD rules that have resulted in permanent and enforceable reductions. Provide documentation on how and when reductions were achieved.

~~If the facility wishes to use verified emission reductions in their HRA, documentation of these verified changes must be provided.~~

~~If equipment or processes with air toxic emissions have been shut down prior to High Priority classification and the permits have been surrendered, then these emission reductions may be used to recalculate the priority score of High Priority facilities. Evidence for these emission reductions must include copies of letters sent to South Coast AQMD requesting emission reduction credits and/or the surrender of South Coast AQMD permits.~~

~~If a process has been modified since the quadrennial emissions report and the equipment or process emits a different quantity of a toxic substance, and the facility has applied for and received a permit modification reflecting this change, then the emission reduction for that substance may be used to recalculate the priority score.~~

All supporting documentation regarding equipment shutdowns and process modifications must be received by AB 2588 Program staff in order to recalculate the priority score.

1.3.4 Change of Ownership/Operator

If there has been a change in ownership or operator, the new owner/operator must submit the requested reports unless the facility no longer emits any substances required to be reported under AB 2588. In such case, the new facility owner/operator must provide South Coast AQMD staff the necessary documentation to be exempt from reporting requirements of the AB 2588 Program.

1.3.5 Facility Closures

If the entire facility is closed prior to High Priority classification or if a facility is scheduled for complete closure, this information must be reported to AB 2588 Program staff. Upon review, staff will ~~make a decision~~decide whether the facility ~~should~~ shall submit an ATIR. Factors that must be

considered include the status of permits granted to the facility by South Coast AQMD and the nature of any ongoing activities at the facility. Unless a facility is informed by staff in writing that an ATIR is no longer required, the facility operator must submit an ATIR by the date required.

1.4 Prioritization Procedure

The AB 2588 Program requires South Coast AQMD staff to designate each facility as either high, intermediate, or low priority based on its individual priority score.

Per the requirements of the AB 2588 Program, South Coast AQMD's Prioritization Procedure considers the potency, toxicity, and quantity of hazardous materials released from the facility; the proximity of the facility to potential receptors, including, but not limited to, hospitals, schools, daycare centers, worksites, and residences; and any other factors that South Coast AQMD uses to determine that the facility may pose a significant risk to receptors. South Coast AQMD's Prioritization Procedure also includes adjustment factors for exposure period, averaging times, and the treatment of multipathway pollutants. The Prioritization Procedure is available at South Coast AQMD's website.[12]

A facility receives two scores: one for carcinogenic effects and the other for non-carcinogenic effects. The facility is then ranked using the higher of the two scores. Three categories are used in the ranking: high priority, intermediate priority, and low priority. Facilities designated as high priority are notified by South Coast AQMD staff of their priority score ~~,~~and are required to submit a comprehensive inventory of their air toxic emissions via an ATIR~~, and required to submit a quadrennial emissions report using the AER software.~~ Facilities ranked as intermediate priority are ~~considered to be~~categorized as "District Tracking" facilities, which are required to submit an air toxics inventory once every four years, using the AER software. Facilities ranked as low priority are exempt from quadrennial emissions reporting. Priority scores are re-calculated each time a facility updates its quadrennial air toxic emissions inventory. Table 2 summarizes the priority score categories and the actions required by each category.

[12] https://www.aqmd.gov/home/rules-compliance/compliance/toxic-hot-spots-ab-2588/prioritization

Table 1 — Priority Score Categories

Category	Facility Priority Score (PS)	Actions
High Priority	PS > 10	Prepare ATIR; update emissions quadrennially through AER
Intermediate Priority	1 < PS ≤ 10	Update emissions quadrennially through AER
Low Priority	PS ≤ 1	Exempt from quadrennial emissions reporting

1.4.1 Meteorological Stations

For prioritization purposes, data from the most representative meteorological station should be used. In most cases, this would be the nearest station by distance. However, an intervening terrain feature may dictate the use of an alternate station.

~~1.4.1~~1.4.2 Receptor Distance

One of the factors considered when prioritizing facilities is the receptor distance. All facilities must report the distances to the nearest residential and commercial receptors as part of their AER submittal. If receptor distances are not provided, then default values (conservative receptor distances) are used by ~~SCAQMD~~South Coast AQMD staff to prioritize that facility. ~~If a facility operator believes that their facility was incorrectly categorized due to an incorrect or default receptor distance, then the facility must prepare and submit a signed copy of the Receptor Proximity Form which can be downloaded from the SCAQMD's website.~~

1.4.3 Priority Score Calculation

The primary factors that affect the priority score are the emissions inventory and distances to receptors. For more information on how the priority score is calculated, see the Prioritization Procedure at South Coast AQMD's website.12

1.5 Notification for High Priority Score Facilities and Next Steps

~~South Coast AQMD staff considers requests from High Priority facilities to be re-prioritized after errors or other problems with their quadrennial emissions inventory report. Once the corrections are verified by South Coast AQMD staff~~Facilities with priority scores considered High Priority~~, the facility~~ will be informed~~,~~ in writing to prepare an ATIR or a VRRP (if eligible). South Coast AQMD staff may allow High Priority facilities to be re-prioritized after any errors or other problems with their quadrennial emissions report are corrected and verified. ~~The following sections discuss the criteria used for evaluating requests to reprioritize a facility.~~

Pursuant to South Coast AQMD Rule 1402 (e), South Coast AQMD staff may require the facility to prepare an ~~Health Risk Assessment (~~HRA~~)~~ if emissions levels from the facility have the potential to exceed the Notification Risk Level. ~~The South Coast AQMD Governing Board has adopted risk levels for purposes of public notification pursuant to the AB 2588 Program.~~ If the HRA determines that risks meet or exceed the Notification Risk Level, then public notification will be required. Additional

information regarding South Coast AQMD's public notification procedures are available in Section 4.9 and on the AB 2588 website.[13] In addition, if the HRA determines that risks meet or exceed the ~~South Coast AQMD Rule 1402 establishes a~~Action ~~r~~Risk ~~l~~Level~~s that require risk reduction~~, then a ~~Risk Reduction Plan~~RRP will also be required~~;~~. Both the Notification Risk Level and the Action Risk Level as defined by South Coast AQMD Rule 1402 ~~the levels~~ are summarized in Table 2 below ~~and the elements to include in a RRP are included in Appendix D of these Supplemental Guidelines~~. ~~Additional information regarding South Coast AQMD's public notification procedures are available on the website.~~[16]

Rule 1402 also includes a provision to allow facilities to participate in the Voluntary Risk Reduction Program. ~~If facilities choose to participate, they~~Participating facilities voluntarily reduce their health risk beyond the Action Risk Level to below the Voluntary Risk Threshold (note this is equivalent to the Notification Risk Level; see Table 2) in lieu of the traditional AB 2588 Program process. Facilities also perform a modified public notification that does not require distribution of individual letters and public meetings as in the traditional AB 2588 Program approach. Additional information regarding qualifications and procedures for South Coast AQMD's Voluntary Risk Reduction Program are available on South Coast AQMD's website.[14]

[13] https://www.aqmd.gov/nav/about/public-notices/ab-2588-notices

[14] ~~http://www.aqmd.gov/docs/default-source/planning/risk-assessment/vrrp_guidelines.pdf?sfvrsn=4~~https://www.aqmd.gov/docs/default-source/planning/risk-assessment/vrrp_guidelines.pdf

Table 2 — Public Notification, Risk Reduction, and Voluntary Risk Reduction Levels[15]

Risk Level/Threshold	Cancer Risk	Non-cancer Risk	Cancer Burden
Public Notification Level	10 chances in-one-~~a~~ million	Hazard Index of 1	--
Action Risk Level	25 chances in-one-~~a~~ million	Hazard Index of 3~~*~~	0.5
Significant Risk Level	100 chances in-one-~~a~~ million	Hazard Index of 5	--
Voluntary Risk Threshold	10 chances in-one-~~a~~ million	Hazard Index of 1	--

~~2.~~

[15] See Rule 1402 for complete definitions as lead concentrations also apply for certain risk levels

2. Air Toxics Inventory Reports

2.1 ATIR Format

An ATIR shall be prepared by using the latest approved version of CARB's HARP. In contrast to the simplified reporting allowed under AER, an ATIR requires a larger list of compounds (approximately 450 toxic air contaminants) and greater detail including process, device, and stack information for each piece of equipment.

In general, an ATIR submittal should include a report summary, EIM data, and supporting documentation. See Appendix A for a list of required information for a complete ATIR submittal.

It is critical for a submitted ATIR to be as accurate as possible. The emissions inventory of an approved ATIR determines whether an HRA is required, which in turn determines whether public notification and risk reduction are required. If an HRA is necessary, then the emissions inventory from the approved ATIR will be used to calculate risk. With very few exceptions, once an HRA is required, the emissions inventory from the approved ATIR may not be changed. Source tests that are conducted after approval of the ATIR may not be used as part of the resulting HRA. For more on source tests and their usage in calculating emissions, see Section 1.3.2.

Any information that a facility deems as a trade secret or exempt from the public records act must be clearly marked. The same holds true for processes which can be identified as confidential in the Process Data tab in EIM.

2.1.1 ~~ATIR~~ Report Summary

The report summary summarizes the results and methodology of the ATIR. Important information about the facility and its processes is described here. Additionally, any significant changes between the AER and the submitted ATIR shall ~~also~~ be described here. Facility plot plans showing emission source locations, property line, and buildings shall be included. Any supporting documentation included in the submittal shall also be listed and described.

2.1.2 Emissions Inventory Module

The EIM is the emissions inventory database tool for HARP. An ATIR submittal must include an associated EIM file that describe facility, device, process, emissions, and stack data.

An EIM file shall provide a complete profile of each itemized emission. A device operates and generates emissions through a process. The emissions are calculated using process data, emission factors, and control efficiencies data. Each device is also connected to a release point in EIM. The database format uses a relational data structure that makes it possible to describe the emissions inventory. Not all source types are currently supported by EIM. For example, EIM does not have an option for circular area sources and polygon area sources. For these situations, the emissions for these sources must be described in the report summary and provided in the supporting documentation in as close a format to the EIM as possible. Please contact AB 2588 Program staff for questions on how to present data in a format that is not currently supported by EIM.

The emissions from each device and process should be clearly itemized instead of combined with other processes when possible. For example, a device that combusts more than one type of fuel should have a separate process for each type of fuel instead of combining all emissions from all types of fuel into one process. There are certain scenarios where entry to EIM may not be feasible. In such instances, a simplified version of the data may be inputted, with the actual calculations provided in the supporting documentation of the ATIR. Facilities shall contact AB 2588 Program staff to discuss these situations prior to doing so.

~~*2.1.1*~~*2.1.3 Supporting Documentations*~~*s*~~

All documents necessary for reproducing the results of the ATIR shall be included in the ATIR submittal, such as assumptions and information required to substantiate each emissions calculation. For example, source tests approved by South Coast AQMD or material safety data sheets that were used to derive emission factors must be included. Any emissions calculations that were done outside EIM shall also be included.

3. Air Dispersion Modeling

Air dispersion modeling is performed for the exposure assessment component of the HRA. In this ~~guideline~~chapter, ~~A~~ a basic understanding of dispersion modeling is presumed. For a more detailed overview of regulatory modeling procedures, refer to the U.S. EPA's "Guideline on Air Quality Models"[16] and~~/or~~ the ~~2015 OEHHA HRA Guidelines~~2015 OEHHA Guidance Manual.

3.1 Facility Description and Source Information

The HRA ~~should~~ must contain a brief description of the facility and its activities as shown in the detailed HRA outline provided in Appendix B. Table 3~~4~~ lists the information on the facility and its surroundings that must be provided in the modeling analysis. The facility location is used to determine the most representative meteorological data for the analysis. The nearby land use is needed to properly label receptors as residential, commercial, sensitive, etc.

The facility plot plan (including a ~~length~~ scale) ~~is needed to determine~~ shall be provided showing all source locations ~~including their elevations above sea level~~, building dimensions, and the property boundary. The operating schedule, the maximum hourly emission rates, the annual average emission rates, and the source parameters listed in Table 4 are ~~necessary~~ required elements to accurately characterize the source emissions. Please refer to the detailed outline provided in Appendix B for additional information and guidance.

[16] https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models

~~Table 2 —~~Table 3 — Required Facility Information

Information on the Facility and Its Surroundings
• Location (i.e., address and Universal Transverse Mercator (UTM) coordinates in World Geodetic System 1984 (WGS84))
• Local land use (within 20 km)
• Local topography (within 20 km)
• Facility plot plan
- Property boundaries
- Horizontal scale
- Building heights (for building downwash calculations)
- Source locations including elevations

~~Table 3 —~~Table 4 — Required Source Information

Point Source Information (stacks, vents, etc.)
• Maximum and average hourly emission rates
• Annual emissions
• Stack location (in UTM coordinates in WGS84) on plot plan including elevation
• Stack height
• Stack gas ~~exit velocity~~flow
• Stack gas exit temperature
• Building dimensions, heights, and location
Fugitive Source Information (area and volume sources)
• Maximum and average hourly emission rates
• Annual emissions
• Source location (in UTM coordinates in WGS84) on plot plan including elevations
• Source height
• Area or volume dimensions

3.2 Model Selection and Model Options

All modeling files~~HRAs~~ prepared for the AB 2588 Program ~~must~~ shall use the most recent version of AERMOD~~HARP.,~~ U.S. EPA's air quality dispersion model~~,~~. AERMOD~~,~~ is ~~used by~~included in HARP for the exposure assessment.~~, but may also.~~ AERMOD can also be obtained from U.S. EPA's website or through third party software programs and be used in its standalone form ~~or third party software programs.~~ AERMOD is a Gaussian plume model capable of estimating pollutant concentrations from a wide variety of sources that are typically present in an industrial source complex. AERMOD estimates hourly concentrations for each source/receptor pair and calculates concentrations for user--specified averaging times, including an average concentration for the complete simulation period. AERMOD includes atmospheric dispersion options for both urban and rural environments and can address flat, gently rolling, and complex terrain situations. AERMOD documentation is available on the U.S. EPA website.[17] Table 5 summarizes the default

[17] https://www3.epa.gov/ttn/scram/models/aermod/aermod_userguide.pdf ~~https://www.epa.gov/scram/air-quality-dispersion-modeling-preferred-and-recommended-models~~

dispersion modeling assumptions recommended by South Coast AQMD. ~~AERMOD-ready meteorological data are available on South Coast AQMD's website.~~

~~Table 4 —~~ Table 5 — Summary of South Coast AQMD Dispersion Modeling Guidance

Parameter	Assumption
Model Control Options	
• Use Regulatory Default?	Yes
• Urban or Rural?	Urban
Source Options	
• Include Building Downwash?	Yes
Meteorology Options	
• Meteorological Data	AERMOD-ready data available on South Coast AQMD website. See Section 3.3.

~~AERMOD should be executed using the urban dispersion parameters (i.e., URBAN), which is~~ South Coast AQMD policy for all air quality impact analyses in its jurisdiction requires use of urban dispersion coefficient. The U.S. EPA regulatory default options ~~should~~ shall be used for all projects. If non-default options are used, a justification ~~must~~ shall be included ~~and SCAQMDSouth Coast AQMD staff approval is needed. We recommend that modelers~~ Please contact AB 2588 Program staff prior to using any non-default options.

3.3 Meteorological Data

South Coast AQMD has AERMOD-ready meteorological data for the South Coast Air Basin available on the South Coast AQMD website including a map showing the locations of meteorological stations with AERMOD-ready data, a table listing the meteorological data for the meteorological stations, and a list of station data including abbreviations, geographical information, and surface characteristics.[18]

The most representative meteorological station should be chosen for modeling which in most cases, is the nearest station; however, an intervening terrain feature may dictate the use of an alternate station. Modelers ~~should~~ shall contact AB 2588 Program staff regarding the most representative meteorological station, if necessary. ~~The data are available on the following South Coast AQMD website~~

3.4 Receptor Grid

Air dispersion modeling is required to estimate (a) annual average concentrations and to ~~calculate~~locate the ~~Maximum Individual Cancer Risk (MICR),~~receptors showing the maximum ~~chronic HI~~cancer risks, the maximum non-cancer hazard indices (HI), the zones of impact, and

[18] https://www.aqmd.gov/home/air-quality/air-quality-data-studies/meteorological-data/data-for-aermod ~~http://www.aqmd.gov/home/air-quality/meteorological-data/~~

~~excess~~ cancer burden and (b) peak hourly concentrations to calculate the health impact from substances with ~~acute~~ non-cancer acute health effects. ~~To achieve these goals, the~~All receptors shall be set to the elevation (i.e. no flagpole receptors), so that ground-level concentrations are analyzed.[19] For air dispersion modeling, an initial receptor grid ~~should begin at the facility fence line and extend to cover the zone of impact. In addition, the receptor grid should be fine enough to identify the points of maximum impact.~~

~~To identify the~~centered on the facility with a maximum ~~impacted receptors (i.e., peak cancer risk and peak hazard indices) a grid~~ receptor spacing of 100 meters ~~or less must~~shall be used. ~~All receptors should be identified in UTM coordinates. Receptor grid points outside of the facility boundary must~~This initial 100 meter receptor grid shall be placed so that individual grid points are ~~placed~~located at UTM coordinates ending in "00" (e.g., grid point UTM East 572300 and UTM North 3731000). ~~Receptor~~This receptor grid shall be of sufficient extent to clearly identify the zone of impact (see Section 4.6 for discussion on zone of impact). Additional receptor grids with ~~less than 100 meter~~ finer spacing ~~must include~~may be required to identify the points of maximum impacts. If a finer receptor grid is warranted, the coarser grid ~~points at UTM coordinates ending in "00." Elevations must be provided for all receptor grids~~need not overlap with the finer grid. All receptors shall be defined in terms of UTM coordinates and a WGS84 spatial reference system.

Receptors on the facility boundary must be placed along the boundary ~~following the maximum~~using 20 meters spacing ~~requirements shown in Table 6.~~. Sensitive receptors must be identified~~.~~. Locations of the sensitive receptors shall also be provided by exact UTM coordinates. Elevations must be provided for all receptors~~.~~
using the AERMAP program provided by U.S. EPA in accordance to Section 3.6.

~~Table 6- Maximum Receptor Spacing Requirements for Fenceline Receptors~~

~~Area of Facility~~	~~Maximum Receptor Spacing~~
~~Area < 4 acres~~	~~20 meters~~
~~4 acres ≤ Area < 10 acres~~	~~30 meters~~
~~10 acres ≤ Area < 25 acres~~	~~50 meters~~
~~25 acres ≤ Area < 100 acres~~	~~75 meters~~
~~Area ≥ 100 acres~~	~~100 meters~~

3.5 Source Data

~~-~~Emission sources are categorized into four basic types: point, area, volume, and open pit sources. Please refer to the AERMOD User Guide and the HARP ADMRT User Manual[20] for the required data for each type of source. Some types of sources may have special situations.

~~*3.4.1*~~*3.5.1 Point Sources*

Emission release points with raincaps may be modeled as a capped source using the POINTCAP option in AERMOD. Horizontal releases may be modeled using the POINTHOR option. ~~or which~~

[19] In instances where elevated receptor heights may be warranted, please consult with AB 2588 Program staff.
[20] https://ww3.arb.ca.gov/toxics/harp/docs2/harp2admrtuserguide.pdf

~~are oriented so that the exhaust is vented downward or horizontally may not use the velocity inside the stack as the vertical velocity of the point source in the model. However, as a point source must be modeled with some vertical velocity, these stacks may be modeled with a positive vertical velocity of no more than 0.01 meters per second.~~ In general, if there is uncertainty on how to represent sources in a model, AB 2588 Program staff ~~should~~ shall be consulted before proceeding with modeling.

~~*3.4.2*~~*3.5.2 Area Sources*

According to U.S. EPA guidance for area sources in AERMOD, the aspect ratio (i.e., length/width) for area sources should be less than 10 to 1. If this is exceeded, then the area ~~should~~ must be subdivided to achieve a 10 to 1 or less aspect ratio for all sub-areas.

The EIM module currently is not capable of handling polygonal area sources. If use of any polygonal or area sources is needed, these must be addressed outside of EIM. Facilities shall submit all documentation necessary for modeling any such area sources, separately from EIM files.

3.5.3 Volume Sources

Receptor placement is important for volume sources that have "exclusion zones." Concentrations may not be correctly calculated for receptors located within the exclusion zone. The exclusion zone for any volume source is defined as 2.15 times the initial lateral dispersion coefficient (sigma y) + 1 meter from the center of the volume source.

3.6 Elevation Data

The AERMOD modeling system includes AERMAP, which is a terrain data pre-processor. Terrain data, available from the United States Geological Survey (USGS), is used by AERMAP to produce terrain base elevations for each receptor and source and a hill height scale value for each receptor.

The most recent version of AERMAP shall be used to determine elevations for receptors, sources, buildings, and terrain. It is highly recommended that National Elevation Dataset (NED) data in GeoTIFF format be used as input into AERMAP, per the recommendation in the U.S. EPA's AERMOD Implementation Guide. A resolution of 1/3 arc-second (approximately 10 meters) is preferred, although 1 arc-second (approximately 30 meters) is also acceptable.

Although NED data is preferred as an input to AERMAP, Digital Elevation Model (DEM) data may still be used since the Air Dispersion Modeling and Risk Tool (ADMRT) module in HARP currently only supports DEM data. However, DEM data is static and has not been updated by USGS for a number of years. For facilities relying solely on HARP for dispersion modeling, DEM data will be allowed until the time when HARP is updated to support NED data.

4. Health Risk Assessments

4.1 OEHHA Guidance

OEHHA's guidance for preparing HRAs is contained in the ~~*Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments*~~2015 OEHHA Guidance Manual.[21] This guidance manual has undergone public and peer review, was endorsed by the California Scientific Review Panel ~~(SRP)~~, and released in final version ~~approved~~ by OEHHA in March 2015.

The ~~2015 OEHHA HRA Guidelines~~2015 OEHHA Guidance Manual[2] recognizes four types of evaluations~~.~~:

- Tier- 1: point estimate, using standard assumptions;
- Tier- 2: point estimate, using site-specific details;
- Tier- 3: stochastic risk, using standard assumptions;
- Tier- 4: stochastic risk, using site-specific details

~~The details are~~ As ~~described in the 2015 OEHHA HRA Guidelines,~~.

~~"~~As described in the 2015 OEHHA HRA Guidelines, "Tier- 1 is a standard point-estimate approach using the recommended point-estimates ~~presented in this document.~~ […] Tier- 1 evaluations are required for all HRAs prepared for the Hot Spots Program~~.~~ To promote consistency across the state for all facility risk assessments and allow comparison across facilities.")[22] ~~(see Section 2.5.3. of 2015 OEHHA HRA Guidelines[26])~~

~~"[T]he Tier-1 evaluation is useful in comparing risks among a large number of facilities and must be included in all HRAs." (see Section 8.2.5.C. of 2015 OEHHA HRA Guidelines)~~

As such, South Coast AQMD requires that all HRAs for the AB 2588 Program ~~contain~~ include ~~at least~~ a Tier-1 evaluation. The results of the Tier- 1 evaluation are used for comparative and regulatory purposes (i.e., risk status, fee category, public notice, and risk reduction).

The Executive Summary and main body of the HRA shall contain only statements regarding the results of the Tier- 1 evaluation. Tier- 2, Tier- 3, and Tier- 4 evaluations ~~should~~ shall not be in the Executive Summary or main document; they may be prepared and presented as appendices to the main document. Site specific details for either a Tier 2, Tier 3, or Tier 4 evaluation ~~will~~ require review and approval by both ~~OEHHA, CARB, and SCAQMD~~South Coast AQMD and OEHHA.

---

[21] Information regarding CARB's Risk Management ~~policy~~ Policy can be located at: https://www.arb.ca.gov/toxics/toxics.htm

[22] See Sections 2.5.3 and 8.1.1 of the 2015 OEHHA Guidance Manual~~https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0~~

4.1.1 Calculating Risk

~~SCAQMD requires that a~~All HRAs prepared for the AB 2588 Program ~~be prepared~~ in accordance with OEHHA and CARB guidance[2] ~~and~~ shall use ~~using~~ the latest approved version of HARP at the time of submittal. The OEHHA Guidelines requires at least a Tier-1 evaluation, which allows for Derived Risk Calculations. The Derived method uses high end exposure parameters for the top two exposure pathways and mean exposure parameters for the remaining pathways for cancer risk estimates. For ~~chronic~~ non-cancer chronic assessments, the Derived method uses high end exposures for the top three exposure pathways. CARB has developed an updated Risk Management Policy that includes recommendations for inhalation exposures, which recommends using high end breathing rates (95th percentile) for children from the 3rd trimester through age 2, and 80th percentile breathing rates for all other ages for residential exposures. In accordance with these guidelines, South Coast AQMD ~~recommends~~ requires ~~Derived Risk Calculations using~~use of CARB's Risk Management Policy ~~to be prepared and presented~~ in an HRA. CARB prepared HARP to facilitate the preparation and transmittal of a compliant ATIR and HRA. The details are provided below.

4.2 HRA Format

The format for the HRA must follow the detailed outline presented in Appendix B of these Supplemental Guidelines. A completed HRA Summary must be included in the Executive Summary of the HRA~~all HRAs submitted to South Coast AQMD~~; a sample of the form can be downloaded from South Coast AQMD's AB 2588 Program website.[23] ~~.~~ The detailed HRA outline provided in Appendix B lists the HARP ~~computer~~ files to be included electronically with the HRA. All copies of electronic file(s) ~~should~~ shall be sent to AB 2588 Program staff. The HRA ~~should~~ shall also be submitted electronically (i.e., PDF format). Any trade secret or other public records act exempt information must be clearly identified for possible redaction since HRAs and all other documents submitted to the AB 2588 Program staff are subject to public records requests.[24]

Cancer risk values ~~should~~ shall be reported to the nearest tenth and ~~should be~~ rounded up ~~from 5~~as necessary (e.g., 5.05 chances in~~-~~one~~-~~ ~~a~~ million is rounded up to 5.1 chances in ~~a~~ one-million). Non-cancer risk values ~~should~~ shall be reported to the nearest hundredth and ~~should~~ also ~~be~~ rounded up as needed ~~from 5~~ (e.g., an ~~hazard index (~~HI~~)~~ of 0.105 is rounded to 0.11).

4.3 HARP

HARP is designed to meet the programmatic requirements of the AB 2588 Program~~-~~. ~~and t~~The ADMRT module is required to be used for all HRAs.~~will calculate all four OEHHA Tiers, both the Derived Risk Calculations (as designed by OEHHA), and CARB's "Risk Management Policy Inhalation Rates for Residential Cancer Risk Calculations.~~"

The outline for an HRA is contained in Appendix B. The list of files that must be submitted with an HRA for the AB 2588 Program are included in Table 6. Any emissions factor development, emission rate calculations, or approved source test protocol and reports must be submitted in standard readable electronic file format (e.g., in Microsoft Excel). For any items that have

[23] https://www.aqmd.gov/docs/default-source/aqmd-forms/AB2588/ab2588-hra-summary-form.pdf
[24] http://www.aqmd.gov/docs/default-source/default-document-library/Guidelines/pra-guidelines.pdf

previously been submitted to South Coast AQMD (such as source test reports)~~If these items have been attached to the AER report~~, please ~~refer to it in make~~include an appropriate reference in references section of the HRA report (see HRA format in Appendix B)~~the cover letter to avoid a redundant submittal~~.

~~Table 5 —~~Table 6 — Required Files ~~that must be provided with~~for HRA s~~S~~ubmittals

File Type	Notes
HRA Input HRA Output	All files created by CARB's ~~Air Dispersion Modeling and Risk Tool (~~ADMRT~~)~~ Module
Dispersion Modeling Input Dispersion Modeling Output	All AERMOD and BPIP files used in the HRA including terrain data. ~~All meteorological data files including any AERMET files if default South Coast AQMD meteorological data is not used.~~
Emission Inventory ~~Input~~Module ~~Emission Inventory Output~~	The transaction file ~~All files~~ created by CARB's ~~Emission Inventory Module (~~EIM~~)~~, only if it is different from the approved ATIR.
Emission Calculations	Provided in standard electronic format (e.g., Excel) and documented references (i.e. sample calculations); applicable only if emissions vary from the approved ATIR.
~~Source Tests~~	~~Only South Coast AQMD-approved source tests can be used. South Coast AQMD approval must be included in submittal.~~
Air Monitoring Data	~~Any monitoring data used in the HRA should be provided.~~ South Coast AQMD station name and meteorological version; otherwise, all meteorological data files including any AERMET files if default South Coast AQMD meteorological data is not used.

4.4 South Coast AQMD's Default Assumptions for HRAs

All HRAs prepared for South Coast AQMD must include an OEHHA Tier~~-~~ 1 evaluation. ~~All SCAQMD risk management decisions are based on the Tier-1 evaluation. Tier-2, Tier-3, and Tier-4 evaluations may be prepared but must be included in an appendix to the HRA. The results of the Tier-2, Tier- 3, and/or Tier-4 evaluations must not be included in the Executive Summary or main body of the HRA.~~ Table 7 and Table 8 summarizes the default ~~HRA~~ assumptions required by South Coast AQMD for preparation of a Tier 1 HRA. Deviations from these defaults must be approved by South Coast AQMD staff prior to their use.

Residential cancer risks assume a 30-year exposure (cancer burden assumes a 70-year exposure) and must include, at a minimum, the following pathways: home grown produce, dermal absorption, soil ingestion, and mother's milk. A deposition velocity of 0.02 m/s ~~should be assumed~~ shall be used for the non-inhalation pathways, ~~. The HRA should assume default values in HARP for all pathways with the exception of~~ and the dermal pathway ~~which should assume~~shall use a "warm" climate. The other pathways of fish ingestion, dairy milk ingestion, drinking water consumption, and meat (i.e., beef, pork, chicken, and egg) ingestion ~~should~~ shall be included ~~only~~ if the facility

impacts a local fishable body of water, grazing land, dairy, or water reservoir. The "RMP Using the Derived Method" risk calculation option ~~should~~ shall be used for estimating cancer risks at residential receptors. To estimate ~~chronic~~ non-cancer chronic risks at residential receptors the "OEHHA Derived Method" risk calculation option ~~should~~ shall be used. The ~~8-hour chronic~~ non-cancer 8-hour chronic risk ~~should~~ shall also be calculated for ~~residential~~ receptors for any source that operates at least 8 hours per day~~, and~~ 5 days per week.

Population exposure analyses shall be included with the HRA. The number of people who reside within the 1 x 10^{-6}, 1 x 10^{-5}, and 1x 10^{-4} cancer risk isopleths shall be provided. For non-cancer exposure, the number of people who reside within the 0.5, 1, and 5 ~~hazard index~~HI isopleths shall likewise be reported. Use of HARP software to calculate the population exposure is preferred. Use of alternative methods must first be discussed and granted approval for use by the AB 2588 Program staff.

Furthermore, a cancer burden analysis shall be provided. The area of impact shall first be delineated from the results of the residential cancer analysis. All census receptors within the 1 x 10^{-6} area of impact[25] shall be identified. A residential cancer risk over a 70 year exposure is then determined for these census receptors. The cancer burden is the sum of the 70 year cancer risk at each census receptor multiplied by the population for each census receptor.

[25] Th~~is~~e zone of impact is determined using the 30 year exposure duration.

Table 7 — Summary of South Coast AQMD Tier 1 HRA Scenarios

Analysis Type	Exposure Period	Intake Scenario
Residential cancer	30 year exposure	RMP using derived method
Worker cancer	25 year exposure	OEHHA derived method
Residential non-cancer chronic	N/A (REL only)[26]	OEHHA derived method
Worker non-cancer chronic	N/A (REL only)[26]	OEHHA derived method
Non-cancer chronic 8-hr	N/A (REL only)[26]	OEHHA derived method
Population wide cancer burden	70 year exposure	RMP using derived method

~~Table 6 —~~Table 8 — Summary of South Coast AQMD ~~Health Risk Assessment Guidance~~Mandatory Exposure Pathways and Settings

Parameter	Assumptions
~~Multipathway~~Pathway	
Inhalation	Required for ~~residential and worker~~ all receptors
Dermal	Required for ~~residential and worker~~ all receptors
Soil	Required for ~~residential and worker~~ all receptors
Homegrown Produce	Required for residential receptors
Mother's Milk	Required for residential receptors
Beef/Dairy	Site specific
Pigs, Chickens, and/or Eggs	Site specific
Deposition ~~Velocity~~Rate	0.02 meters per second
~~MP~~ Exposure Assumptions	Use HARP defaults except for dermal pathway which uses "warm" climate
~~Residential Cancer Risk Assumptions~~	
~~Exposure Duration~~	~~30 years for individual receptors 70 years for cancer burden~~
~~Analysis Option~~	~~RMP Using the Derived Method~~
~~Worker Cancer Risk Assumptions~~	
~~Exposure Duration~~	~~25 years~~
~~Analysis Option~~	~~OEHHA Derived Method~~
~~Residential and Worker Non-Cancer Risk Assumptions~~	
~~Analysis Option~~	~~OEHHA Derived Method~~

~~Worker cancer risks assume a 25-year exposure and must include the pathways of dermal absorption and soil ingestion. A deposition velocity of 0.02 m/s should be assumed for these pathways and the dermal pathway should assume a 'warm' climate. The "OEHHA Derived~~

[26] Based on Reference Exposure Levels; see 2015 OEHHA Guidance Manual for detail

~~Method" risk calculation option should~~ shall ~~be used for estimating cancer and non-cancer chronic risks at worker receptors.~~

The ~~air~~ concentration ~~that~~ to which ~~the neighboring~~ workers are exposed ~~breathe when present at work is~~may be different than the annual average concentration calculated by AERMOD. The annual average estimated by AERMOD is a 24 hours per day, 7 days per week, 365 days per year average, regardless of the actual operating schedule of the emitting facility. ~~It is assumed~~However, the off-site worker ~~is~~may be impacted ~~by the toxic emissions~~ only during work hours. Thus, the model-predicted concentrations must be adjusted by a multiplying factor, the worker adjustment factor (WAF), ~~(worker adjustment factor)~~ to reflect the pollutant concentration that the worker breathes. For example, suppose that the off-site worker and the emitting facility have the same operating schedule, perhaps 8 hours per day, 5 days per week, and 52 weeks per year. The annual average concentrations predicted by AERMOD must be adjusted by a factor of 4.2 (i.e., 7/5 x 24/8).[27] ~~Please refer to the 2015 OEHHA HRA Guidelines~~2015 OEHHA Guidance Manual ~~for further information.~~

~~The adjustment factors for all possible operating schedules are provided in Tables 5.1 and 5.2 of SCAQMD *Permit Application Package "N" For Use in Conjunction with the Risk Assessment Procedures for Rules 1401, 1401.1, and 212.*~~ These factors are entered into HARP by activating the ~~Worker Adjustment Factor (~~WAF~~)~~ option in the Inhalation Pathway and entering the appropriate factor from either one of the tables.

The ~~worker adjustment factors~~WAF factors ~~s in Tables 5.1 and 5.2 should~~shall only be applied when estimating worker cancer risks and non-cancer chronic 8-hour HI for facilities that do not operate continuously. The adjustments are not applicable to residential cancer risks and to residential or worker non-cancer chronic ~~non-cancer~~ risks.

4.5 Receptors for Maxima~~l~~~~um~~ Exposure~~ed Individual~~ and Point of Maximum Impact

The HRA shall include evaluations to show the following receptors: the Maximally Exposed Individual Resident (MEIR); the Maximally Exposed Individual Worker (MEIW~~R~~); and the Point of Maximum Impact (PMI). As part of the ~~evalution~~evaluation~~To identify the location of the maximum exposed individual, it is necessary to examin~~,e current land use and allowable land use shall be identified ~~in the vicinity of the point of maximum impact~~ (residential, commercial/industrial, or mixed use). ~~Currently, t~~The use of block group or census tract centroids as surrogates for the maximum exposed individual does not provide sufficient spatial resolution and will not be approved.

Cancer risk and non-cancer chronic ~~hazard indices (HI)~~HIs must be provided for both the most exposed residential and the most exposed worker ~~commercial/industrial~~ receptors. The non-cancer acute HI must be provided for the offsite ~~point of maximum impact (~~PMI~~)~~. Additionally, cancer

[27] See Sections 4.12.2.1, 4.12.3.1, and 5.4.1.2 5.4.1.4 from the 2015 OEHHA Guidance Manual.
See also Tables 5.1 and 5.2 of South Coast AQMD *Permit Application Package "N" For Use in Conjunction with the Risk Assessment Procedures for Rules 1401, 1401.1, and 212.* here:
~~http://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf~~https://www.aqmd.gov/docs/default-source/permitting/rule-1401-risk-assessment/attachmentn-v8-1.pdf

risk and HI values at each sensitive receptor located within the zone of impact must be presented in a table. The zone of impact is discussed in ~~the next s~~Section 4.6.

4.6 Zone of Impact

Using air dispersion modeling and risk analysis, a zone of impact shall be determined for cancer and for non-cancer risks. ~~In an HRA, it is necessary to define a zone of impact or a method to set boundaries on the analysis. For AB 2588 purposes, South Coast AQMD requires that~~ For cancer risk, the zone of impact ~~the HRA must~~shall encompass the entire geographic area subject to an added lifetime cancer risk (all pathways) of one chances in~~-~~one~~-~~million or greater (i.e. $\geq 1.0 \times 10^{-6}$). Likewise, ~~For~~ for non-cancer risks, the analysis must bound the area subject to an HI greater than or equal to one half (≥ 0.5). The air dispersion modeling and risk analysis process may be required to be repeated with a larger receptor grid in order to correctly determine the zone of impacts.

4.7 Land Use Considerations

Risk estimates are sensitive to land uses (e.g. residential, commercial, vacant) since these factors can affect exposure assumptions. If residential or worker risks are not calculated at the PMI because the land is currently vacant, then a discussion of the location, zoning and potential future land uses shall be included ~~with~~ in the HRA~~must be discussed~~. ~~Updated information on current land uses is requested~~ shall be provided ~~when updated emission estimates are reported to South Coast AQMD.~~

4.8 Maps

Maps showing the location of the facility and sources within the facility in relation to the zone of impact must be submitted. ~~Dispersion modeling for sources should~~ shall be conducted ~~with receptors defined in terms of Universal Transverse Mercator (UTM) coordinates and a World Geodetic System 1984 (WGS84) spatial reference system.~~ For cancer risk, total risk isopleths for facilities ~~should~~ shall be plotted on the street map provided using HARP at cancer risk intervals of 1, 10, 25, and 100 chances in~~-one-~~ ~~a~~ million. Isopleths for non-cancer HI must include levels corresponding to an HI of 0.5, 1.0, 3.0, and 5.0.

Separate maps should be provided for each of the four risk variables: cancer risks, non-cancer acute risks, non-cancer chronic risks, and non-cancer 8-hour chronic risks. The maps must contain an accurate scale for measuring distances and a legend. The map scale that can accommodate the isopleths and show the greatest level of detail must be used. The names of streets and other locations must be presented and be legible.

The location of schools, hospitals, day-care centers, other sensitive receptors, residential areas and work-sites within the zone of impact must be identified on the map. If the area of the zone of impact is very large, then more detail should be devoted to higher concentration/risk areas versus lower risk areas. The land uses in the vicinity of the receptors of maximal exposure and the ~~point of maximum impact PMI~~ PMI must be shown in detail. This may require a separate map. If sensitive receptors are located within the zone of impact, then cancer risk and HI values must also be presented in the form of a table including all the sensitive receptors.

4.9 Public Notification

Public notification shall be conducted when risk is found to exceed the Notification Risk Level of Rule 1402. See the *South Coast AQMD Public Notification Procedures for Facilities Under the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588) and Rule 1402*[28] for details on the requirements and the notification process.

~~4.9~~

4.10 ~~Use of~~ Emissions Differing from ~~after the Quadrennial~~ Base Year Inventory~~Reporting Year~~

~~HRAs in t~~The AB 2588 Program takes a 'snapshot' of a base year emissions inventory, which is ~~determined by the HRA request letter. This base year is commonly~~ typically the most recent quadrennial emissions reporting year. The ATIR is developed for th~~is~~e base year and the HRA is conducted using this ATIR. In some cases, more recent emissions are substantially different than the base year emissions of a facility due to modifications. Facilities ~~can~~ may include information about the more recent emission changes and how those affect health risks in a supplemental appendix to their HRA. If a facility includes supplemental information showing that emissions and health risks have been reduced since the base year, then this more recent emissions scenario can be used when comparing residual health risks against Rule 1402(c)(2) Risk Reduction thresholds, ~~as long as~~provided the new emissions scenario is based on emission reductions that are permanent, enforceable, and verifiable. The health risks from the base year will still be used when comparing against Rule 1402 (c)(12) Public Notification Thresholds. If public notification is required, then the ~~supplemental~~ information about reductions in health risk since the base year can be included as supplemental information in the notification materials.

The facility ~~should~~ shall contact AB 2588 Program staff to obtain approval and determine if the changes occurring after the base year can be considered as verifiable, enforceable, and permanent emission reductions. Upon approval, the facility must estimate cancer risk, cancer burden, and hazard indices for both the base year and the estimated ~~annual~~ emissions following reductions.~~after the proposed future reductions are complete~~. The two risk estimates must be presented separately in the HRA submitted to South Coast AQMD. The risk estimate determined from emissions not derived from the base year inventory shall be shown in a supplemental appendix to the HRA. ~~The dual estimate provides a backup in case reductions proposed by the facility are not implemented as planned.~~ Note that ~~any new emissions or~~ emission increases~~,~~ due to process changes and/or new equipment~~,~~ must also be quantified ~~and included in any HRA which incorporates emission reductions since the quadrennial emissions inventory was prepared~~.

4.11 Uncertainty Analyses and Alternate HRA

The 2015 OEHHA ~~HRA Guidelines~~Guidance Manual describes uncertainty analyses ~~(or~~ and ~~conducting of~~ HRAs with alternate assumptions~~) that~~ (i.e., alternate HRAs). These may be ~~provided~~included only at the discretion of ~~SCAQMD. SCAQMD~~South Coast AQMD. Factors for allowing ~~The~~ an Alternate HRA ~~is~~ include whether the information provides value and if underlying assumptions are acceptable to staff. ~~Regardless, any~~ Alternate HRAs ~~for informational~~

[28] https://www.aqmd.gov/docs/default-source/planning/risk-assessment/pn_procedures.pdf

~~purposes only and is~~are not ~~reviewed or~~ approved by South Coast AQMD and are not allowable ~~;~~ ~~neither will it be used~~ for ~~comparison to Rule 1402 risk levels~~for determining the Rule 1402 Action Risk Level or Notification Risk Level.

Any alternate analysis that South Coast AQMD staff ~~will allow such analyses to be included as one of~~allows shall meet the ~~appendices to the facility's HRA. This analysis would be a supplement to the primary HRA that is carried out using the assumptions presented in the 2015~~following requirements:

- ~~OEHHA HRA Guidelines and the guidelines included. Deviations from the OEHHA Tier-1 point estimate methodology must be described in detail at the beginning of the appendix and the reasons for the alternative assumptions must also be described in detail with supporting documentation.~~

- All analyses, discussion, and information relating to an alternate analysis (including any unapproved source test data) must appear under a separate title such as "Alternate Analysis" in an appendix to the HRA.

    - If an alternate HRA is ~~mixed~~ integrated together with the HRA Tier-1 analysis and not presented in a separate appendix of the document as required by OEHHA and ~~SCAQMD~~South Coast AQMD guidelines, the HRA will be considered unacceptable and returned to the facility owner/operator for revision.

    - ~~Failure to comply with these guidelines are grounds for rejection of the primary HRA in accordance with Rule 1402(e).[14] The Alternate HRA it is for informational purposes only and is not reviewed or approved by SCAQMD, neither will it be used for comparison to Rule 1402 risk levels.~~

- Deviations from the OEHHA Tier-–1 point estimate methodology must be described in detail at the beginning of the appendix and the reasons for the alternative assumptions must also be described in detail with supporting documentation.

Failure to comply with these guidelines are grounds for rejection of the primary HRA in accordance with Rule 1402(e).

5. Risk Reduction Plans

5.1 Risk Reduction Measures

An ~~Risk Reduction Plan~~RRP shall propose risk reduction measures that reduce or eliminate risk associated with emissions of ~~toxic air contaminants~~TACs that are real, permanent, quantifiable, and enforceable. Letters of intent or internal memos mandating new company policy are not considered verifiable emission reductions.

Risk reduction measures shall be as specific as possible with details on what actions will be taken to reduce or eliminate risk. Examples of risk reduction measures include permit modifications of a device generating a significant portion of the ~~toxic air contaminants~~TACs contributing to the risk, installation of additional air pollution control devices, and conducting source tests to demonstrate that the facility's emissions will result in risks below the Action Risk Level.

~~*5.1.1 Implementation Schedule*~~

~~*5.1.2 Time Extensions*~~

~~a~~

5.2 Updated ATIR and HRA

The RRP shall include an updated ATIR and HRA that includes the proposed risk reduction measures. The updated ATIR and HRA must demonstrate that the risk reduction measures will reduce or eliminate risk to below the Action Risk Level.

5.3 Progress Reports

Progress reports shall be submitted 12 months after RRP approval. The progress reports shall describe any progress that has been made in implementing the risk reduction measures and provide an updated timeline to full implementation. See Appendix E for a full list of items to be included in a Risk Reduction Progress Report

6. Potentially High Risk Level Facilities

Potentially High Risk Level facilities are those facilities that have been determined to have a likely potential to either exceed or has~~s~~ve exceeded the Significant Risk Level as specified in Rule 1402 (g)(1). Facilities are designated as Potentially High Risk Level facilities by South Coast AQMD. Prior to the official designation, staff will meet with the facility representatives to obtain any relevant information. The designation is in written form and will include information substantiating the designation such as findings from the evaluation of relevant ambient monitoring data, source test data, compliance data, emissions data as well as site visits.

Following the designation, a Potentially High Risk Level facility must submit the Initial Information for the ATIR, Early Action Reduction Plan, ATIR, HRA and RRP. With the exception of the Early Action Reduction Plan, facilities that are notified under the traditional path must also submit these documents. However, Potentially High Risk Level facilities are required to submit the HRA and RRP on an expedited timeline of 180 days following designation. The purpose of the expedited timeline is to quickly reduce potential health risk to the public.

The Early Action Reduction Plan shall include the facility name, location address, and South Coast AQMD facility identification number. The devices and processes that account for the estimated risk from the facility shall be identified. The Early Action Reduction Plan shall also identify risk reduction measure(s) to be implemented to quickly reduce emissions that drive risk. Note that these risk reduction measures may also be proposed for the final RRP. Examples of risk reduction measures include housekeeping provisions, process changes, physical modifications, as well as operational curtailments. These measures are not required to be permanent but must remain in place for the duration stated in the approval for the Early Action Reduction Plan. Finally, a schedule for implementing the specified risk reduction measures shall be provided. The schedule may be enforced as part of the approval for the Early Action Reduction Plan.

Appendix A — Elements of an Air Toxics Inventory Report

1. **Report Summary** (hard copy)

- Facility name, Facility ID, and location
- Facility plot plan identifying: emission source location, property line, horizontal scale, and building heights and dimensions
- Report emission control equipment and efficiency by source and by substance.
- Facility total emission rate by substance for all ~~emittants~~ devices including the following information (2015 OEHHA Guidance Manual Appendix A-I Substances must be quantified in the inventory report):
  - substance name and CAS number
  - annual average emission for each substance (lb/yr and g/s)
  - maximum one-hour emissions for each substance (~~lbs~~lb/hr and g/s)
- ~~Report emission control equipment and efficiency by source and by substance. The description should be brief.~~
- Report annual average and maximum hourly emission rates for each toxic substance for each source
- Report emissions inventory methods indicating whether emissions are measured or estimated
- A list of ~~S~~supporting documentation such as source test reports ~~and South Coast AQMD approval letter if emissions are measured~~or material safety data sheets included in the submittal along with a description of each supporting document and which emissions refer to it

2. **~~Use HARP's Emissions Inventory Module~~EIM**:~~the EIM portion of HARP to~~ provide facility, device, process, emissions, and stack data ~~in a HARP database~~, including but not limited to the following information:

- Source identification numbers used by the facility
- Source names
- South Coast AQMD permit numbers if available
- Source locations using UTM coordinates (in meters) with a WGS84 projection
- Source base elevations (m)
- Source heights (m)
- Source dimensions (e.g., stack diameter, building dimensions, area/volume size, etc.) (m)

- ~~Stack gas exit velocity (m/s) if applicable~~
- Stack gas volumetric flow rates (ACFM) if applicable
- Stack gas exit temperatures (K)
- Number of operating hours per day
- Number of operating days per week
- Number of operating weeks per year
- Annual process rates for each device and process
- Maximum hourly process rates for each device and process
- Controlled and uncontrolled emission factors for each ~~toxic air contaminant~~TAC reported

3. **Supporting Documentation (note these are separate from EIM):** emission calculations and documents used to substantiate emissions calculations. This includes, but is not limited to:

- Source test reports approved by South Coast AQMD
- Material safety data sheets
- Manufacturer specifications
- Emissions calculations in which a simplified version was inputted into EIM. The full detailed emissions calculations and the basis for calculations shall be included here. Provide the spreadsheet calculations if they were used. Provide separate sample calculation details to substantiate methodology as needed. If spreadsheets were used for emissions calculations, they should be provided ~~them here~~
- Reference sources for emission factors that do not use South Coast AQMD defaults
- Control efficiencies used in emissions calculations and the references and calculations used to determine the percentage. Clearly indicate control efficiencies used for each specific ~~which~~ emissions calculations ~~use which control efficiencies~~

Appendix B — Outline for the HRA

I. Table of Contents

- Section headings with page numbers indicated
- Tables and figures with page numbers indicated
- Definitions and abbreviations. Must include a definition of acute, 8-hour chronic, chronic, and cancer health impacts
- Appendices with page numbers indicated

II. Executive Summary

- Name of facility and the ~~complete~~ location address
- South Coast AQMD Facility ID number
- Description of facility operations and a list identifying emitted substances, including a table of maximum 1-hour and annual emissions in units of ~~lbs~~lb/hr and ~~lbs~~lb/yr, respectively
- List the multipathway substances and their pathways
- Text presenting overview of dispersion modeling and exposure assessment
- Text defining dose-response assessment for cancer and non-cancer health impacts and a table showing target organ systems by substance for non-cancer impacts
- Summary of results (See Attachment A to this Appendix). Potential cancer risks for residents must be based on 30-year, Tier~~-~~ 1 analysis and potential cancer risks for workers must be based on 25-year, Tier-1 analysis. Cancer burden results must be based on 70-year, Tier-1 analysis
  - Location (~~address or~~ UTM coordinates) and description of the off-site PMI, ~~maximum exposed individual resident (~~MEIR~~)~~, and ~~maximum exposed individual worker (~~MEIW~~)~~. See Attachment A for the required summary form
  - Location (~~address or~~ UTM coordinates and location addresses, where available) and description of any sensitive receptors that are above a cancer risk of ten chances in~~-~~one~~-~~million or above a non-cancer health HI of one
  - Text presenting an overview of the total potential multipathway cancer risk at the PMI, MEIR, MEIW, and sensitive receptors (if applicable). Provide a table of cancer risk by substance for the MEIR and MEIW. Include a statement indicating which of the substances appear to contribute to (i.e., drive) the potential health impacts. In addition, identify the exposure pathways evaluated in the HRA
  - Provide a map of the facility and surroundings and identify the location of

the MEIR, MEIW, and PMI

- Provide a map of 30-year lifetime cancer risk zone of impact (i.e., 1 chances in one ~~-~~million risk contour), if applicable. Also show the 10, 25, and 100 chances in ~~-~~one ~~-~~million risk contours, if applicable. If the cancer burden is greater than 0.5, then a map showing the 1 chances in ~~-~~one ~~-~~million risk contour based on a 70-year lifetime ~~should~~ shall also be presented

- Text presenting an overview of the acute and chronic non-cancer hazard quotients or the (total) hazard indices for the PMI, MEIR, MEIW, and sensitive receptors.

- Include separate statements (for acute, 8-hour chronic, and annual chronic exposures) indicating which of the substances appear to drive the potential health impacts. In addition, clearly identify the primary target organ(s) that are impacted from acute and chronic exposures

- Identify any subpopulations (e.g., subsistence fishers) of concern

- Table and text presenting an overview of estimates of population exposure

- Version of the Risk Assessment Guidelines and computer program(s) used to prepare the risk assessment

III. Main Body of Report

A. Hazard Identification

- Table and text identifying all substances emitted from the facility. Include the CAS number of substance and the physical form of the substance if possible. The complete list of the substances to be considered is contained in Appendix A of the 2015 OEHHA Guidance Manual[2]

- Table and text identifying all substances that are evaluated for cancer risk and/or non- cancer acute and chronic health impacts. In addition, identify any substances that present a potential cancer risk or non-cancer chronic ~~non-cancer~~ hazard via non-inhalation routes of exposure

- Describe the types and amounts of continuous or intermittent predictable emissions from the facility that occurred during the reporting year. As required by statute, releases from a facility include spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping (fugitive), leaching, dumping, or disposing of a substance into ambient air. Include the substance(s) released and a description of the processes that resulted in long-term and continuous releases

B. Exposure Assessment

This section describes the information related to the air dispersion modeling process that should be reported in the risk assessment. In addition, doses calculated by pathway of exposure for each substance should be included in this section. The educated reader should be able to reproduce the risk assessment without the need for clarification. The location of any information that is presented in appendices, on electronic media, or attached documents that supports information presented in this section, must be clearly identified by title and page number in this section's text and in the document's table of contents.

B.1 Facility Description

Report the following information regarding the facility and its surroundings:

- Facility name
- South Coast AQMD Facility ID number
- Facility location ~~(i.e., address)~~
- Local topography
- Facility plot plan identifying: emission source locations, property line, ~~horizontal~~ scale, building ~~heights and~~ dimensions
- Description of the site/route dependent exposure pathways. Provide a summary of the site-specific inputs used for each pathway (e.g., water or grazing intake assumptions). This information ~~may~~ shall be clearly presented and cross-referenced to the text in an appendix

B.2 Emissions Inventory

Report the following information regarding the facility's sources and emissions in table format; see Appendix K of the 2015 OEHHA Guidance Manual[2]. Depending on the number of sources and/or pollutants, this information may be placed in the main body of the report or in an appendix:

- Source identification number used by the facility (e.g., EIM release ID)
- Source name
- Source location using UTM coordinates (in meters); with a WGS84 projection
- Source base elevation (m)
- Source height (m)
- Source dimensions (e.g., stack diameter, building dimensions, area/volume size, etc.) (m)
- ~~Stack gas exit velocity (m/s) if applicable~~
- Stack gas volumetric flow rate (ACFM) if applicable
-

- Stack gas exit temperature (K)
- Number of operating hours per day and per year
- Number of operating days per week
- Number of operating days or weeks per year
- Report emission control equipment and efficiency by source and by substance. The description should be brief.
- Report emissions inventory methods indicating whether emissions are measured or estimated.

Report emission rates for each toxic substance, grouped by source, in table form including the following information (see Appendix K of the 2015 OEHHA Guidance Manual). Depending on the number of sources and/or pollutants, this information may be placed in the main body of the report or in an appendix:

- Source name
- Source identification number
- Substance name and CAS number
- Annual average emissions for each substance (~~lbs~~lb/yr ~~and g/s~~). Radionuclides are reported in curies/yr
- Maximum one~~-~~hour emissions for each substance (~~lbs~~lb/hr ~~and g/s~~). Radionuclides are reported in millicuries/yr
- Report facility total emission rates by substance for all ~~emittants~~ devices including the following information (see Appendix K of the 2015 OEHHA Guidance Manual). This information should be in the main body of the report
- Substance name and associated CAS number
- Annual average emissions for each substance (~~lbs~~lb/yr and g/s). Radionuclides are reported in curies/yr
- Maximum one-hour emissions for each substance (~~lbs~~lb/hr and g/s).

~~Radionuclides are reported in millicuries/yr~~

B.3 Air Dispersion Modeling

- The HRA ~~should~~ shall indicate the source and time period of the meteorological data used. ~~Include the meteorological data electronically with the HRA.~~ South Coast AQMD has AERMOD-ready meteorological data for available stations in the South Coast Air Basin available for ~~. This data can be~~ download~~ed~~ from South Coast AQMD's website. Submit the meteorological data if it is not provided by South Coast AQMD

- Include proper justification for using the meteorological data. The nearest representative meteorological station ~~should~~ shall be ~~chosen for modeling~~used. Usually this is simply the nearest station to the facility; however, an intervening terrain feature may dictate the use of an alternate site
- The latest approved version of AERMOD and HARP ~~should~~ shall be used for all HRAs prepared for the AB 2588 Program
- Table and text that specifies the following information:
  - Selected model options and parameters
  - Receptor grid spacing
- For the PMI, MEIR, MEIW, and any sensitive receptors within the zone of impact~~required by South Coast AQMD~~, include tables that summarize the annual average concentrations calculated for all substances
- For the PMI, MEIR, MEIW, and any sensitive receptors required by South Coast AQMD, include tables that summarize the maximum one-hour; chronic 8-hour; and 90-day rolling average (lead only) concentrations

C. Risk Characterization

~~HARP generates the risk characterization data needed for the outline below. Any data needed to support the risk characterization findings should be clearly presented and referenced in the text and appendices. A listing of HARP files that meet these HRA requirements are provided in Section V. All HARP files should be included in the HRA. Ideally, the HRA report and a summary of data used in the HRA should be on paper and all data and model input and output files should be provided electronically.~~

~~The potential cancer risk for the PMI, MEIR, and sensitive receptors of interest must be presented in the HRA's text, tables, and maps using a residential 30-year exposure period. MEIW location should use appropriate exposure periods. For the AB 2588 Program, the 30-year exposure duration should be used as the basis for residential public notification and risk reduction audits and plans. All HRAs must include the results of a Tier 1 exposure assessment. If persons preparing the HRA would like to present additional information (i.e., exposure duration adjustments or the inclusions of risk characterizations using Tier 2 through Tier 4 exposure data), then this information should be presented in separate, clearly titled, sections, tables, and text.~~

The following information ~~should~~ shall be presented in this section of the HRA. If not fully presented here, then by topic, clearly identify the section(s) and pages within the HRA where this information is presented.

- Description of receptors ~~to be quantified~~
- Identify the ~~site/route dependent~~ exposure pathways (e.g., water ingestion) for the receptor(s), where appropriate (e.g., MEIR). Provide a summary of the site-specific inputs used for each exposure pathway (e.g., water or grazing intake assumptions). In addition, provide reference to the appendix (section and page

number) that contains the modeling (i.e., HARP/dispersion modeling) files that show the same information

- Tables and text providing the following information regarding the potential multipathway cancer risks at the PMI, MEIR, MEIW, and any sensitive receptors of concern:
  - Location in UTM coordinates
  - Contribution by substance
  - Contribution by source
- Tables and text providing the following information regarding the ~~acute~~ non-cancer acute hazard quotient at the PMI, MEIR, MEIW, and any sensitive receptors of concern:
  - Location in UTM coordinates
  - Target organ(s)
  - Contribution by substance
  - Contribution by source
- Tables and text providing the following information regarding the ~~chronic~~ non-cancer chronic (inhalation and oral) hazard quotient at the PMI, MEIR, MEIW, and any sensitive receptors of concern:
  - Location in UTM coordinates
  - Target organ(s)
  - Contribution by substance
  - Contribution by source
- Table and text presenting estimates of population exposure. Tables should indicate the number of persons exposed to a total cancer risk greater than 10^{-6}, 10^{-5}, 10^{-4}, etc. and total hazard quotient or HI greater than 0.5, 1.0, 3.0, and 5.0. Total ~~excess~~ cancer burden should also be provided
- Provide maps that illustrate the HRA results as noted below. The maps should be an actual street map of the area impacted by the facility with UTM coordinates and facility boundaries clearly labeled. This should be a true map (i.e., one that shows roads, structures, etc.), drawn to scale, and not a schematic drawing. Color aerial photos are usually the most appropriate choice. The following maps are required:
  - Locations of the PMI, MEIR, MEIW, and sensitive receptors for the cancer

and non-cancer acute and chronic risks. Also show the facility emission points and property boundary

- Total cancer risk (including multipathway factors) contours for the following risk levels: 100, 25, 10, and 1 chances in~~ a~~one ~~in~~million. Maps should be provided for the minimum exposure pathways (i.e., inhalation, soil ingestion, dermal exposure, and mother's milk) and for all applicable exposure pathways (i.e., minimum exposure pathways plus additional site/route specific pathways). Include the facility location on the maps
- Non-cancer acute and non-cancer chronic HI contours for the following levels: 5.0, 3.0, 1.0 and 0.5. ~~Include the facility location~~

- The risk assessor may want to include a discussion of the strengths and weaknesses of the risk analyses and associated uncertainty directly related to the facility HRA
- If appropriate, comment on the possible alternatives for control or remedial measures
- If possible, identify any community concerns that influence public perception of risk

D. References

References to other documents cited within HRA shall be included in this section. References to standard guidance documents are not required.

IV. Appendices

The appendices ~~should~~ shall contain all data, sample calculations, assumptions, and all modeling and risk assessment files that are needed to reproduce the HRA results. All data and model input and output files ~~should~~ shall be provided electronically (e.g., uploaded to South Coast AQMD's OnBase system or on USB ~~Flash~~ flash ~~Drive~~drive). All appendices and the information they contain ~~should~~ shall be referenced, clearly titled, and paginated. The following are potential appendix topics unless presented elsewhere in the HRA:

- List of all receptors in the zone of impact and their associated risks
- Emissions by source
- Census data
- Maps and facility plot plan
- All calculations used to determine emissions, concentrations, and potential health impacts at the PMI, MEIR, MEIW, and sensitive receptors
- Presentation of alternate risk assessment methods (e.g., alternate exposure durations, or ~~Tier 2 to Tier 4~~non-Tier 1 evaluations with supporting information)

Computer Files

The list of electronic files that must be submitted for the HRA are found in Table ~~7~~6 ~~of Chapter 3~~ of this document. They must be useable (i.e., unencrypted and can be opened by native applications such as HARP programs~~can be opened and run in AERMOD/HARP if file is an AERMOD/HARP file~~). Any supplementary files ~~should~~ shall be submitted in formats that will not lose formatting in transfer (i.e. pdf for text documents).

Attachment A to Appendix B HRA Summary Form

This summary form[23] ~~should~~ shall accompany all HRAs and be presented at the beginning of the Executive Summary.

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

HEALTH RISK ASSESSMENT SUMMARY FORM

(Required in Executive Summary of HRA)

Facility Name : _____
Facility Address: _____
_____
Type of Business: _____
SCAQMD ID No.: _____

A. Cancer Risk

(One in a million means one chance in a million of getting cancer from being constantly exposed to a certain level of a chemical over a period of time)

1. Inventory Reporting Year : _____
2. Maximum Cancer Risk to Receptors : *(Offsite and residence = 30-year exposure, worker = 25-year exposure)*
   a. Offsite _____ in a million Location: _____
   b. Residence _____ in a million Location: _____
   c. Worker _____ in a million Location: _____
3. Substances Accounting for 90% of Cancer Risk: _____
   Processes Accounting for 90% of Cancer Risk: _____
4. Cancer Burden for a 70-yr exposure: *(Cancer Burden = [cancer risk] x [# of people exposed to specific cancer risk])*
   a. Cancer Burden _____
   b. Number of people exposed to >1 per million cancer risk for a 70-yr exposure _____
   c. Maximum distance to edge of 70-year, 1 x 10^{-6} cancer risk isopleth (meters) _____

B. Hazard Indices

[Long Term Effects (chronic) and Short Term Effects (acute)]
(non-carcinogenic impacts are estimated by comparing calculated concentration to identified Reference Exposure Levels, and expressing this comparison in terms of a "Hazard Index")

1. Maximum Chronic Hazard Indices:
   a. Residence HI: _____ Location: _____ toxicological endpoint: _____
   b. Worker HI : _____ Location: _____ toxicological endpoint: _____
2. Substances Accounting for 90% of Chronic Hazard Index: _____
3. Maximum 8-hour Chronic Hazard Index:
   8-Hour Chronic HI: _____ Location: _____ toxicological endpoint: _____
4. Substances Accounting for 90% of 8-hour Chronic Hazard Index: _____
5. Maximum Acute Hazard Index:
   PMI: _____ Location: _____ toxicological endpoint: _____
6. Substances Accounting for 90% of Acute Hazard Index: _____

C. Public Notification and Risk Reduction

1. Public Notification Required? ____ Yes ____ No
   a. If 'Yes', estimated population exposed to risks > 10 in a million for a 30-year exposure, or an HI >1
   _____
2. Risk Reduction Required? ____ Yes ____ No

Revised 4/30/2015

Appendix C — HRA Review Check List

The check list contained here is used by South Coast AQMD staff to standardize the review of HRAs. It is being provided to assist facilities and consultants in their HRA preparation.

Facility Name:	**Facility ID:**
Street Address:	
City:	**Zip Code:**
HRA Consultant:	**Reviewer:**

Dispersion Modeling

1. Control Pathway
   a. "Regulatory Default Option" checked? **Yes No**
      i) If No, explain why:
   b. Urban Option
      i) "Apply All Sources" checked? **Yes No**
      ii) "Population" from the latest Census data is added for county? **Yes No**
      iii) "Roughness Length" = 1.0 (default value) **Yes No**
2. Source Pathways
   a. Sources
      i) Check if source list is consistent with following documents:
         - Base Year AER source list? **Yes No**
         - District equipment list (permit list)? **Yes No**
      ii) "Source Type" determined properly? **Yes No**
      iii) "Volume/Area source dimensions" are reasonable? **Yes No**
      iv) "UTMs" are consistent with Plot Plan? **Yes No**
      v) ~~"~~Elevation~~"~~ of source(s) are imported from AERMAP output file? **Yes No**
      vi) Adequate "Emission Rates" used? (default 1 g/s) **Yes No**
      vii) ~~vii)~~"Release Heights" reasonable? Yes No
      viii) Stack parameters are consistent with those provided in the report **Yes No**
      ix) Accurate and sufficient details entered for every source? **Yes No**
   b. Variable Emissions

i) Default emission rate used? (default: 1 g/s, 24 hrs/day, 365 days/yr) **Yes No**

ii) If not, appropriate emission rate factors are used? ~~(Table 2)~~ **Yes No**

c. Buildings

i) All surrounding buildings included? **Yes No**

ii) Tier Heights and corner points reasonable? **Yes No**

- ~~If No in any,~~ _

3. Receptors

a. Grid receptors

i) Included? -(should be "Yes") **Yes No**

ii) Spacing? (should be no greater than 100 meters) **Yes No**

- Assumed spacing_____meters

iii) Elevations included? -(should be "Yes") **Yes No**

iv) Is gridded area sufficient to cover acceptable risk levels? **Yes No**

b. Property boundary receptors

i) Included? -(should be "Yes") **Yes No**

ii) Spacing? ~~(should follow guidance in Table 3)~~ **Yes No**

- Assumed spacing_____meters

iii) Elevations included (should be "Yes") **Yes No**

c. Sensitive receptors

i) Included? -(should be "Yes" if cancer risks >1 chances ~~in~~ n-one-~~a~~ million) **Yes No**

ii) Elevation included? (should be "Yes") **Yes No**

iii) Verified from review of Google Earth or other source? **Yes No**

d. Census block receptors

i) Included? -(should be "Yes" if cancer risks >1 chances in-~~a~~-one-~~-~~million) **Yes No**

ii) Elevation included? -(should be "Yes") –**Yes No**

e. Pathway receptors included? -(should be "No") **Yes No**

4. Meteorology Pathway (The latest met data files shall be used.)

a. Surface Met Data File: _____.sfc

b. Profile Met Data File: _____.pfl

c. Base Elevation of Met Station (PROFBASE): _____ meters

d. Does the Met Station reflect prevailing meteorological conditions (ex., prevailing winds), surrounding —land —use, —and —topography —that —exists —at —the source? This is not always the closest Met Station ~~(Table 1)~~ **Yes No**

5. Terrain Option
   a. (Step 1) is Anchor location correct? –**Yes No**
   b. (Step 2) is appropriate DEM/NED data file linked? -**Yes No**
      i) DEM/NED file used: _____
      ii) Is (Are) the DEM/NED file(s) covering sufficient area? **Yes No**
   c. (Step 3) independently ran AERMAP? **Yes No**
6. Building Downwash
7. Independently ran BPIP Prime? –**Yes No** Duplication of AERMOD Results
   a. Independently ran AERMOD? **Yes No**
   b. Average χ/Q first high values for each source group reproduced? **Yes No**

(not required; useful if diagnosing discrepancies)

   c. Max 1-hour χ/Q first high values for each source group reproduced? **Yes No**

(not required; useful if diagnosing discrepancies)

8. All plt files are generated successfully? –**Yes No**

Site Visit

- Site visit conducted? **Yes No**
  a. If Yes, **Date** **Time** ;
  b. Facility Contact: _____
  c. South Coast AQMD Staff: _____

Program Used

1. Facility submittal package is processed by the latest version of HARP? **Yes No**

a. If NOT, name software used: -

2. This review is performed using the latest version of HARP? **Yes No**

a. If NOT, name software used: -

General Comments

Appendix D — Elements of a Risk Reduction Plan

INTRODUCTION

Facilities with an approved HRA with health risks greater than or equal to the Action Risk Levels as identified in South Coast AQMD Rule 1402 are required to submit an RRP within the specified timeframes for each specific category as specified in the Rule. Facilities participating in the Voluntary Risk Reduction Program under Rule 1402 ~~should~~ are required to follow the *Guidelines for Participating in the Rule 1402 Voluntary Risk Reduction Program* ~~that are available online~~. The owner or operator is responsible for preparing ~~a~~an RRP that identifies the risk reduction measures ~~that should~~to be implemented. Implementation of these measures ~~will in order to reduce~~will reduce the impact of the total facility emissions below the Action Risk Levels.

ELEMENTS OF A RISK REDUCTION PLAN

1. The name, address, and South Coast AQMD facility identification number, and Standard Industrial Code (SIC) and North American Industry Classification System (NAICS) codes of the facility;

2. A facility risk characterization which includes an updated ATIR and HRA, if the risk due to total facility emissions has increased above or decreased below the levels indicated in the previously approved HRA;

3. Identification of each source from which risk needs to be reduced in order to achieve a risk below Rule 1402 Action Risk Levels;

4. For each source identified in subparagraph (3), an evaluation of the risk reduction measures available to the owner or operator, including emission and risk reduction potential, and time necessary for implementation;

    ~~• An updated ATIR and HRA if total facility risks are different than what was approved in the previously approved HRA.~~

5. Specification of the risk reduction measures that shall be implemented by the owner or operator to comply with the requirements of Rule 1402~~, subdivision~~ (i) to achieve the Action Risk Level or the lowest achievable level;

6. A schedule for implementing the specified risk reduction measures as quickly as feasible. The schedule shall include the submittal of all necessary applications for permits to construct or modify within 180 days of approval of the RRP, or in accordance with another schedule subject to approval by the Executive Officer, and specify the dates for other increments of progress associated with implementation of the risk reduction measures;

7. If requesting a time extension, the plan must also include the following information:

    - A description of the risk reduction measure(s) for which a time extension is needed;
    - The reason(s) a time extension is needed;

- Progress in implementing risk reduction measures in the plan;
- For RRPs, estimated health risks at the time of the extension request and at the end of the risk reduction period; and the length of time extension requested.

The Executive Officer will review the request for the time extension and will approve or reject the time extension based on the following criteria:

- The facility-wide health risk is below the Significant Risk Level at the time of submittal of the time extension request;
- The owner or operator provides sufficient details identifying the reason(s) a time extension is needed that demonstrates to the Executive Officer that there are specific circumstances beyond the control of the owner or operator that necessitate additional time to complete implementation of the plan. Such a demonstration may include, but is not limited to, providing detailed schedules, engineering designs, construction plans, permit applications, purchase orders, economic burden, and technical infeasibility; and
- The time extension will not result in an unreasonable risk to public health.

8. An estimation of the residual health risk after implementation of the specified risk reduction measures; and
9. Proof of certification of the RRP as meeting all requirements by an individual who is officially responsible for the processes and operations of the facility. The person who makes this certification must be one of the following:
    - An engineer who is registered as a professional engineer pursuant to Business and Professional Code section 6762.
    - An individual who is responsible for the operations and processes of the facility.
    - An environmental assessor registered pursuant to Health and Safety Code section 25570.3.

Appendix E — Elements of a Risk Reduction Progress Report

INTRODUCTION

Facilities with an approved RRP or VRRP as identified in South Coast AQMD Rule 1402 are required to submit an **Annual Progress Report** every twelve months as long as their total facility risk meets or exceeds the Rule 1402 Action or Significance Risk Levels.

ELEMENTS OF A RISK REDUCTION PROGRESS REPORT

1. A description of any increases or decreases in emissions of ~~toxic air contaminants~~TACs that have occurred at the facility, including a description of any associated permits that were subject to Rule 1401, since approval of the RRP or VRRP;

2. The increments of progress (interim facility risks) achieved in implementing the risk reduction measures specified in the RRP or VRRP. The interim facility risk should represent the previous twelve month period;

3. Submittal dates of all applicable permit application(s), the status of the application(s), the name of the regulatory agency, and the corresponding permit number(s);

4. A schedule indicating dates for future increments of progress; and

5. Identification of any increments of progress that will be achieved later than specified in the plan and the reason for achieving the increments late.

Appendix F — Elements of Early Action Reduction Plans for Potentially High Risk Level Facilities

INTRODUCTION

Facilities designated as a Potentially High Risk Level Facility by the Executive Officer, as identified in South Coast AQMD Rule 1402, are required to submit an Early Action Reduction Plan within 90 days of notification of such designation. The purpose of the Early Action Reduction Plan is to expedite risk reduction to mitigate the elevated health risk to protect public health.

ELEMENTS OF AN EARLY ACTION REDUCTION PLANS FOR POTENTIALLY HIGH RISK LEVEL FACILITIES

Within 90 days of the date of notification by the Executive Officer that the facility is a Potentially High Risk Level Facility, an owner or operator shall submit an Early Action Reduction Plan that identifies a list of measures that can be implemented immediately to reduce the facility-wide health risk. The Early Action Reduction Plan shall include:

1. The name, address, and South Coast AQMD Facility ID number;

2. Identification of device(s) or process(es) that are the key health risk driver(s);

3. Risk reduction measure(s) that can be implemented by the owner or operator that includes but are not limited to procedural changes, process changes, physical modifications, and curtailments; and

4. A schedule for implementing the specified risk reduction measures.

Appendix G — List of Acronyms and Abbreviations

List of Acronyms and Abbreviations

Acronym	Description
2015 OEHHA Guidance Manual	Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments
AB 2588	Air Toxics "Hot Spots" Information and Assessment Act
ADMRT	Air Dispersion Modeling and Risk Tool
AER	Annual Emissions Reporting
ATIR	Air Toxics Inventory Report
CARB	California Air Resources Board
CAS	Chemical Abstracts Service
DEM	Digital Elevation Model
DICE	Diesel Internal Combustion Engine
EIM	Emission Inventory Module
HARP	Hotspots Analysis and Reporting Program
HI	Hazard Index
HRA	Health Risk Assessment
MEIR	Maximum Exposed Individual Resident
MEIW	Maximum Exposed Individual Worker
MICR	Maximum Individual Cancer Risk
NAICS	North American Industry Classification System
NED	National Elevation Dataset
ODC	Ozone Depleting Compound
OEHHA	Office of Environmental Health Hazard Assessment
PMI	Point of Maximum Impact
REL	Reference Exposure Level
RRP	Risk Reduction Plan
SB 1731	Facility Air Toxic Contaminant Risk Audit and Reduction Plan
SIC	Standard Industrial Code
South Coast AQMD	South Coast Air Quality Management District
TAC	Toxic Air Contaminant
U.S. EPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UTM	Universal Transverse Mercator
VRRP	Voluntary Risk Reduction Plan
WAF	Worker Adjustment Factor
WGS84	World Geodetic System 1984

AB 2588 Toxic Hot Spots
2019 Annual Report

Board Meeting
September 4, 2020

South Coast AQMD

Introduction

- AB 2588 Program Annual Report summarizes
  - Activities implemented under AB 2588 “Hot Spots Act” consistent with state law
  - South Coast AQMD activities to reduce toxic air contaminants
  - Future activities relating to AB 2588
  - Updates to AB 2588 Guidance
- H&S Code §44363 requires a public hearing to present results of Annual Report

South Coast AQMD

Goals and Objectives of AB 2588

- Collect emissions data for air toxics
- Identify facilities with localized impacts
- Determine potential health risks
- Provide public notification
- Reduce significant risks

AB 2588 is one piece of South Coast AQMD's overall approach to air toxics

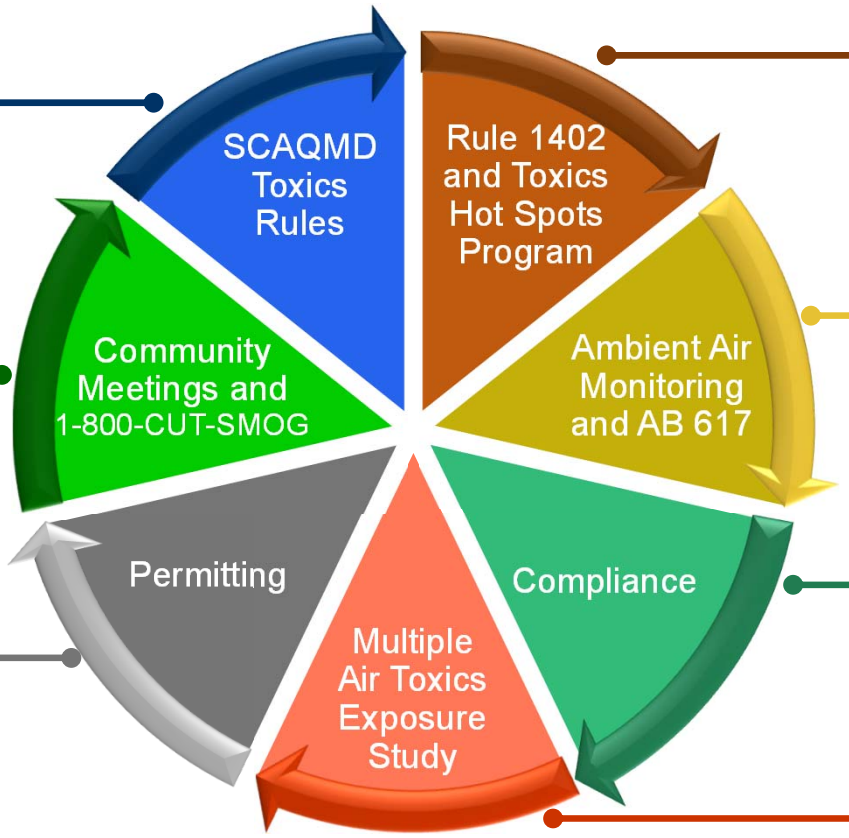
South Coast AQMD

AB 2588 is one Component of the Air Toxics Program

Over 25 rules to reduce toxic air contaminants

Community meetings and direct public communication 1-800-CUT SMOG

All new and modified sources are evaluated for toxics during permitting (Rules 1401 and 1401.1



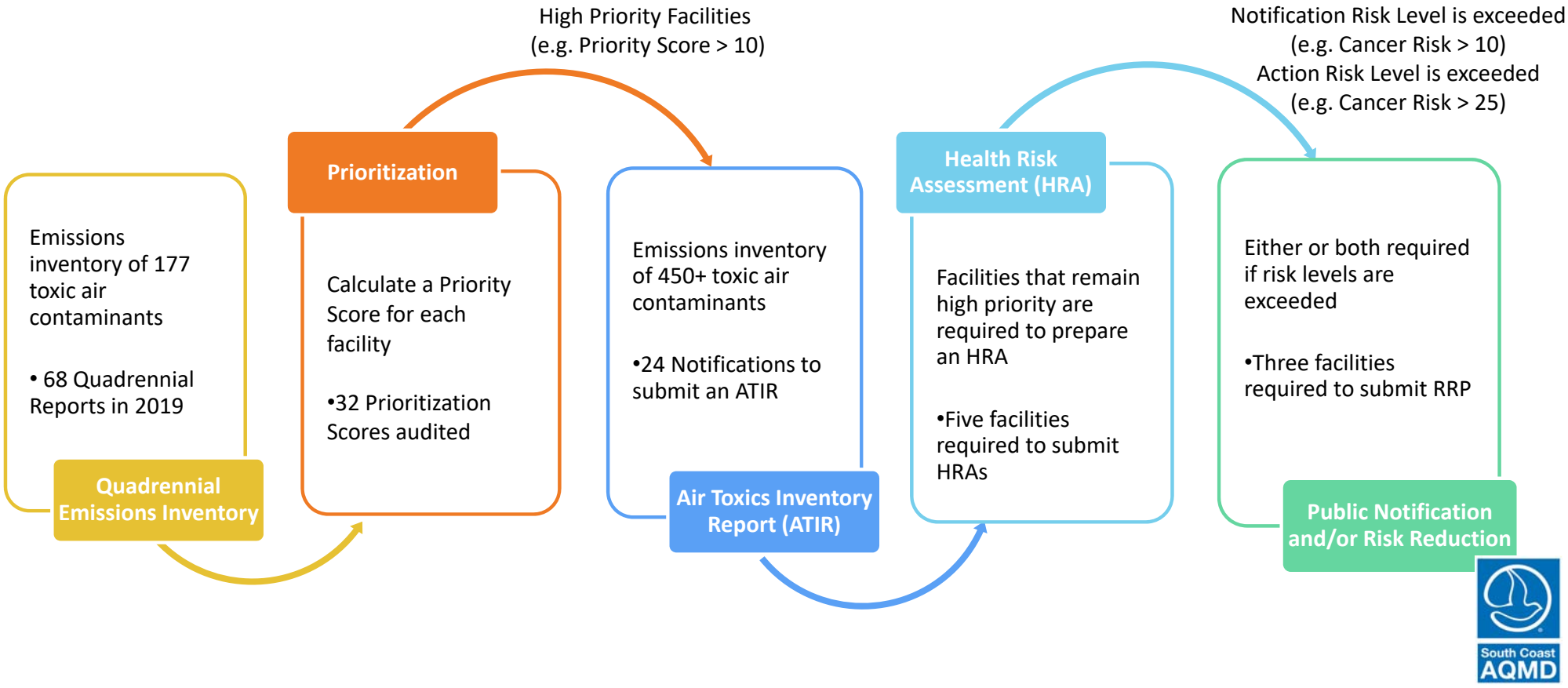
Requires Health Risk Assessments, Risk Reduction Plans, and Public Notification

Ambient monitoring near facilities and community monitoring

Ensures facilities are complying with South Coast AQMD rules and regulations

Measures regional toxic air contaminants throughout air basin

AB 2588 Traditional Process for 'Core' Facilities



South Coast AQMD

Typical Pathways for Facilities in Rule 1402

Traditional Approach

Facilities with cancer risks <100 chances in-one-million

- Air Toxic Inventory Report
- Health Risk Assessment
- Public Notification (if cancer risks > 10 in-one-million)
- Risk Reduction Plan (if cancer risks > 25 in-one-million)

Voluntary Risk Reduction Program

Facilities with cancer risks <100 chances in-one-million and approved Health Risk Assessment

- Air Toxic Inventory Report
- Voluntary Risk Reduction Plan committing to reduce cancer risks below 10 in-one-million
- Modified Public Notification

Potentially High Risk Level

Facilities with potential cancer risks >100 chances in-one-million

- Early Action Reduction Plan
- Air Toxic Inventory Report
- Health Risk Assessment
- Public Notification (if cancer risks > 10 per million)
- Risk Reduction Plan (if cancer risks > 25 per million)

South Coast AQMD

Reviews in 2019

123
Reviews

3

Revised Priority Score
- 3 Revised Priority Score < 10 (No further action)

112

Traditional AB 2588
- 68 Quadrennial Emission Reports
- 31 Air Toxics Inventory Reports
- 10 Health Risk Assessments
- 3 Risk Reduction Plans

5

Voluntary Risk Reduction Program
- 5 Voluntary Risk Reduction Plans

3

Potentially High Risk Level Facilities
- 1 Health Risk Assessment
- 2 Risk Reduction Plans

South Coast AQMD

Other Key Toxics-Related Activities in 2019

Rulemaking

Amended Rule 1407 to further reduce emissions of arsenic, cadmium, and nickel by establishing new requirements such as control efficiency requirements and mass emissions limits.

Adopted Rule 1480 to require facilities designated as a Metal Toxic Air Contaminant Monitoring Facility to conduct air monitoring and sampling.

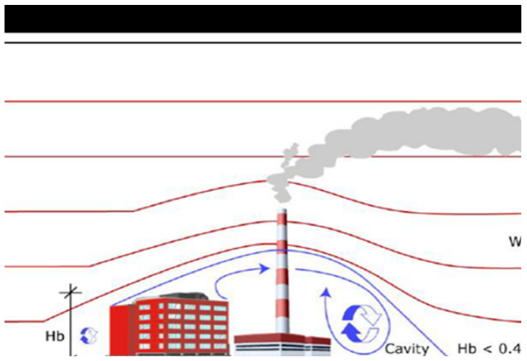
Special Monitoring

Continued air monitoring in Paramount

Continued mobile monitoring campaign in the Greater Los Angeles Area

Conducted air monitoring in West Rancho Dominguez Area

Rules 1420.2 & 1466



Reviewed air dispersion modeling for lead emissions from three facilities under Rule 1420.2

Reviewed requests for alternative PM10 limits for one facility under 1466 to ensure toxics in PM10 pose no adverse health effects

South Coast AQMD

Projected 2020 Toxics-Related Activities

- Audit quadrennial emissions inventories for approximately 130 facilities
- Track development of potential additions or revisions to health values by OEHHA
- Work with CARB and through the CAPCOA Toxics and Risk Managers Committee (TARMAC) regarding:
  - Updates to the AB 2588 guidelines, including review of additional chemicals to be added for evaluating risk
  - Amendments to CTR (Criteria and Toxics Reporting) guidelines that will overlap with the updated AB 2588 guidelines
- Work with CARB to develop or update HRA guidance for Industrywide Sources (i.e., gasoline dispensing facilities)

South Coast AQMD

Updates to AB 2588 Guidances

- Facility Prioritization Procedures for the AB 2588 Program
  - Correction to calculation of cancer score for workers and calculation of non-cancer score
  - Provide additional clarification on worker adjustment factor (WAF)
- Public Notification Procedures
  - Provide additional clarification on the requirements for conducting public notification and public meetings
- AB 2588 and Rule 1402 Supplemental Guidelines
  - Provide additional clarification for implementation of the AB 2588 Program and Rule 1402 to ensure consistency with guidance in other AB 2588 documents

South Coast AQMD

Recommendation

- Receive and File the 2019 Annual Report on the AB 2588 Program
- Approve Updates to:
  - Facility Prioritization Procedure
  - Public Notification Procedures
  - AB 2588 and Rule 1402 Supplemental Guidelines