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

A G E N D A

MEETING, DECEMBER 1, 2017

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

Questions About an Agenda Item

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

Meeting Procedures

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

Questions About Progress of the Meeting

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

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

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

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

CALL TO ORDER

- Pledge of Allegiance
- Opening Comments: William A. Burke, Ed.D., Chair
  Other Board Members
  Wayne Nastri, Executive Officer
- Election of Chair for Term January 2018 – January 2020
- Election of Vice Chair for Term January 2018 – January 2020
- Recognize Employees with Twenty, Twenty-Five, Thirty, Thirty-Five and Forty Years of Service **Burke**

Staff/Phone (909) 396-

CONSENT CALENDAR (Items 1 through 23)

Note: Consent Calendar items held for discussion will be moved to Item No. 24

1. Approve Minutes of November 3, 2017 Board Meeting **Garzaro/2500**

2. Set Public Hearing January 5, 2018 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations **Nastri/3131**

   Determine That Proposed Amendments to Rule 2001 – Applicability and Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx) are Exempt from CEQA and Amend Rules 2001 and 2002 **Nakamura/3105**

   The adoption Resolution of the Final 2016 AQMP directed staff to achieve additional NOx emission reductions and to transition the RECLAIM program to a command and control regulatory structure as soon as practicable. Proposed Amended Rule 2001 will commence the initial steps of this transition by ceasing any future inclusions of facilities into NOx and SOx RECLAIM. Proposed Amended Rule 2002 will establish notification procedures for RECLAIM facilities that will exit the program and address the RECLAIM Trading Credit holdings for these facilities. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 2001 – Applicability and Rule 2002 - Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx) are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 2001 – Applicability and Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx). (Reviewed: Stationary Source Committee, November 17, 2017)

Budget/Fiscal Impact

3. Recognize Revenue, Appropriate Funds and Execute Contract to Evaluate Potential Nationwide Economic Impacts of Federal Clean Air Investment Fund **Fine/2239**

SCAQMD staff is proactively seeking federal support to create a Clean Air Investment Fund (CAIF), which will enable air quality improvement projects nationwide and provide the critical financing urgently needed by SCAQMD and other non-attainment areas. To help garner federal support, staff recommends execution of a sole source contract with ICF to evaluate the potential nationwide economic impacts and benefits of clean air investments. The evaluation will focus on using the CAIF to accelerate the deployment of clean heavy-duty trucks, the segment which is currently the primary source of NOx emissions. This action is to recognize revenue and appropriate up to $100,000 from Bay Area Air Quality Management District and appropriate up to $130,000 from the General Fund Undesignated (Unassigned) Fund Balance, for a total appropriation of $230,000 into Planning, Rule Development and Area Sources' FY 2017-18 Budget. This action is to also award a sole source contract to ICF in an amount not to exceed $230,000. Staff continues to seek funding from other interested parties to assist with project costs. (Reviewed: Administrative Committee, November, 9, 2017; Recommended for Approval)

4. Utilize Rule 1111 Rebate Funding and Incremental Mitigation Fee Funding and Issue RFP for Implementation of Consumer Rebate Program for Compliant Natural Gas-Fired, Fan-Type Central Furnaces **Nakamura/3105**

In 2018 staff will be proposing amendments to Rule 1111 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces. Currently, all furnace manufacturers are paying a NOx mitigation fee until they can commercialize compliant products. To provide an additional incentive, staff is proposing to develop a rebate program for consumers. The rebate program is expected to offset the cost for consumers to purchase a compliant furnace, and motivate commercialization of compliant furnaces. This action is to authorize staff to utilize $3,000,000 in Rule 1111 rebate funding from the Air Quality Investment Fund (27), Rule 1121 Fee Program, as well as any additional incremental mitigation fee funding from future Rule 1111 amendments for the rebate program. Staff is recommending that a third-party contractor be used to implement the rebate program. (Reviewed: Stationary Source Committee, November 17, 2017; Recommended for Approval)

5. Execute Contract to Develop Thermal Management Strategy Using Cylinder Deactivation for Heavy-Duty Diesel Engines

Miyasato/3249

West Virginia University, Jacobs Vehicle Systems, Inc., and Cummins Inc. propose a collaborative effort to evaluate integration of cylinder deactivation hardware in a heavy-duty 15-liter diesel engine to create better thermal management. The proposed study aims to develop a strategy to decrease fuel consumption and reduce NOx at low-load conditions to achieve 0.02 g/bhp-hr NOx over the duty cycle of a heavy-duty diesel engine. This action is to execute a contract with West Virginia University-Center for Alternative Fuels Engines and Emissions to develop a thermal management strategy using cylinder deactivation for heavy-duty diesel engines in an amount not to exceed $250,000 from the Clean Fuels Fund (31). (Reviewed: Technology Committee, November 17, 2017; Recommended for Approval)

6. Execute Contract to Develop and Demonstrate Near-Zero Emission-Opposed Piston Engine

Miyasato/3249

CALSTART, Inc., and Achates Power, Inc., have been awarded $7 million to develop and demonstrate emission opposed piston (OP) engine technology in Class 8 heavy-duty, line-haul trucks that meet a 0.02 g/bhp-hr NOx target, with concurrent reductions in CO2 emissions. The project was awarded under CARB's Low Carbon Transportation Greenhouse Gas Reduction Fund Investments, with total project costs estimated at $15.55 million. The trucks will provide revenue service on regional long haul routes within California. Staff proposes to cost-share this project. This action is to execute a contract with CALSTART, Inc., to develop and demonstrate near-zero emission OP engines in an amount not to exceed $1 million from the Clean Fuels Fund (31). (Reviewed: Technology Committee, November 17, 2017; Recommended for Approval)

7. Amend Contract for Tier 4 Passenger Locomotives

Minassian/2641

Under the "Year 16" Carl Moyer Program Announcement released on March 7, 2014, the Southern California Regional Rail Authority (SCRRA) submitted a proposal requesting $58.85 million to cofund the replacement of 17 and the purchase of 3 new Tier 4 locomotives. On September 4, 2015, the Board awarded $22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining $36 million over four phases. The first addition of $9 million was approved by the Board on December 2, 2016. The SCAQMD's cost-share of this $129 million project is only for the replacement component of the project. This action is to amend SCRRA's contract, adding an additional $9 million for a revised total of $40.85 million from the Carl Moyer Program AB 923 Fund (80). The remaining $18 million requested by SCRRA will be considered over two phases in future Board requests. (Reviewed: Technology Committee, October 20, 2017; Recommended for Approval)

8. Adopt Resolution Recognizing Funds and Accepting Terms and Conditions for Funds Appropriated Under AB 134 **Minassian/2641**

On September 16, 2017, the Governor approved AB 134 to amend the Budget Act of 2017. This amendment adds appropriations to the Budget Act of 2017, taking effect immediately as a Budget Bill. Under Schedule 3 of this Bill, $250 million is to be distributed by CARB to air districts for implementation of projects pursuant to the Carl Moyer Memorial Air Quality Standards Attainment Program. SCAQMD's allocation of these funds is $107.5 million. This action is to adopt a Resolution recognizing funds up to $107.5 million from CARB into the Carl Moyer Program Fund (32) and accepting terms and conditions for funds appropriated under Schedule 3 of AB 134 in the amended Budget Act of 2017. (Reviewed: Special Administrative Committee, November 20, 2017; Recommended for Approval)

9. Amend and Execute Technical Assistance Contracts for Implementation of Incentive Funding Programs **Minassian/2641**

On June 3, 2016, the Board approved contracts for technical assistance for the demonstration and deployment of mobile and stationary source advanced technologies and implementation of incentive funding programs. The contractors were selected from proposals received in response to a solicitation issued in February 2016. Since that time, the SCAQMD has been successful in generating large amounts of incentive program funding that must be encumbered and expended expeditiously. Thus, it is necessary to increase funding for technical assistance for the implementation of incentive funding programs, including the Carl Moyer Program and the Enhanced Fleet Modernization Program (EFMP). This action is to execute two agreements with Clean Fuel Connection, Inc., a contract amendment for Carl Moyer Program technical support in an amount not to exceed $150,000 and a new contract for EFMP implementation support in an amount not to exceed $150,000 from, respectively, the administrative portions of the Carl Moyer Program AB 923 Fund (80) and the HEROS II Special Revenue Fund (56). (Reviewed: Technology Committee, November 17, 2017; Recommended for Approval)

10. Amend Contract to Improve Online Application Database for Carl Moyer Program and Reimburse General Fund for Administrative Costs **Minassian/2641**

In November 2015, the Board approved a contract with Trinity Technology Group to develop an online application database for the Carl Moyer Program. This online database, which successfully launched for the "Year 19" Carl Moyer Program, greatly facilitated the application submittal process and expedited evaluation of applications. However, improvements are necessary to incorporate changes in the newly revised Carl Moyer Program Guidelines, including updated cost-effectiveness calculations and new funding categories. Other modifications are needed to improve the online application submittal experience for the participants as well. This action is to amend a contract with Trinity Technology Group to modify and enhance the existing online application database for the Carl Moyer Program in an amount not to exceed $85,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80) and reimburse the General Fund up to $187,500 for administrative costs from the Carl Moyer Program SB 1107 Fund (32). (Reviewed: Technology Committee, November 17, 2017; Recommended for Approval)

11. Recognize Revenue and Appropriate Funds for 2017 Sensor Conference

Low/2269

On September 27-28, 2017, SCAQMD hosted the "Making Sense of Sensors" Conference at SCAQMD's headquarters to share information about the technology revolution in low-cost, portable air quality sensors. The Conference, attended by more than 350 participants from 22 U.S. states and nine countries, brought together experts from the sensor industry along with government, academia, environmental and research organizations and community groups. It also featured over 40 speakers, 22 exhibitors, 27 technical posters and special tours of SCAQMD's exclusive AQ-SPEC chamber testing system. This action is to recognize revenue from cosponsors and attendee registration fees and appropriate funds to Science & Technology Advancement's FY 2017-18 Budget to reimburse expenses incurred from hosting the Conference. (Reviewed: Administrative Committee, November 9, 2017; Recommended for Approval)

12. Execute Contracts for Strategic Consulting Services and for Legislative Representation in Sacramento, California

Alatorre/3122

At the September 1, 2017 meeting, the Board approved release of an RFP to solicit proposals for legislative representation in Sacramento, California. Two proposals were received, one from Gonzalez, Quintana and Hunter, LLC, and another from Joe A. Gonsalves & Son. On November 9, 2017, the Administrative Committee recommended approval of the execution of contracts with Gonzalez, Quintana & Hunter, LLC for $207,000 and Joe A. Gonsalves & Son for $143,000, for a total amount not to exceed $350,000. Subsequent to the Administrative Committee meeting, the SCAQMD was notified that Gonzalez, Quintana & Hunter, LLC was splitting into two separate entities – The Quintana Company and California Advisors, LLC. Staff recommends splitting the original proposed contract for Gonzalez, Quintana and Hunter, LLC into two separate contracts for the two new entities. This item is to approve a contract with Joe A. Gonsalves & Son in the amount of $143,000 for legislative representation in Sacramento; approve a contract with The Quintana Company in the amount of $103,500 for consulting regarding strategic planning, communications and messaging in support of the 2016 AQMP; and to approve a contract with California Advisors, LLC for $103,500 for legislative representation in Sacramento. (Reviewed: Administrative Committee, November 9, 2017; Recommended for Approval, as to Joe A. Gonsalves & Son; Special Administrative, November 20, 2017; Recommended for Approval as to The Quintana Company and California Advisors, LLC.)

13. Transfer and Appropriate Funds and Amend Contracts to Provide Short- and Long-Term Systems Development, Maintenance and Support Services

O'Kelly/2828

SCAQMD currently has contracts with several companies for short- and long-term systems development, maintenance and support services. These contracts are periodically amended as additional needs are defined. This action is to transfer and appropriate funds and amend three contracts previously approved by the Board to add additional funding for needed development and maintenance work. (Reviewed: Administrative Committee, November 9, 2017; Recommended for Approval)

14. Amend Provisions of SCAQMD's Salary Resolution and Labor Contracts with Teamsters Local 911 and SCPEA Relating to Vacation Leave Balances **O'Kelly/2828**

Due to high priority operational needs, staff has been required to limit the use of vacation time this year. As a result, a number of employees will exceed the cap on vacation leave balances, and will be prohibited from accruing vacation time or will be required to forfeit vacation hours accrued. This proposal seeks approval of an amendment of SCAQMD's Salary Resolution and the bargaining unit MOUs, in order to suspend the limitations on vacation leave balances for 2017. (Reviewed: Administrative Committee, November 9, 2017, Recommended for Approval)

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

This action is to appropriate $350,000 from Undesignated Fund Balance to Legal's FY 2017-18 Budget and amend contracts to expend these funds for prequalified counsel approved by the Board and for specialized legal counsel and services for environmental litigation. (Reviewed: Administrative Committee, November 9, 2017; Recommended for Approval)

16. Approve Contract Awards and Modification and Issue Solicitation Approved by MSRC **Pettis**

As part of their FYs 2016-18 Work Program, the MSRC approved sole source contracts for a Hydrogen Infrastructure Partnership Program, for a Southern California Future Communities Partnership Program, and for electric vehicle charging infrastructure planning analysis. The MSRC also allocated $125,903 to exercise the option clause to extend the contract with the Better World Group for programmatic outreach services, and approved the release of an Invitation to Negotiate for a County Transportation Commission Partnership Program as part of their FYs 2016-18 Work Program. At this time the MSRC seeks Board approval of the contract awards and modification and to release the solicitation. (Reviewed: Mobile Source Air Pollution Reduction Review Committee, November 16, 2017; Recommended for Approval)

Items 17 through 23 - Information Only/Receive and File

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

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

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

This reports the actions taken by the Hearing Board during the period of October 1 through October 31, 2017. (No Committee Review)

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

This reports the monthly penalties from October 1 through October 31, 2017, and legal actions filed by the General Counsel's Office from October 1 through October 31, 2017. An Index of District Rules is attached with the penalty report. (Reviewed: Stationary Source Committee, November 17, 2017)

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

This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between October 1, 2017 and October 31, 2017, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA. (Reviewed: Mobile Source Committee, November 17, 2017)

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

This report highlights SCAQMD rulemaking activities and public workshops potentially scheduled for 2018. (No Committee Review)

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

Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects. (Reviewed: Administrative Committee, November 9, 2017)

23. Annual Audited Financial Statements for FY Ended June 30, 2017 **O'Kelly/2828**

This item transmits the annual audited financial statements of the SCAQMD. The SCAQMD has received an unmodified opinion (the highest obtainable) on its financial statements. (Reviewed: Administrative Committee, November 9, 2017)

24. <u>Items Deferred from Consent Calendar</u>

BOARD CALENDAR

Note: The November meetings of the Legislative and Mobile Source Committees were canceled. The next meeting of the Legislative Committee is scheduled for December 8, 2017. The next regular meeting of the Mobile Source Committee is scheduled for January 19, 2018.

25.	A. Administrative Committee (Receive & File)	**Chair: Burke**	**Nastri/3131**
	B. Special Administrative Committee (Receive & File)	**Chair: Burke**	**Nastri/3131**
26.	Investment Oversight Committee (Receive & File)	**Chair: Cacciotti**	**O'Kelly/2828**
27.	Stationary Source Committee (Receive & File)	**Chair: Benoit**	**Tisopulos/3123**
28.	Technology Committee (Receive & File)	**Chair: Buscaino**	**Miyasato/3249**
29.	Mobile Source Air Pollution Reduction Review Committee (Receive & File)	**Board Liaison: Benoit**	**Minassian/2641**
30.	California Air Resources Board Monthly Report (Receive & File)	**Board Rep: Mitchell**	**Garzaro/2500**

PUBLIC HEARINGS

31. Determine That Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring and Guidelines are Exempt from CEQA, Adopt Rule 1180, and Approve Guidelines **Fine/2239**

Proposed Rule 1180 establishes fenceline and community air monitoring requirements for petroleum refineries. The proposed rule will require petroleum refineries to install and operate fenceline air monitoring systems to measure a comprehensive list of criteria pollutants and toxic air contaminants. The proposal will require the submittal and approval of a plan that provides detailed information about the fenceline air monitoring systems such as siting, wind data collection, maintenance procedures, measures in case of failures, auditing, and data reporting methods. Further, the proposed rule will set-forth requirements for the plan review process, notifications and recordkeeping. The rule also establishes a fee schedule, to be paid by the petroleum refineries, for the SCAQMD's cost of designing, developing, installing and initial operation of refinery-related community air monitoring systems. This action is to adopt the Resolution: 1) Determining that the proposed adoption of Rule 1180 – Refinery Fenceline and Community Air Monitoring and Guidelines are exempt from the requirements of the California Environmental Quality Act; 2) Adopting Rule 1180 – Refinery Fenceline and Community Air Monitoring; and 3) Approve Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines. (Reviewed: Stationary Source Committee, September 15 and October 20, 2017)

32. Certify Final Environmental Assessment and Amend Rule 1420 – Emissions Standard for Lead **Nakamura/3105**

Rule 1420 was adopted in September 1992 with the purpose of reducing lead emissions from non-vehicular sources. On October 15, 2008, the U.S. EPA lowered the National Ambient Air Quality Standard (NAAQS) for lead from 1.5 µg/m3 to 0.15 µg/m3 averaged over a rolling 3-month period to protect public health and the environment. PAR 1420 – Emissions Standard for Lead, will further protect public health from exposure to lead from facilities not covered under Rules 1420.1 and 1420.2, and help ensure continued attainment of the lead NAAQS. The proposal includes an initial ambient air lead concentration limit of 0.150 µg/m3 averaged over any consecutive 30 days which will be lowered to a final limit of 0.100 µg/m3 by 2021 to be consistent with Rules 1420.1 and 1420.2. The proposed amended rule also establishes requirements for building enclosures, revisions to the point source lead emission limits, periodic source testing, conditional ambient air monitoring, and enhanced housekeeping measures. This action is to adopt the Resolution: 1) Certifying the Final Environmental Assessment for Proposed Amended Rule 1420 – Emissions Standard for Lead; and 2) Amending Rule 1420 – Emissions Standard for Lead. (Reviewed: Stationary Source Committee, September 15, 2017)

33. Certify Final Subsequent Environmental Assessment and Amend Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants **Nakamura/3105**

Rule 1466 was adopted July 7, 2017 and is designed to minimize fugitive dust emissions of certain toxic air contaminants from earth-moving activities from sites that U.S. EPA, Department of Toxic Substances Control, Regional Water Quality Control Board, State Water Resources Control Board, or the SCAQMD have determined that the soil contains certain toxic air contaminants. During the adoption of Rule 1466, the adoption Resolution directed staff to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. Proposed Amended Rule (PAR 1466) proposes to expand the list of applicable toxic air contaminants consistent with the adoption Resolution and expands the applicability to other government designated sites. Other amendments to PAR 1466 are provided for alternative compliance and to clarify provisions. This action is to adopt the Resolution: 1) Certifying the Final Subsequent Environmental Assessment for Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants; and 2) Amending Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants. (Reviewed: Stationary Source Committee, October 20, 2017)

OTHER BUSINESS

34. Amend Governing Board Meeting Procedures **Wiese/3460**

This action is to amend the Governing Board Meeting Procedures, primarily to add provisions to address public decorum and meeting disruptions. In addition, the amendments will clarify the time limits for public comment and address recent changes in the law applicable when members of the public use translators to assist with providing public comment. In addition, the amendments will, in certain areas, conform the procedures to long-standing Board practice. (Reviewed: Administrative Committee, September 8 and November 9, 2017; Recommended for Approval)

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

BOARD MEMBER TRAVEL – (*No Written Material*)

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

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

Under the approval authority of the Executive Officer, the District will enter into a contract modification with Paul Hastings LLC (Contract No. C1306012). The contractor is a potential source of income for Governing Board Member Joseph Lyou, which qualifies for the remote interest exception of Section 1090 of the California Government Code. Dr. Lyou abstained from any participation in the making of the contract modification.

CLOSED SESSION - (*No Written Material*)

CONFERENCE WITH LEGAL COUNSEL – EXISTING LITIGATION

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

- In the Matter of SCAQMD v. Aerocraft Heat Treating Co., Inc. and Anaplex Corp., SCAQMD Hearing Board Case No. 6066-1 (Order for Abatement);
- SCAQMD v. Anaplex, Los Angeles Superior Court Case No. BC608322 (Paramount Hexavalent Chromium);
- Arizona v. Bahr, United States Supreme Court Case No. 16-1369 (Contingency Measures);
- In the Matter of SCAQMD v. Browning-Ferris Industries of California, Inc. dba Sunshine Canyon Landfill, Hearing Board Case No. 3448-14;
- Communities for a Better Environment v. SCAQMD, Los Angeles Superior Court Case No. BS161399 (RECLAIM);
- Communities for a Better Environment v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169841; Safe Fuel and Energy Resources California, et al. v. South Coast Air Quality Management District, Los Angeles Superior Court Case No. BS169923 (Tesoro);
- Zbigniew (Phil) Szymanski v. SCAQMD, WCAB No: ADJ9752399;
- People of the State of California, ex rel. SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528;
- In re: Exide Technologies, Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy Case);

- Fast Lane Transportation, Inc. et al. v. City of Los Angeles, et al., Contra Costa County Superior Court Case No. MSN14-0300 (formerly South Coast Air Quality Management District v. City of Los Angeles, et al., Los Angeles Superior Court Case No. BS 143381) (SCIG), Court of Appeal First Appellate District Case No. A148993;

- Ferguson v. Coachella Valley Association of Governments, Riverside County Transportation Commission and South Coast Air Quality Management District, Riverside Superior Court Case No. PSC 1705629 (CV Link);

- SCAQMD v. EPA, U.S. Court of Appeals, D.C. Circuit, Case No. 15-1115 (consolidated with 15-1123, Sierra Club, et al. v. EPA) (Out-of-Area RFP);

- South Coast Air Quality Management District v. Top Shelf Consulting LLC, Los Angeles Superior Court, Case No. BC676606; and

- In the Matter of SCAQMD v. Torrance Refining Company, LLC, SCAQMD Hearing Board Case No. 6060-5 (Order for Abatement).

CONFERENCE WITH LEGAL COUNSEL – INITIATING LITIGATION

It is also necessary for the Board to recess to closed session pursuant to Government Code section 54956.9(a) and 54956.9(d)(4) to consider initiation of litigation (two cases)—one case is a potential amicus brief in Valero Refining Co. v. Hearing Board of the BAAQMD, San Francisco Superior Court Case No. CPF-15-514407/Valero Refining Company – California v. Hearing Board of the Bay Area Air Quality Management District, et al., California Court of Appeals Case No. A151004.

CONFERENCE WITH NEGOTIATORS

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

- designated representatives regarding represented employee salaries and benefits or other mandatory subjects within the scope of representation [Negotiator: A. John Olvera; Represented Employees: Teamsters Local 911 and SCAQMD Professional Employees Association]; and to confer with:

- labor negotiators regarding unrepresented employees [Agency Designated Representative: A. John Olvera; Unrepresented Employees: Designated Deputies and Management and Confidential employees].

ADJOURNMENT

PUBLIC COMMENTS

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

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

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

ACRONYMS

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

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 1

MINUTES: Governing Board Monthly Meeting

SYNOPSIS: Attached are the Minutes of the November 3, 2017 meeting.

RECOMMENDED ACTION:
Approve Minutes of the November 3, 2017 Board Meeting.

Denise Garzaro
Clerk of the Boards

DG

FRIDAY, NOVEMBER 3, 2017

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

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

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

Supervisor Marion Ashley
County of Riverside

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

Supervisor Sheila Kuehl
County of Los Angeles

Dr. Joseph K. Lyou
Governor's Appointee

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

Supervisor Shawn Nelson (Arrived at 10:00 a.m.)
County of Orange

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

Council Member Dwight Robinson
Cities of Orange County

Supervisor Janice Rutherford
County of San Bernardino

Members absent:

Council Member Joe Buscaino
City of Los Angeles

Mayor Pro Tem Larry McCallon
Cities of San Bernardino County

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

- Pledge of Allegiance: Led by Council Member Mitchell

- Opening Comments

Mayor Cacciotti explained that the South Pasadena Police Department is replacing gas-powered parking enforcement vehicles with EVs. He commented on a recent news article regarding Edison's electrification plan and noted the challenges and high costs involved with installing charging stations where excavation for electrical infrastructure is necessary. He added that incentives for installing charging stations may be necessary to assist schools, churches and small businesses.

Chairman Burke concurred with Mayor Cacciotti's comments and encouraged coordination with Edison to promote electrification efforts and the need for charging infrastructure. He added that there is a proposal to eliminate the $7,500 federal tax incentive for qualifying EVs.

Dr. Parker announced that he traveled to Germany and Sweden, along with Chairman Burke and Council Member Mitchell, where they visited the heavy-duty electric truck demonstration project by Siemens. He noted the technological advances in pantograph technology for heavy-duty electric trucks, which is similar to the catenary demonstration project that the District funded in the city of Carson. He added that the trip was informative and confirmed that investment in new technology will yield great results and will help meet NOx reduction goals.

Council Member Mitchell announced that on that European trip, she also visited, along with Mr. Nastri and Dr. Miyasato, a Volvo manufacturing facility in Gothenburg, Sweden, where electric heavy-duty trucks, marine vessels and off-road trucks are manufactured in one facility. She noted that the city's electric-powered bus system is quite impressive and the buses charge in 10 minutes via an overhead catenary located within bus shelters. She added that she also had the opportunity to ride in a heavy-duty electric truck and the transition on and off of the catenary system was seamless, even at high speeds. She also attended the CAPCOA Conference in Monterey on October 15-17, 2017, where she participated in a panel regarding AB 617, and discussed the intent to share resources with smaller air quality districts. She also announced that she attended the groundbreaking ceremony for the new CARB facility in Riverside, along with Mr. Nastri, Dr. Fine, and local legislators and added that the location will employ over 300 people and will be a state-of-the-art research and testing facility.

Chairman Burke announced that he and Dr. Parker attended the Taste of Soul event on October 21, 2017 in South Los Angeles, which was attended by well over 350,000 people. He expressed appreciation to staff for providing information to attendees regarding air quality issues and available District programs.

CONSENT CALENDAR

1. Approve Minutes of October 6, 2017 Board Meeting

2. Set Public Hearing December 1, 2017 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations

   A. Determine That Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring is Exempt from CEQA and Adopt Rule 1180

   B. Certify Final Environmental Assessment and Amend Rule 1420 – Emissions Standard for Lead

   C. Certify Final Subsequent Environmental Assessment and Amend Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

Budget/Fiscal Impact

3. Transfer and Appropriate Funds, Authorize Contracts, RFQs and Purchase Orders, and Execute Contracts for Advanced Monitoring During MATES V

4. Recognize Revenue, Issue Program Announcement for Heavy-Duty Diesel Truck Replacement Projects, Execute Agreement and Reimburse General Fund for Administrative Costs

5. Amend Contract to Develop and Demonstrate Catenary Zero Emissions Goods Movement System

6. Amend Contract for Replacement of Diesel School Buses with Electric Buses

7. Execute Contracts for FY 2016-17 “Year 19” Carl Moyer Program, SOON Provision and AB 134 Carl Moyer Funding, and Transfer Funds for Carl Moyer Program and Voucher Incentive Program

8. Amend Contract for Tier 4 Passenger Locomotives

9. Amend Contract for Targeted Outreach for “The Right to Breathe” Video Utilizing YouTube Videos and Banner Ads

10. Transfer Funds for Enhanced Particulate Monitoring Program

11. Revise Procurement Policy and Procedure

Action Items/No Fiscal Impact

12. Annual Report on 457 Deferred Compensation Plan

13. Establish Board Meeting Schedule for Calendar Year 2018

Items 14 through 21 - Information Only/Receive and File

14. Legislative, Public Affairs and Media Report

15. Hearing Board Report

16. Civil Filing and Civil Penalties Report

17. Lead Agency Projects and Environmental Documents Received by SCAQMD

18. Rule and Control Measure Forecast

19. Report of RFPs/RFQQs Scheduled for Release in November

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

21. Audit Reports of AB 2766 Fee Revenue Recipients for Fiscal Years Ending June 30, 2014 and 2015

Dr. Lyou announced his abstention on Item No. 5 because the Los Angeles County Metropolitan Transportation Authority is a potential source of income to him; and on Item No. 9 because of a financial interest in Google.

Supervisor Kuehl noted that she is a Board Member of the Los Angeles County Metropolitan Transportation Authority which is involved with Item No. 5; and announced her abstention on Item No. 9 because of a financial interest in Google.

Supervisor Ashley announced his abstention on Item No. 2A because of a financial interest in Chevron; and on Item No. 7 because of campaign contributions from CR&R, Inc., Scott Bros. Dairy Farms, L.P., and Waste Management Collection and Recycling, Inc.

Supervisor Rutherford announced her abstention on Item No. 7 because her office did not have time to evaluate all potential conflicts of interest.

Agenda Item Nos. 2A, 4, 5, 7 and 9 were withheld for comment and discussion.

Mr. Nastri noted that staff was requesting that Item No. 8 be continued to the December 1, 2017 Board meeting.

MOVED BY CACCIOTTI, SECONDED BY PARKER, AGENDA ITEMS 1, 2B, 2C, 3, 6, AND 10 THROUGH 21 APPROVED AS RECOMMENDED, ADOPTING RESOLUTION NO. 17-18, SETTING THE TIME AND PLACE OF REGULAR MEETINGS, BY THE FOLLOWING VOTE:

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

NOES: None

ABSENT: Buscaino, McCallon and Nelson

22. <u>Items Deferred from Consent Calendar</u>

2A. Determine That Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring is Exempt from CEQA and Adopt Rule 1180

Supervisor Ashley left the room during discussion of Item No. 2A.

Bridget McCann, Western States Petroleum Association (WSPA), expressed support for the proposed rule and stated that WSPA members have been actively engaged throughout the rulemaking process. She explained that several technical issues are still unresolved and WSPA members will continue to discuss their concerns with staff. She requested

the Board consider addressing the fee schedule for the community air monitoring program under Regulation III rulemaking, as it is WSPA's understanding that that is the appropriate mechanism for fee rules. (Submitted Written Comments)

Chairman Burke asked staff to provide a response to the speaker's concerns.

Mr. Nastri stated that staff will continue to work with stakeholders in an effort to address their concerns before the December public hearing and indicated that Dr. Fine would address comments regarding deployment of monitoring.

Dr. Philip Fine, DEO/Planning, Rule Development and Area Sources, explained that Rule 1180 is part of the implementation of AB 1647 and requires both fenceline monitoring by refineries and community monitoring by air districts. Staff has been working closely with stakeholders on rule language and guidelines for implementation and is close to agreement on several issues which have been discussed in working group meetings. Due to the short period of time for implementation, there is a need to establish the fee schedule for reimbursement of community monitoring from the refineries and begin the RFP process for procuring the necessary equipment for monitoring. The stakeholders are working through how the cost will be assigned to each facility and how reimbursement will be made. If there is still disagreement regarding the fee schedule, the Board can choose to adopt the rule in December and defer the fee schedule to a later date.

Council Member Robinson expressed concern about setting a precedent by adopting a fee schedule separate from Regulation III.

Mr. Nastri explained that Regulation III fees address ongoing and permitting fees, while the fee schedule proposed under this rule is for a one-time fee associated with the initial set-up of the community monitoring program.

Dr. Fine added that the operation and maintenance fees related to the refinery community air monitoring program will be addressed under Regulation III so that they can be adjusted for CPI. He added that the initial costs for set up and installation of the monitoring program under this rule is similar to temporary fees that have been adopted within past rules.

MOVED BY LYOU, SECONDED BY KUEHL, AGENDA ITEM 2A APPROVED, AS RECOMMENDED, BY THE FOLLOWING VOTE:

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

NOES: None

ABSTAIN: Ashley

ABSENT: Buscaino, McCallon and Nelson

4. Recognize Revenue, Issue Program Announcement for Heavy-Duty Diesel Truck Replacement Projects, Execute Agreement and Reimburse General Fund for Administrative Costs

Supervisor Robinson expressed support for heavy-duty truck replacement and commented that efforts should be directed toward sending scrapped diesel trucks to other areas in the United States or Mexico, as they may provide an improvement in air quality in those areas.

Dr. Lyou expressed support for developing better rate structures and incentive programs to motivate drivers to replace older trucks with cleaner technology.

MOVED BY ROBINSON, SECONDED BY CACCIOTTI, AGENDA ITEM 4 APPROVED, AS RECOMMENDED, BY THE FOLLOWING VOTE:

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

NOES: None

ABSENT: Buscaino, McCallon and Nelson

5. Amend Contract to Develop and Demonstrate Catenary Zero Emissions Goods Movement System

Dr. Lyou left the room during discussion of Item No. 5.

Mayor Cacciotti spoke in favor of catenary systems and asked staff to explain the current demonstration project in the city of Carson.

Dr. Matt Miyasato, DEO/Science and Technology Advancement, presented photos of the demonstration project on Alameda Street in Carson

and explained that the catenary technology is similar to trolley cars in San Francisco and the light rail systems operating in the center of local freeways. He noted that when attached to the overhead catenary lines, the truck is electrified and can operate on an electric motor with zero emissions. He added that the battery-electric trucks are charging when connected to the catenary and operate with zero emissions on and off the catenary. This project is demonstrating the viability of utilizing systems in heavily urbanized and industrial areas where the catenary can be used on highways and roads without having a dedicated rail line.

Chairman Burke expressed concern that funding projects for development of new technology will produce large financial benefits for private companies.

Dr. Parker expressed support for catenary systems and the technology that will be developed to better support battery-electric trucks and cleaner air. He added that private companies are benefitting from the patents that are being acquired for new technology and suggested potential legislation to provide for recouping funds allocated for these projects.

Supervisor Kuehl highlighted the importance of investing in technology for alternative transportation options that will reduce emissions. She noted the challenges associated with excavating in urbanized areas where underground infrastructure has not been well documented.

Council Member Robinson stressed the importance of diversifying alternate fuel options, maintaining fuel neutrality and developing technology that will allow for faster charging of EVs.

MOVED BY CACCIOTTI, SECONDED BY BENOIT, AGENDA ITEM 5 APPROVED, AS RECOMMENDED, BY THE FOLLOWING VOTE:

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

NOES: None

ABSTAIN: Lyou

ABSENT: Buscaino, McCallon and Nelson

(Supervisor Nelson arrived at 10:00 a.m.)

7. Execute Contracts for FY 2016-17 “Year 19” Carl Moyer Program, SOON Provision and AB 134 Carl Moyer Funding, and Transfer Funds for Carl Moyer Program and Voucher Incentive Program

Supervisor Nelson announced his abstention on Item No. 7 because of a campaign contribution from Sukut Construction, LLC.

MOVED BY BENOIT, SECONDED BY MITCHELL, AGENDA ITEM 7 APPROVED, AS RECOMMENDED, BY THE FOLLOWING VOTE:

AYES: Benoit, Burke, Cacciotti, Kuehl, Mitchell, Lyou, Parker, and Robinson

NOES: None

ABSTAIN: Ashley, Nelson and Rutherford

ABSENT: Buscaino and McCallon

9. Amend Contract for Targeted Outreach for “The Right to Breathe” Video Utilizing YouTube Videos and Banner Ads

Dr. Lyou left the room during discussion of Item No. 9.

Mayor Cacciotti inquired about the status of updating “The Right to Breathe” film and expressed concern that this contract would commence prior to that being completed.

Chairman Burke explained that the amended contract will utilize a credit of $250,000 from Google for additional advertising of the current video and that once complete, a contract would be considered for displaying the current video.

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

AYES: Ashley, Benoit, Burke, Cacciotti, Mitchell, Nelson, Parker, Robinson and Rutherford

NOES: None

ABSTAIN: Kuehl and Lyou

ABSENT: Buscaino and McCallon

BOARD CALENDAR

23. Administrative Committee

24. Legislative Committee

25. Mobile Source Committee

26. Stationary Source Committee

27. Technology Committee

28. California Air Resources Board Monthly Report

MOVED BY LYOU, SECONDED BY CACCIOTTI, AGENDA ITEMS 23 THROUGH 28, APPROVED AS RECOMMENDED, RECEIVING AND FILING THE COMMITTEE AND CARB REPORTS AND APPROVING THE FOLLOWING POSITION ON LEGISLATION, BY THE FOLLOWING VOTE:

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

NOES: None

ABSENT: Buscaino and McCallon

Agenda Item	**Recommendation**
H.R. 3682 (Lowenthal) Blue Whales and Blue Skies Act	Not Support

Staff Presentation/Board Discussion

29. Status Report on Permit Backlog Reduction Effort

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

Supervisor Nelson and Dr. Lyou expressed appreciation for the work that has been done to reduce the permit backlog.

INFORMATION ONLY; NO ACTION NECESSARY

PUBLIC HEARING

30. Certify Final Environmental Assessment and Adopt Proposed Rule 415 - Odors from Rendering Facilities

Council Member Robinson announced his abstention on Item No. 30 because of a financial interest in Darling Ingredients, Inc., and Supervisor Ashley announced his abstention on Item No. 30 because of a financial interest in Smithfield Foods. They both left the room during the discussion of the item.

Tracy Goss, Planning and Rules Manager, gave the staff presentation on Item 30. He noted that an errata sheet containing clarification to responses to comments in the Final Environmental Assessment was provided to the Board Members and copies were made available to the public.

Dr. Burke commented that he can relate to the odor concerns of residents because during his childhood he lived near a slaughter house in Ohio.

The public hearing was opened; and the following individuals addressed the Board on Item 30.

Martin Schlageter, on behalf of City of Los Angeles Council Member Jose Huizar, urged the Board to adopt Rule 415 to protect residents from odors emanating from animal rendering facilities which present a nuisance and health concern for residents in an EJ community. He thanked staff for attending the community meeting hosted by Council Member Huizar and Resurrection Church, and for giving residents the opportunity to provide informed feedback to the Board. (Submitted Written Comments)

James Andreoli, Baker Commodities, thanked staff for working with industry during the rulemaking process and expressed concerns about the costs of implementation of odor control systems. He noted that the rule does not provide scientific methods for determining the source of odors; and added that

Baker Commodities has always been committed to using the best available odor control technology.

Chairman Burke acknowledged the investment that will be required for rendering plants to comply with Rule 415 and noted that the District is committed to working with industry to temper the financial impacts.

Monsignor John Moretta, Resurrection Church, thanked staff and the Board for their work on the rule and stressed the importance of addressing the long standing odors from rendering plants in the Boyle Heights area. He expressed concerns for the health and quality of life for residents in the area. He inquired about penalties for businesses who fail to comply and requested clarification on the required signage that will provide information on how to report complaints.

Kurt Wiese, General Counsel, responded that penalties for violation of a District regulation are provided for in the Health and Safety Code, as well as other enforcement provisions, such as Orders for Abatement and injunctions.

Mr. Goss explained that signage advising individuals how to register a complaint with the District by calling 1-800-CUT-SMOG is required by the rule, however, the inclusion of contact information for on-site personnel at the facility is optional.

Felipe Aguirre, Comite Civico Del Valle, spoke in support of the rule and expressed appreciation to staff for their response to complaints. He asked the Board to consider limiting processing hours to assist with odor issues during the implementation period.

Joe Gonzalez, Resurrection Church, commented that he has lived in the area for 61 years and described the putrid odors that he lives with. He expressed appreciation to staff for contacting him and investigating odor complaints and inquired about Spanish translation for callers who contact the District to complain.

Derrick Alatorre, DEO/Legislative, Public Affairs and Media, responded that Spanish translation is available for callers and there is a complaint procedure brochure available in Spanish.

Ariel Garcia, Resurrection Catholic School student, expressed support for the rule and commented on the negative health impacts to children as a result of the odors from rendering plants. She urged the Board to clean the air for the benefit of children and residents in the area.

David Alvarez, Resurrection Catholic School student, expressed concerns for the health and well-being of rendering facility workers.

Terry Cano, Los Angeles Resident, described the severe respiratory issues she suffers due to the odors from the rendering plants that have existed for decades. She urged the Board to adopt fines or possible closure provisions for facilities that violate the rule; and added that those fines could be used to create a healthcare fund to assist affected individuals. (Submitted Written Comments)

Priscilla Sanchez, Communities for a Better Environment (CBE)
Jose Luis Silva, CBE

Expressed support for the rule and commented on respiratory illnesses and other health issues experienced by children as a result of the odors from rendering plants.

Daniel Covarrubias, Resurrection Catholic School student
Kayleigh Wade, CBE
Martha Escobedo, CBE
Rosa Esquivel, CBE
Alicia Silva, CBE
Dinah Dominquez, CBE
Marilyn Lopez, CBE
Dilia Ortega, CBE

Stressed the importance of regulating odors to address public health concerns and provide a better quality of life for residents in the East Los Angeles area.

Martin Perez, Teamsters Local 63, expressed opposition to the rule and commented that odors are tolerable. He urged the Board to work with residents and industry to develop a rule that addresses community concerns while maintaining local jobs.

Yvonne Watson, Sierra Club, commented that she attended a meeting held in the community on October 16, 2017 and was immediately sickened by the intense odors when she stepped outside. She described her severe asthma and the effect of odors on her condition that can last for hours. She urged the Board to address this public health issue and adopt the rule for the benefit of the communities surrounding rendering plants.

<u>Written Comments Submitted By</u>:
Miguel Santiago, Assembly Member, Fifty-Third District
Esther Feldman, Community Conservation Solutions
Carina Sanchez, Boyle Heights resident
Salvador Hernandez, Los Angeles resident
Rosa M. Gallegos, Los Angeles resident
Frank Villalobos, Los Angeles resident
Eva Olivier, Los Angeles resident
Felipe Agome, Maywood resident
Maria E. Duran, Los Angeles resident

Michael Delgado, Los Angeles resident
Teresa Marquez, Los Angeles resident
Alex Navarro, Whittier resident
Rosa Torres, Los Angeles resident
David Rivas, Los Angeles resident
Cindy Vega, Huntington Park resident
Efrain Lopez Cortez, Los Angeles resident
Ana De Anda, Azusa resident
Martha Diaz, Los Angeles resident
Juanita Marquez, Los Angeles resident

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

Dr. Lyou explained that the Clean Communities Plan committed to address community concerns and acknowledged that this rule provides protection for EJ communities. He suggested that information be provided to rendering companies regarding replacement of heavy-duty trucks in order to offset the economic impact of rule compliance.

Council Member Mitchell acknowledged staff's efforts throughout the process. She commented that she has visited all of the rendering plants in this area and noted the sickening odors she experienced. She added that requiring enclosed processing of materials and odor control equipment would greatly improve the odor issues.

Supervisor Nelson stated that he would support the rule but expressed concern with regulating long-standing businesses that produce odors and whether these types of nuisances should be regulated by the District. He noted the challenge of operating businesses in heavily populated areas.

Supervisor Kuehl thanked the public speakers for their testimony. She expressed concern for the workers at these facilities who may not be willing to express concerns about workplace conditions for fear of impacting their income. She stressed the importance of cleaning the air to protect public health.

Dr. Parker commented on his experience of moving to California to attend college in Los Angeles and experiencing the foul odors from the rendering facilities located nearby. He added that poor city planning is partly to blame for allowing residential zoning so close to industrial zoning and amendment of those planning methods is warranted. He noted that odor control technology will improve air quality and health for residents in these areas.

Mayor Cacciotti concurred with his fellow Board members and expressed appreciation to all who testified. He noted the challenge of balancing the need for jobs and quality of life for residents living in these areas. He encouraged the

students of Resurrection Catholic School to seek opportunities to become more involved in government and improving their communities.

Mayor Pro Tem Benoit recalled that while visiting Exide technologies with his father some years ago, he experienced the overwhelming odors from the rendering plants. He concurred with the comments of fellow Board members and thanked rulemaking staff for working with industry and the community on the development of the rule.

MOVED BY BENOIT, SECONDED BY KUEHL, AGENDA ITEM NO. 30 APPROVED, ADOPTING RESOLUTION NO. 17-17 CERTIFYING THE FINAL ENVIRONMENTAL ASSESSMENT FOR PROPOSED RULE 415 AND ADOPTING RULE 415 — ODORS FROM RENDERING FACILITIES, BY THE FOLLOWING VOTE:

AYES: Benoit, Burke, Cacciotti, Kuehl, Lyou, Mitchell, Nelson, Parker, and Rutherford

NOES: None

ABSTAIN: Ashley and Robinson

ABSENT: Buscaino and McCallon

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

There was no public comment on non-agenda items.

Mr. Nastri noted a compliance issue with Rule 222 regarding the submittal of information on a District form. He stated that there was an unanticipated delay in sending the form to the regulated community and, as such, the District will be using enforcement discretion for a short period of time to allow additional time for submittal of the form.

CLOSED SESSION

The Board recessed to closed session at 11:35 a.m., pursuant to Government Code sections 54956.9(a) and 54956.9(d)(1) to confer with its counsel regarding pending litigation which has been initiated formally and to which the SCAQMD is a party. The actions are:

Communities for a Better Environment v. SCAQMD, Los Angeles Superior Court Case No. BS161399 (RECLAIM);

People of the State of California, ex rel. SCAQMD v. Exide Technologies, Inc., Los Angeles Superior Court Case No. BC533528;

In re: Exide Technologies, Inc., U.S. Bankruptcy Court, District of Delaware, Case No. 13-11482 (KJC) (Bankruptcy Case); and

South Coast Air Quality Management District v. Top Shelf Consulting LLC, Los Angeles Superior Court, Case No. BC676606.

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

ADJOURNMENT

There being no further business, the meeting was adjourned by Kurt Wiese at 12:10 p.m.

The foregoing is a true statement of the proceedings held by the South Coast Air Quality Management District Board on November 3, 2017.

Respectfully Submitted,

Denise Garzaro
Clerk of the Boards

Date Minutes Approved: _____

_____
Dr. William A Burke, Chairman

ACRONYMS

CAPCOA = California Air Pollution Control Officers Association
CARB = California Air Resources Board
CEQA = California Environmental Quality Act
CPI = Consumer Price Index
DEO = Deputy Executive Officer
EJ = Environmental Justice
EV = Electric Vehicle
FY = Fiscal Year
MATES = Multiple Air Toxics Exposure Study
NOx = Oxides of Nitrogen
PR = Proposed Rule
RFP = Request for Proposals
RFQ = Request for Quotations
RFQQs = Request for Qualifications and Quotations
SOON = Surplus Off-Road Opt-in for NOx

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 2

PROPOSAL: Set Public Hearing January 5, 2018 to Consider Adoption of and/or Amendments to SCAQMD Rules and Regulations:

Determine That Proposed Amendments to Rule 2001 – Applicability and Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx) are Exempt from CEQA and Amend Rules 2001 and 2002

The adoption Resolution of the Final 2016 AQMP directed staff to achieve additional NOx emission reductions and to transition the RECLAIM program to a command and control regulatory structure as soon as practicable. Proposed Amended Rule 2001 will commence the initial steps of this transition by ceasing any future inclusions of facilities into NOx and SOx RECLAIM. Proposed Amended Rule 2002 will establish notification procedures for RECLAIM facilities that will exit the program and address the RECLAIM Trading Credit holdings for these facilities. This action is to adopt the Resolution: 1) Determining that the proposed amendments to Rule 2001 – Applicability and Rule 2002 - Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx) are exempt from the requirements of the California Environmental Quality Act; and 2) Amending Rule 2001 – Applicability and Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur (SOx). (Reviewed: Stationary Source Committee, November 17, 2017)

The complete text of the proposed rule and amendments, staff reports and other supporting documents will be available from the District's Public Information Center, (909) 396-2001 and on the Internet (www.aqmd.gov) as of December 6, 2017.

RECOMMENDED ACTION:
Set Public Hearing January 5, 2018 to amend Rules 2001 and 2002.

Wayne Nastri
Executive Officer

dg

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 3

PROPOSAL: Recognize Revenue, Appropriate Funds and Execute Contract to Evaluate Potential Nationwide Economic Impacts of Federal Clean Air Investment Fund

SYNOPSIS: SCAQMD staff is proactively seeking federal support to create a Clean Air Investment Fund (CAIF), which will enable air quality improvement projects nationwide and provide the critical financing urgently needed by SCAQMD and other non-attainment areas. To help garner federal support, staff recommends execution of a sole source contract with ICF to evaluate the potential nationwide economic impacts and benefits of clean air investments. The evaluation will focus on using the CAIF to accelerate the deployment of clean heavy-duty trucks, the segment which is currently the primary source of NOx emissions. This action is to recognize revenue and appropriate up to $100,000 from Bay Area Air Quality Management District and appropriate up to $130,000 from the General Fund Undesignated (Unassigned) Fund Balance, for a total appropriation of $230,000 into Planning, Rule Development and Area Sources' FY 2017-18 Budget. This action is to also award a sole source contract to ICF in an amount not to exceed $230,000. Staff continues to seek funding from other interested parties to assist with project costs.

COMMITTEE: Administrative, November 9, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Recognize revenue, upon receipt, and appropriate up to $100,000 in funding from BAAQMD into Planning, Rule Development and Area Sources' FY 2017-18 Budget, Services and Supplies Major Object, Professional and Special Services account.
2. Appropriate up to $130,000 into Planning, Rule Development and Area Sources' FY 2017-18 Budget, Services and Supplies Major Object, Professional and Special Services account from the General Fund Undesignated (Unassigned) Fund Balance.

3. Authorize the Executive Officer to execute a sole source contract with ICF in an amount not to exceed $230,000 to evaluate the potential nationwide economic impacts and benefits of clean air investments in advanced clean heavy-duty trucks via the proposed CAIF.

Wayne Nastri
Executive Officer

PF:SN:JW:ES

Background

The 2016 Air Quality Management Plan (AQMP) details the critical role of advanced clean technologies in achieving the magnitude of nitrogen oxides (NOx) emission reductions needed to attain both ozone and PM2.5 standards. As recognized in the 2016 AQMP, financial incentives are critical to accelerating further deployment of zero and near-zero emission technologies so that NOx emissions can be expeditiously and effectively reduced. Based on staff's evaluation, it is potentially the most cost-effective approach to provide incentives for on-road mobile source emission reductions, particularly in the heavy-duty trucking sector, which is the primary source of NOx emissions in the South Coast Air Basin and also in other parts of the country including the San Joaquin Valley Air Basin. At the same time, staff seeks to identify any cost-effective application of incentives to reduce pollutant emissions from off-road mobile and stationary sources.

SCAQMD staff is proactively seeking federal support to create a Clean Air Investment Fund (CAIF). The creation of CAIF will enable air quality improvement projects nationwide. And importantly, it will provide the critical financing urgently needed by SCAQMD, as well as all other non-attainment areas in the nation that are faced with the daunting air pollution challenges and the fast-approaching deadlines to attain federal air quality standards. While seeking federal support for a CAIF, staff has concurrently reached out to various agencies and organizations to establish effective partnerships. In addition to Bay Area Air Quality Management District's (BAAQMD) funding commitment, there are other interested parties that have expressed and confirmed their support of conducting a nationwide economic impacts evaluation of accelerated clean technology deployment in the heavy-duty trucking sector.

Proposal

To garner federal support for a CAIF, staff recommends execution of a sole source contract with ICF to evaluate the potential nationwide economic impacts and benefits of clean air investments. The evaluation will focus on using the CAIF to accelerate the deployment of clean heavy-duty trucks, the segment which is currently the primary source of NOx emissions. By assuming different and reasonable mixes of clean heavy-

duty trucking technologies and scopes of their future deployment, various scenarios and their associated costs will be developed as part of this evaluation. Potential economic impacts and benefits for truck and engine manufacturers, and truck owners and operators nationwide, will be evaluated. The national competitiveness advantage that could be gained from investments in advanced fuel and transportation technologies will be also assessed.

This action is to recognize revenue, upon receipt, and appropriate up to $100,000 in funding from BAAQMD and appropriate up to $130,000 from the General Fund Undesignated (Unassigned) Fund Balance, for a total appropriation of $230,000 into Planning, Rule Development and Area Sources' FY 2017-18 Budget, Services and Supplies Major Object, Professional and Special Services account. This action is to also authorize the Executive Officer to execute a sole source contract with ICF in an amount not to exceed $230,000 to evaluate the potential nationwide economic impacts and benefits of clean air investments in advanced clean heavy-duty trucks via the proposed CAIF. Staff continues to seek funding from other interested parties to assist with project costs.

Sole Source Justification

Section VIII.B.2 of the Procurement Policy and Procedure identifies four provisions under which a sole source award may be justified for procurement. This request for a sole source award is made under provisions B.2c: (1) The unique experience and capabilities of the proposed contractor or contractor team; and B.2d: (1) Projects involving cost sharing by multiple sponsors. The ICF project team consists of five highly-qualified and experienced policy specialists and researchers in the fields of economic impacts evaluation, energy and environmental economics, transportation data analytics, freight transportation demand forecasting, and alternative transportation fuels and technologies. The team members have performed economic analyses on various national and regional greenhouse gas and NOx emission reduction programs, clean truck freight strategies, and deployment of low NOx trucks fueled by renewable natural gas, for clients in the public and private sectors, including California Air Resources Board, BAAQMD, Southern California Association of Governments, Riverside County Transportation Commission, U.S. Environmental Protection Agency, U.S. Department of Transportation, the Federal Highway Administration, and the Transportation Research Board. The project team's unique combination of economics and transportation expertise and experience provides the sole source justification of this contract award. Additionally, the cost of this contract—an amount not to exceed $230,000—will be shared between SCAQMD and BAAQMD, and potentially with other interested parties as well.

Benefits to SCAQMD
The project outlined above will provide support and evidence for SCAQMD's campaign for a federal CAIF, by quantifying the potential magnitude of nationwide economic impacts and benefits of clean air investments. The creation of a CAIF will be critical to the implementation of the 2016 AQMP as it will help provide the urgently needed incentive funding to accelerate the further deployment of zero and near-zero NOx emission technologies.

Resource Impacts
The total project cost is $230,000, which up to $100,000 will be provided by BAAQMD. Staff continues to seek funding from other interested parties to assist with project costs.

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 4

PROPOSAL: Utilize Rule 1111 Rebate Funding and Incremental Mitigation Fee Funding and Issue RFP for Implementation of Consumer Rebate Program for Compliant Natural Gas-Fired, Fan-Type Central Furnaces

SYNOPSIS: In 2018 staff will be proposing amendments to Rule 1111 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces. Currently, all furnace manufacturers are paying a NOx mitigation fee until they can commercialize compliant products. To provide an additional incentive, staff is proposing to develop a rebate program for consumers. The rebate program is expected to offset the cost for consumers to purchase a compliant furnace, and motivate commercialization of compliant furnaces. This action is to authorize staff to utilize $3,000,000 in Rule 1111 rebate funding from the Air Quality Investment Fund (27), Rule 1121 Fee Program, as well as any additional incremental mitigation fee funding from future Rule 1111 amendments for the rebate program. Staff is recommending that a third-party contractor be used to implement the rebate program.

COMMITTEE: Stationary Source, November 17, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Authorize staff to utilize $3,000,000 in Rule 1111 rebate funding from the Air Quality Investment Fund (27), Rule 1121 Fee Program, as well as any additional incremental mitigation fee funding from future Rule 1111 amendments, to have a third-party contractor for implementation of the consumer rebate program; and

2. Authorize the issuance of RFP #P2018-05 to solicit proposals to administer the rebate program for consumers who purchase and install compliant furnaces in the SCAQMD.

Wayne Nastri
Executive Officer

PF:SN:TG:GQ:YZ

Background

Rule 1111 - Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces was adopted to reduce emissions of nitrogen oxides (NOx) from residential and commercial gas-fired fan-type residential space heating furnaces with a rated heat input capacity of less than 175,000 BTU per hour or, for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour. This rule applies to manufacturers, distributors, sellers, and installers of such furnaces.

Rule 1111 was amended in 2009 to lower the NOx emission limit from 40 to 14 ng/Joule (ng/J). At that time there were no commercially available compliant units. In order to encourage and accelerate technology development, Rule 1111 provided an incentive for early compliance. Manufacturers that delivered any 14 ng/J furnaces into the SCAQMD could have elected to receive a payment of $90 for each high-efficiency unit and $75 for each other type of furnace sold and delivered into the SCAQMD 90 days or more prior to the applicable compliance date. On November 6, 2009 (Agenda #30), the Board authorized $3,000,000 from the Air Quality Investment Fund (27), Rule 1121 Mitigation Fee Program, to fund these rebates.

Rule 1111 was later amended in 2014 to provide additional time for manufacturers to conduct safety and reliability testing and to provide a temporary per-unit mitigation fee that manufacturers could pay in lieu of meeting the new lower NOx emission limit. The mitigation fee is $200 for condensing furnaces and $150 for other types of furnaces, and is available for up to 36 months past the applicable compliance date. Currently, all manufacturers are paying the mitigation fee. Although no compliant furnaces have been introduced into the market, three manufacturers have developed and certified products complying with the Rule 1111 NOx 14 ng/J limit with field tests underway. On November 2, 2017 at a local tradeshow, Lennox Industries, Inc. unveiled their commercially available compliant non-condensing furnace.

Staff will be proposing amendments to Rule 1111 for Board consideration in February 2018. A companion proposal to the proposed rule amendments is a rebate program for consumers. The proposed rebate is $500 for up to the first 6,000 compliant furnaces that are purchased and installed, and $250 thereafter based on funding availability, for up to six calendar months beyond the mitigation fee end date. The consumer rebate

program is expected to not only offset cost for consumers, but also motivate commercialization of compliant products. Total available funding for this rebate program is derived from two sources. The first is the previously authorized $3,000,000 of Rule 1111 rebate funding (November 6, 2009 Agenda #30), which remains unspent in the Fund 27 Rule 1121 Fee Program. The second is the proposed increased portion of the mitigation fee to be included in the proposed Rule 1111 amendments, which are scheduled for Board consideration in February 2018. In the current staff proposal for Rule 1111, the increased portion of the mitigation fee would be $200 for each condensing unit and $250 for other unit types. The consumer rebate program can be implemented with the existing $3,000,000 funding independent of the proposed rule amendments.

The total number of rebates may range from 10,000 to 50,000 for consumers who have installed compliant units within the SCAQMD for the first implementation year, and more for the following years depending on commercialization status, market demand for compliant products, and funding availability. Based on discussions with the working group and with individual OEMs, as well as limited staff resources, it is proposed to outsource the rebate implementation to a third party contractor who would issue the rebates directly to consumers.

Proposal

Utilize Existing $3,000,000 in Rule 1111 Rebate Funding and Additional Incremental Mitigation Fee Funding

This action is to utilize $3,000,000 in Rule 1111 rebate funding from the Fund 27 Rule 1121 Fee Program, as well as any additional incremental mitigation fee funding from future Rule 1111 amendments, to outsource the implementation of the consumer rebate program to a third-party contractor. The existing Rule 1111 rebate funding of $3,000,000 was authorized by the Board on November 6, 2009 (Agenda #30) from the Air Quality Investment Fund (27), Rule 1121 Mitigation Fee Program, to incentivize manufacturers. The funds remain unspent because there have not been any compliant furnaces introduced into the market. The new consumer rebate program will incentivize the purchase of compliant furnaces, which are expected to be introduced in the near future, in a way that directly reduces costs to the consumer.

Issue RFP

This action is to issue RFP #P2018-05 to solicit bids from the most qualified applicants with experience and expertise in rebate implementation to: (1) assist in the promotion and purchase of compliant furnaces; and (2) receive and process rebate applications submitted by consumers who have purchased and installed natural-gas-fired, fan-type central compliant furnace(s) that are certified by the SCAQMD to meet a 14 ng/J NOx emission limit.

Bid Evaluation
Proposals will be evaluated by a panel consisting of SCAQMD staff members and potentially outside experts who have appropriate expertise and are willing to participate. The panel will make recommendations, and the final selection of projects will be subject to approval by the Board.

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

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

Benefits to SCAQMD
The proposed work will provide the SCAQMD with the resources needed to promote and process consumer rebate applications for Rule 1111 compliant furnaces. The estimated number of rebates could range from 10,000 to 50,000 for the first year. The duration of the program may be two to three years for condensing, non-condensing, and weatherized furnaces, and up to five years for mobile home furnaces, depending on how long the funding lasts.

Resource Impacts
Total available funding for this rebate program is the combination of the following: (1) the previously authorized $3,000,000 in Rule 1111 rebate funding, which remains unspent in the Air Quality Investment Fund (27) Rule 1121 program and (2) the increased portion of the mitigation fee as part of the proposed Rule 1111 amendment to be considered for adoption in February 2018.*

The award under the RFP is anticipated to be on a fixed-percentage cost of the rebates processed and depends on total available rebate funding.

The Air Quality Investment Fund (27), as of October 2017, has a balance of $36,174,802 excluding any Board actions that have not been encumbered.

Attachment
RFP # P2018-05

* The rebate program can be implemented with the $3,000,000 funding independent of the proposed rule amendments.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

REQUEST FOR PROPOSALS

Rebate Administration for Rule 1111 Units, Natural-Gas-Fired, Fan-Type Central Furnaces, with NOx Emissions Certified at or below 14 Nanograms per Joule

P2018-05

South Coast Air Quality Management District (SCAQMD) requests proposals for the following purpose according to terms and conditions attached. In the preparation of this Request for Proposals (RFP) the words "Proposer," "Contractor," "Consultant," “Bidder” and “Firm” are used interchangeably.

PURPOSE

The purpose of this RFP is to obtain proposals from potential contractors with appropriate expertise and capabilities to receive and process rebate applications from consumers purchasing natural-gas-fired, fan-type central furnaces, with NOx emissions certified at or below 14 nanograms per Joule compliant with SCAQMD Rule 1111, beginning on February 2, 2018[1] and ending on the dates listed below.

Equipment Category	Rebate End Date
Condensing (standard) Furnace	March 31, 2020
Non-condensing (high efficiency) Furnace	March 31, 2020
Weatherized Furnace	March 31, 2021
Mobile Home Furnace	March 31, 2023

INDEX - The following are contained in this RFP:

Section I Background/Information
Section II Contact Person
Section III Schedule of Events
Section IV Participation in the Procurement Process
Section V Statement of Work/Schedule of Deliverables
Section VI Required Qualifications
Section VII Proposal Submittal Requirements
Section VIII Proposal Submission
Section IX Proposal Evaluation/Contractor Selection Criteria

[1] There may be a back log of rebate applications due to the time differential between the beginning of the rebate program (February 2, 2018) and the date in which the contractor takes action with the program.

Section X Funding
Section XI Sample Contract

Attachment A - Participation in the Procurement Process
Attachment B - Certifications and Representations

SECTION I: BACKGROUND/INFORMATION

The South Coast Air Quality Management District (SCAQMD or District) is a regional government agency responsible for clean air in Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties. While the region is still exceeding federal public health standards for both ozone and particulate matter (PM), emission reductions, including NOx reduction, is needed to achieve compliance with the ambient air quality standards.

The SCAQMD Rule 1111 reduces emissions of nitrogen oxides (NOx) from residential and commercial gas-fired fan-type residential space heating furnaces with a rated heat input capacity of less than 175,000 BTU per hour or, for combination heating and cooling units, a cooling rate of less than 65,000 BTU per hour. This rule applies to manufacturers, distributors, sellers, and installers of such furnaces.

Rule 1111 was amended in 2009 to lower the NOx emissions from 40 to 14 nanograms per Joule (ng/J) with phased future compliance dates depending on the furnace type. The SCAQMD then initiated technology development projects in 2010 - 2013 to develop prototype residential furnaces that meet the new 14 ng/J NOx limit. The prototype furnaces developed through these four projects demonstrated that the lower Rule 1111 NOx limit is achievable in all of the types of forced air residential heating furnaces. However, additional time was needed to commercialize 14 ng/J furnaces.

Rule 1111 was later amended in 2014 to (1) postpone a compliance date; and (2) provide an alternative compliance option by allowing the original equipment manufacturers (OEMs) to pay a per unit mitigation fee of $200 for each condensing furnace and $150 for each other type of furnace, in lieu of meeting the new lower NOx emission limit, for up to 36 months past the applicable compliance date.

To date, compliant furnaces have not yet been introduced into the market; however, three OEMs have developed and certified products complying with the Rule 1111 NOx 14 ng/J limit with field tests underway. Moreover, one manufacturer has indicated that they will have a compliant product commercially available prior to the 2017 winter season.

Staff conducted analysis, and is proposing amendments to Rule 1111 with Public Hearing scheduled on February 2, 2018 for rule adoption. A key companion to that proposal is to develop a rebate program to consumers of compliant products. The rebate program is expected to not only offset cost for consumers, but also motivate commercialization of compliant products.

The total number of rebates may range from 10,000 to 50,000 consumers who have installed compliant units within the SCAQMD for the first implementation year, and more for the

following years depending on commercialization status and market demand for compliant products. With regards to rebate program administration, staff had discussion with the working group and also with individual OEMs. Based on these discussions, as well as limited staff resources to implement the rebate program, the preferred method is to outsource the rebate administration to a third party contractor who would issue rebate directly to consumers.

SECTION II: CONTACT PERSON:

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

Yanrong Zhu, Air Quality Specialist
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182
(909) 396-3289
yzhu1@aqmd.gov

SECTION III: SCHEDULE OF EVENTS

Date	Event
December 1, 2017	RFP Released
December 19, 2017	Bidder's Conference
January 9, 2018	Proposals Due to SCAQMD - **No Later Than 1:00 pm**
January 10 -12, 2018	Proposal Evaluations
January 11, 2018	Interviews, if required
February 2, 2018	Governing Board Approval
February 16, 2018	Anticipated Contract Execution

Participation in the Bidder's Conference is optional. Such participation would assist in notifying potential Bidders of any updates or amendments. The Bidders Conference will be held at the AQMD Headquarters in Diamond Bar, California at 1:00 p.m. on Tuesday, December 19, 2017 in Conference Room CC3-5. Please contact Yanrong Zhu at yzhu1@aqmd.gov or (909) 396-3289 by close of business on Thursday, December 14, 2017 if you plan to attend in person or via tele-conference.

SECTION IV: PARTICIPATION IN THE PROCUREMENT PROCESS

It is the policy of SCAQMD to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts. Attachment A to this RFP contains definitions and further information.

SECTION V: STATEMENT OF WORK/SCHEDULE OF DELIVERABLES

A. Objective

The objective of the proposed project shall be to (1) receive and process rebate applications submitted by consumers who have purchased and installed natural-gas-fired, fan-type central furnace(s) that are (is) certified by the SCAQMD to meet a 14 ng/J NOx emission limit; and (2) assist in the promotion of compliant products.

B. Statement of Work

The proposed project shall include the following tasks:

1. Develop a plan to promote the program. The outreach may be conducted through distribution of point of purchase material, informational bulletins, written copy of program information to media including television, radio, newspaper and health/environmental advocacy groups, or others, provided that any written outreach information, including camera-ready originals, are submitted to the SCAQMD for approval prior to distribution. SCAQMD resources (i.e., list serves, newsletters, and web site) may also be used, as determined to be appropriate, to help promote the program.
2. Develop forms for use in the SCAQMD reimbursement procedure (Task #5) for the SCAQMD approval prior to program implementation. The forms, at a minimum, must document: (1) the customer was provided a rebate ($500 for the first 6,000 installations and $250 for the remaining installations); (2) the installation occurred within the geographical boundaries of the SCAQMD (check jurisdiction by this link: http://www.aqmd.gov/home/about/jurisdiction); (3) the date of product purchase; (4) the date of product installation; (5) product name/model number and accompanying BTU rating; (6) installation address; (7) a signature from the owner/occupant; and (8) a signature from the owner/occupant.
3. Design a rebate receiving and processing program and implement it to consumers. The implementation is expected to initiate at the time of the contract execution. If an on-line tool is to be developed and launched more than two months after the contract execution, a manual process should be in place prior to the launch of the on-line tool. The implementation, at a minimum, involves (1) receiving applications including sales receipts and any signatures required on the reimbursement forms, (2) verifying or auditing installations, and (3) issuing rebates ($500 for the first 6,000 installations and $250 for the remaining installations).
4. Monitor the volume of applications received and communicate with the SCAQMD to ensure that the applications to be processed will be funded.
5. Bundle the reimbursement forms and sales receipts for submittal to the SCAQMD for reimbursement in groups of at least 50 rebates.
6. Prepare a report every three months that includes a spreadsheet summarizing installations address, zip code, and county. The final report shall also include a discussion on topics about public acceptance of the program as specified and comments/suggestions for future program improvement.

C. Schedule of Deliverables

In addition to any deliverables set forth in the above referenced Specific Tasks, successful bidders, *following contract execution with the SCAQMD*, are expected to adhere to the master schedule included below.

Task Number:	**Task Name**	**Schedule/Deliverable**
1	Program Promotion	Begin preparation of outreach material at the time of contract execution. Submit written outreach materials to the SCAQMD for approval no later than 14 calendar days before distribution. Initial distribution of outreach materials shall occur within six weeks after contract execution.
2	Reimbursement Forms Design	Submit project reimbursement forms to the SCAQMD for approval no later than 14 days after contract execution.
3	Program Design and Implementation	Subsequent to successful completion of Task 2.
4	Application Monitoring	Provide updates within five days of an SCAQMD request.
5	Reimbursement	No sooner than the collection of at least 50 reimbursement forms and the accompanying sales receipts.
6	Report	Every three months with the first report on July 1, 2018; The final report due no later than 45 days following notification by the SCAQMD that all funding has been expended or the rebate end dates, whichever is earlier.

SECTION VI: REQUIRED QUALIFICATIONS

A. The SCAQMD requests submittal of detailed expertise and capabilities from proposers who meet a combination of the technical qualifications listed below. Individuals can team up to submit a joint bid if they have complementary expertise and qualifications that collectively meet the requirements. Statements of qualifications should include evidence documenting experience, expertise, and capabilities wherever possible.

B. Bidder(s) will be selected for contract award based on the best combinations of qualifications. Qualifications that are of importance to this project include expertise and experience in public outreach and rebate administration for household appliances.

SECTION VII: PROPOSAL SUBMITTAL REQUIREMENTS

Submitted proposals must follow the format outlined below and all requested information must be supplied. Failure to submit proposals in the required format will result in elimination from proposal evaluation. SCAQMD may modify the RFP or issue supplementary information or guidelines during the proposal preparation period prior to the due date. Please check our website for updates (http://www.aqmd.gov/grants-bids). The cost for developing the proposal is the responsibility of the Contractor, and shall not be chargeable to SCAQMD.

Each proposal must be submitted in three separate volumes:

- Volume I - Technical Proposal
- Volume II - Cost Proposal
- Volume III - Certifications and Representations included in Attachment B to this RFP, must be completed and executed by an authorized official of the Contractor.

A separate cover letter including the name, address, and telephone number of the contractor, and signed by the person or persons authorized to represent the Firm should accompany the proposal submission. Firm contact information as follows should also be included in the cover letter:

1. Address and telephone number of office in, or nearest to, Diamond Bar, California.
2. Name and title of Firm's representative designated as contact.

A separate Table of Contents should be provided for Volumes I and II.

VOLUME I - TECHNICAL PROPOSAL

DO NOT INCLUDE ANY COST INFORMATION IN THE TECHNICAL VOLUME

Summary (Section A) - State overall approach to meeting the objectives and satisfying the scope of work to be performed, the sequence of activities, and a description of methodology or techniques to be used.

Program Schedule (Section B) - Provide projected milestones or benchmarks for completing the project (to include reports) within the total time allowed.

Project Organization (Section C) - Describe the proposed management structure, program monitoring procedures, and organization of the proposed team. Provide a statement detailing your approach to the project, specifically address the Firm’s ability and willingness to commit and maintain staffing to successfully complete the project on the proposed schedule.

Qualifications (Section D) - Describe the technical capabilities of the Firm. Provide references of other similar studies or projects performed during the last five years demonstrating ability to successfully complete the work. Include contact name, title, and telephone number for any references listed. Provide a statement of your Firm's background and related experience in performing similar services for other governmental organizations.

Assigned Personnel (Section E) - Provide the following information about the staff to be assigned to this project:

1. List all key personnel assigned to the project by level, name and location. Provide a resume or similar statement describing the background, qualifications and experience of the lead person and all persons assigned to the project. Substitution of project manager or lead personnel will not be permitted without prior written approval of SCAQMD.

2. Provide a spreadsheet of the labor hours proposed for each labor category at the task level.

3. Provide a statement indicating whether or not 90% of the work will be performed within the geographical boundaries of SCAQMD.

4. Provide a statement of education and training programs provided to, or required of, the staff identified for participation in the project, particularly with reference to management consulting, governmental practices and procedures, and technical matters.

5. Provide a summary of your Firm's general qualifications to meet required qualifications and fulfill statement of work, including additional Firm personnel and resources beyond those who may be assigned to the project.

Subcontractors (Section F) - This project may require expertise in multiple technical areas. List any subcontractors that will be used, identifying functions to be performed by them, their related qualifications and experience and the total number of hours or percentage of time they will spend on the project.

Conflict of Interest (Section G) - Address possible conflicts of interest with other clients affected by actions performed by the Firm on behalf of SCAQMD. SCAQMD recognizes that prospective Contractors may be performing similar projects for other clients. Include a complete list of such clients for the past three (3) years with the type of work performed and the total number of years performing such tasks for each client. Although the Proposer will not be automatically disqualified by reason of work performed for such clients, SCAQMD reserves the right to consider the nature and extent of such work in evaluating the proposal.

Additional Data (Section H) - Provide other essential data that may assist in the evaluation of this proposal.

VOLUME II - COST PROPOSAL

Name and Address - The Cost Proposal must list the name and complete address of the Proposer in the upper left-hand corner.

Cost Proposal – SCAQMD anticipates awarding a fixed price contract. Cost information must be provided as listed below:

1. Detail must be provided by the following categories:

   A. Labor – The Cost Proposal must list the fully-burdened hourly rates and the total number of hours estimated for each level of professional and administrative staff to be used to perform the tasks required by this RFP. Costs should be estimated for each of the components of the work plan.

   B. Subcontractor Costs - List subcontractor costs and identify subcontractors by name. Itemize subcontractor charges per hour or per day.

C. Travel Costs - Indicate amount of travel cost and basis of estimate to include trip destination, purpose of trip, length of trip, airline fare or mileage expense, per diem costs, lodging and car rental.

D. Other Direct Costs -This category may include such items as postage and mailing expense, printing and reproduction costs, etc. Provide a basis of estimate for these costs.

E. Fixed-Percentage Cost – Not withstanding above categories A, B, C, and D, proposer may provide overall cost on a fixed percentage of the rebate processed.

2. It is the policy of the SCAQMD to receive at least as favorable pricing, warranties, conditions, benefits and terms as other customers or clients making similar purchases or receiving similar services. SCAQMD will give preference, where appropriate, to vendors who certify that they will provide "most favored customer" status to the SCAQMD. To receive preference points, Proposer shall certify that SCAQMD is receiving "most favored customer" pricing in the Business Status Certifications page of Volume III, Attachment B – Certifications and Representations.

VOLUME III - CERTIFICATIONS AND REPRESENTATIONS (see Attachment B to this RFP)

SECTION VIII: PROPOSAL SUBMISSION

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

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

Due Date - **All proposals are due no later than 1:00 p.m., January 9, 2018, and should be directed to**:

Procurement Unit
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178
(909) 396-3520

Submittal - Submit six (6) complete copies of the proposal in a sealed envelope, plainly marked in the upper left-hand corner with the name and address of the Proposer and the words "Request for Proposals P2018-05"

Late bids/proposals will not be accepted under any circumstances.

Grounds for Rejection - A proposal may be immediately rejected if:

- It is not prepared in the format described, or
- It is signed by an individual not authorized to represent the Firm.

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

SECTION IX: PROPOSAL EVALUATION/CONTRACTOR SELECTION CRITERIA

A. Proposals will be evaluated by a panel of three to five SCAQMD staff members familiar with the subject matter of the project. The panel shall be appointed by the Executive Officer or his designee. In addition, the evaluation panel may include such outside public sector or academic community expertise as deemed desirable by the Executive Officer. The panel will make a recommendation to the Executive Officer and/or the Governing Board of SCAQMD for final selection of a contractor and negotiation of a contract.

B. Each member of the evaluation panel shall be accorded equal weight in his or her rating of proposals. The evaluation panel members shall evaluate the proposals according to the specified criteria and numerical weightings set forth below.

1. Proposal Evaluation Criteria

(a) R&D Projects Requiring Technical or Scientific Expertise, or Special Projects Requiring Unique Knowledge or Abilities

Understanding the Problem	20
Technical/Management Approach	20
Contractor Qualifications	20
Previous Experience on Similar Projects	10
Cost	30
TOTAL	100

(b) Additional Points

Small Business or Small Business Joint Venture	10
DVBE or DVBE Joint Venture	10
Use of DVBE or Small Business Subcontractors	7
Low-Emission Vehicle Business	5
Local Business (Non-Federally Funded Projects Only)	5
Off-Peak Hours Delivery Business	2
Most Favored Customer	2

The cumulative points awarded for small business, DVBE, use of small business or DVBE subcontractors, low-emission vehicle business, local business, and off-peak hours delivery business shall not exceed 15 points.

<u>Self-Certification for Additional Points</u>
The award of these additional points shall be contingent upon Proposer completing the Self-Certification section of Attachment B – Certifications and Representations and/or inclusion of a statement in the proposal self-certifying that Proposer qualifies for additional points as detailed above.

2. To receive additional points in the evaluation process for the categories of Small Business or Small Business Joint Venture, DVBE or DVBE Joint Venture or Local Business (for non-federally funded projects), the proposer must submit a self-certification or certification from the State of California Office of Small Business Certification and Resources at the time of proposal submission certifying that the proposer meets the requirements set forth in Section III. To receive points for the use of DVBE and/or Small Business subcontractors, at least 25 percent of the total contract value must be subcontracted to DVBEs and/or Small Businesses. To receive points as a Low-Emission Vehicle Business, the proposer must demonstrate to the Executive Officer, or designee, that supplies and materials delivered to SCAQMD are delivered in vehicles that operate on either clean-fuels or if powered by diesel fuel, that the vehicles have particulate traps installed. To receive points as an Off-Peak Hours Delivery Business, the proposer must submit, at proposal submission, certification of its commitment to delivering supplies and materials to SCAQMD between the hours of 10:00 a.m. and 3:00 p.m. To receive points for Most Favored Customer status, the proposer must submit, at proposal submission, certification of its commitment to provide most favored customer status to the SCAQMD. The cumulative points awarded for small business, DVBE, use of Small Business or DVBE Subcontractors, Local Business, Low-Emission Vehicle Business and Off-Peak Hour Delivery Business shall not exceed 15 points.

   The Procurement Section will be responsible for monitoring compliance of suppliers awarded purchase orders based upon use of low-emission vehicles or off-peak traffic hour delivery commitments through the use of vendor logs which will identify the contractor awarded the incentive. The purchase order shall incorporate terms which obligate the supplier to deliver materials in low-emission vehicles or deliver during off-peak traffic hours. The Receiving department will monitor those qualified supplier deliveries to ensure compliance to the purchase order requirements. Suppliers in non-compliance will be subject to a two percent of total purchase order value penalty. The Procurement Manager will adjudicate any disputes regarding either low-emission vehicle or off-peak hour deliveries.

3. For procurement of Research and Development (R & D) projects or projects requiring technical or scientific expertise or special projects requiring unique knowledge and abilities, technical factors including past experience shall be weighted at 70 points and cost shall be weighted at 30 points. A proposal must receive at least 56 out of 70 points on R & D projects and projects requiring technical or scientific expertise or special projects requiring unique knowledge and abilities, in order to be deemed qualified for award.

4. The lowest cost proposal will be awarded the maximum cost points available and all other cost proposals will receive points on a prorated basis. For example if the lowest cost proposal is $1,000 and the maximum points available are 30 points, this proposal would receive the full 30 points. If the next lowest cost proposal is $1,100 it would receive 27 points reflecting the fact that it is 10% higher than the lowest cost (90% of 30 points = 27 points).

C. During the selection process the evaluation panel may wish to interview some proposers for clarification purposes only. No new material will be permitted at this time. Additional information provided during the bid review process is limited to clarification by the Proposer of information presented in his/her proposal, upon request by SCAQMD.

D. The Executive Officer or Governing Board may award the contract to a Proposer other than the Proposer receiving the highest rating in the event the Governing Board determines that another Proposer from among those technically qualified would provide the best value to SCAQMD considering cost and technical factors. The determination shall be based solely on the Evaluation Criteria contained in the Request for Proposal (RFP), on evidence provided in the proposal and on any other evidence provided during the bid review process.

E. Selection will be made based on the above-described criteria and rating factors. The selection will be made by and is subject to Executive Officer or Governing Board approval. Proposers may be notified of the results by letter.

F. The Governing Board has approved a Bid Protest Procedure which provides a process for a Bidder or prospective Bidder to submit a written protest to SCAQMD Procurement Manager in recognition of two types of protests: Protest Regarding Solicitation and Protest Regarding Award of a Contract. Copies of the Bid Protest Policy can be secured through a request to SCAQMD Procurement Department.

G. The Executive Officer or Governing Board may award contracts to more than one proposer if in (his or their) sole judgment the purposes of the (contract or award) would best be served by selecting multiple proposers.

H. If additional funds become available, the Executive Officer or Governing Board may increase the amount awarded. The Executive Officer or Governing Board may also select additional proposers for a grant or contract if additional funds become available.

I. Disposition of Proposals – Pursuant to SCAQMD's Procurement Policy and Procedure, SCAQMD reserves the right to reject any or all proposals. All proposals become the property of SCAQMD, and are subject to the California Public Records Act. One copy of the proposal shall be retained for SCAQMD files. Additional copies and materials will be returned only if requested and at the proposer's expense.

J. If proposal submittal is for a Public Works project as defined by State of California Labor Code Section 1720, Proposer is required to include Contractor Registration No. in Attachment B. Proposal submittal will be deemed as non-responsive and Bidder may be disqualified if Contractor Registration No. is not included in Attachment B. Proposer is alerted to changes to California Prevailing Wage compliance requirements as defined in Senate Bill 854 (Stat. 2014, Chapter 28), and California Labor Code Sections 1770, 1771 and 1725.

SECTION X: FUNDING

Total available funding for this RFP is the combined amount of the following two parts.

A. Part one funding is a fixed amount of $3,000,000.

B. Part two funding is the Rule 1111 mitigation fee increased portion, as adopted on February 2, 2018.

Mitigation fee, including the increased portion, is paid on an annual basis for any non-compliant unit sold to the SCAQMD that cannot meet 14 ng/J NOx emission limit. The annual sale of furnaces in the region was approximately 150,000. For a total of four furnace categories, which are condensing (high efficiency), non-condensing (standard), weatherized, and mobile house furnaces, non-condensing furnaces occupy about 71% of the market in the SCAQMD. Staff recognizes that the part two funding may not be a fixed amount. However, as an example, estimation for the mitigation fee increase for non-condensing units could be based on: (1) 1.66 years fee increase (first 0.66 year for 60% units and later one year for 30% units), (2) $250 fee increase per unit, and (3) 71 % market. The resulting funding could reach approximately $20,000,000 from this category of furnaces.

To assist bidders in make their own estimation for the part two funding and the scale of project, staff includes the mitigation fee and rebate preliminary information below. Please note that: (1) these preliminary information are subject to change prior to the Board approval on February 2, 2018; (2) currently all the manufacturers are paying mitigation fee for all sales, however, staff expects one or more manufacturers will supply compliant furnaces to the market at the time when mitigation fee increase becomes effective; and (3) Manufacturers are not required to pay mitigation fee for any compliant unit sold in the SCAQMD.

Furnace Category	Market Share	Mitigation Fee Increase ($/Unit)	Mitigation Fee Increase Start Date	Mitigation Fee Increase End Date	Rebate start Date	Rebate End Date[2]	Increase Fee Collection Duration(years)	Rebate Duration (years)
Condensing	15%	200	2/2/2018	9/30/2019	2/16/2018	4/1/2020	1.66	2.12
Non-Condensing	71%	250	2/2/2018	9/30/2019	2/16/2018	4/1/2020	1.66	2.12
Weatherized	10%	250	2/2/2018	9/30/2020	2/16/2018	4/1/2021	2.66	3.12
Mobile house	4%	250	10/1/2018	9/30/2022	2/16/2018	4/1/2023	4.00	5.12

[2] *Rebate payment will be made on a first-come-first-serve base. The rebate end date may be shortened largely depending on how long the funding lasts. If available, alternative sources of funding may be used to lengthen the rebate duration.*

SECTION XI: SAMPLE CONTRACT

A sample contract to carry out the work described in this RFP is available on SCAQMD's website at http://www.aqmd.gov/grants-bids or upon request from the RFP Contact Person (Section II).

ATTACHMENT A

PARTICIPATION IN THE PROCUREMENT PROCESS

A. It is the policy of South Coast Air Quality Management District (SCAQMD) to ensure that all businesses including minority business enterprises, women business enterprises, disabled veteran business enterprises and small businesses have a fair and equitable opportunity to compete for and participate in SCAQMD contracts.

B. Definitions:

The definition of minority, women or disadvantaged business enterprises set forth below is included for purposes of determining compliance with the affirmative steps requirement described in Paragraph G below on procurements funded in whole or in part with federal grant funds which involve the use of subcontractors. The definition provided for disabled veteran business enterprise, local business, small business enterprise, low-emission vehicle business and off-peak hours delivery business are provided for purposes of determining eligibility for point or cost considerations in the evaluation process.

1. "Women business enterprise" (WBE) as used in this policy means a business enterprise that meets all of the following criteria:

   a. a business that 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 or women.

   b. a business whose management and daily business operations are controlled by one or more women.

   c. a business which is a sole proprietorship, corporation, or partnership 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-based business.

2. "Disabled veteran" as used in this policy is a United States military, naval, or air service veteran with at least 10 percent service-connected disability who is a resident of California.

3. "Disabled veteran business enterprise" (DVBE) as used in this policy means a business enterprise that meets all of the following criteria:

   a. is a sole proprietorship or partnership of which at least 51 percent is owned by one or more disabled veterans or, in the case of a publicly owned business, at least 51 percent of its 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.

   b. 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.

ATTACHMENT A

PARTICIPATION IN THE PROCUREMENT PROCESS

c. is a sole proprietorship, corporation, or partnership with its primary headquarters office located in the United States, which is not a branch or subsidiary of a foreign corporation, firm, or other foreign-based business.

4. "Local business" as used in this policy means a company that has an ongoing business within geographical boundaries of SCAQMD at the time of bid or proposal submittal and performs 90% of the work related to the contract within the geographical boundaries of SCAQMD and satisfies the requirements of subparagraph H below.

5. “Small business” as used in this policy 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 and 339000, inclusive, of the North American Industrial Classification System (NAICS) Manual published by the United States Office of Management and Budget, 2007 edition.

6. "Joint ventures" as defined in this policy pertaining to certification means that one party to the joint venture is a DVBE or small business and owns at least 51 percent of the joint venture.

7. "Low-Emission Vehicle Business" as used in this policy means a company or contractor that uses low-emission vehicles in conducting deliveries to SCAQMD. Low-emission vehicles include vehicles powered by electric, compressed natural gas (CNG), liquefied natural gas (LNG), liquefied petroleum gas (LPG), ethanol, methanol, hydrogen and diesel retrofitted with particulate matter (PM) traps.

8. “Off-Peak Hours Delivery Business” as used in this policy means a company or contractor that commits to conducting deliveries to SCAQMD during off-peak traffic hours defined as between 10:00 a.m. and 3:00 p.m.

ATTACHMENT A

PARTICIPATION IN THE PROCUREMENT PROCESS

9. “Benefits Incentive Business” as used in this policy means a company or contractor that provides janitorial, security guard or landscaping services to SCAQMD and commits to providing employee health benefits (as defined below in Section VIII.D.2.d) for full time workers with affordable deductible and co-payment terms.

10. “Minority Business Enterprise” as used in this policy means a business that is at least 51 percent owned by one or more minority person(s), 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 or minority persons.

    a. a business whose management and daily business operations are controlled by one or more minority persons.

    b. a business which is a sole proprietorship, corporation, or partnership 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-based business.

    c. "Minority person" for purposes of this policy, means a Black American, Hispanic American, Native-American (including American Indian, Eskimo, Aleut, and Native Hawaiian), Asian-Indian (including a person whose origins are from India, Pakistan, and 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, and Taiwan).

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

12. ”Disadvantaged Business Enterprise” as used in this policy means a business that is an entity owned and/or controlled by a socially and economically disadvantaged individual(s) as described by Title X of the Clean Air Act Amendments of 1990 (42 U.S.C. 7601 note) (10% statute), and Public Law 102-389 (42 U.S.C. 4370d)(8% statute), respectively;
    a Small Business Enterprise (SBE);
    a Small Business in a Rural Area (SBRA);
    a Labor Surplus Area Firm (LSAF); or
    a Historically Underutilized Business (HUB) Zone Small Business Concern, or a concern under a successor program.

C. Under Request for Quotations (RFQ), DVBEs, DVBE business joint ventures, small businesses, and small business joint ventures shall be granted a preference in an amount equal to 5% of the lowest cost responsive bid. Low-Emission Vehicle Businesses shall be granted a preference in an amount equal to 5 percent of the lowest cost responsive bid. Off-Peak Hours Delivery Businesses shall be granted a preference in an amount equal to 2 percent of the lowest cost responsive bid. Local businesses (if the procurement is not

funded in whole or in part by federal grant funds) shall be granted a preference in an amount equal to 2% of the lowest cost responsive bid. Businesses offering Most Favored Customer status shall be granted a preference in an amount equal to 2 percent of the lowest cost responsive bid.

D. Under Request for Proposals, DVBEs, DVBE joint ventures, small businesses, and small business joint ventures shall be awarded ten (10) points in the evaluation process. A non-DVBE or large business shall receive seven (7) points for subcontracting at least twenty-five (25%) of the total contract value to a DVBE and/or small business. Low-Emission Vehicle Businesses shall be awarded five (5) points in the evaluation process. On procurements which are not funded in whole or in part by federal grant funds local businesses shall receive five (5) points. Off-Peak Hours Delivery Businesses shall be awarded two (2) points in the evaluation process. Businesses offering Most Favored Customer status shall be awarded two (2) points in the evaluation process.

E. SCAQMD will ensure that discrimination in the award and performance of contracts does not occur on the basis of race, color, sex, national origin, marital status, sexual preference, creed, ancestry, medical condition, or retaliation for having filed a discrimination complaint in the performance of SCAQMD contractual obligations.

F. SCAQMD requires Contractor to be in compliance with all state and federal laws and regulations with respect to its employees throughout the term of any awarded contract, including state minimum wage laws and OSHA requirements.

G. When contracts are funded in whole or in part by federal funds, and if subcontracts are to be let, the Contractor must comply with the following, evidencing a good faith effort to solicit disadvantaged businesses. Contractor shall submit a certification signed by an authorized official affirming its status as a MBE or WBE, as applicable, at the time of contract execution. SCAQMD reserves the right to request documentation demonstrating compliance with the following good faith efforts prior to contract execution.

1. Ensure Disadvantaged Business Enterprises (DBEs) are made aware of contracting opportunities to the fullest extent practicable through outreach and recruitment activities. For Indian Tribal, State and Local Government recipients, this will include placing DBEs on solicitation lists and soliciting them whenever they are potential sources.

2. Make information on forthcoming opportunities available to DBEs and arrange time frames for contracts and establish delivery schedules, where the requirements permit, in a way that encourages and facilitates participation by DBEs in the competitive process. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 30 calendar days before the bid or proposal closing date.

3. Consider in the contracting process whether firms competing for large contracts could subcontract with DBEs. For Indian Tribal, State and Local Government recipients, this will include dividing total requirements when economically feasible into smaller tasks or quantities to permit maximum participation by DBEs in the competitive process.

ATTACHMENT A

PARTICIPATION IN THE PROCUREMENT PROCESS

4. Encourage contracting with a consortium of DBEs when a contract is too large for one of these firms to handle individually.

5. Using the services and assistance of the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

6. If the prime contractor awards subcontracts, require the prime contractor to take the above steps.

H. To the extent that any conflict exists between this policy and any requirements imposed by federal and state law relating to participation in a contract by a certified MBE/WBE/DVBE as a condition of receipt of federal or state funds, the federal or state requirements shall prevail.

I. When contracts are not funded in whole or in part by federal grant funds, a local business preference will be awarded. For such contracts that involve the purchase of commercial off-the-shelf products, local business preference will be given to suppliers or distributors of commercial off-the-shelf products who maintain an ongoing business within the geographical boundaries of SCAQMD. However, if the subject matter of the RFP or RFQ calls for the fabrication or manufacture of custom products, only companies performing 90% of the manufacturing or fabrication effort within the geographical boundaries of SCAQMD shall be entitled to the local business preference.

J. In compliance with federal fair share requirements set forth in 40 CFR Part 33, SCAQMD shall establish a fair share goal annually for expenditures with federal funds covered by its procurement policy.

ATTACHMENT B

South Coast Air Quality Management District

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

Business Information Request

Dear SCAQMD Contractor/Supplier:

South Coast Air Quality Management District (SCAQMD) 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,

Michael B. O'Kelly
Chief Administrative Officer

DH:tm

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

REV 2/17

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

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

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

Check all that apply:

☐ 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 SCAQMD at the time of bid application.
- performs 90 percent of the work within SCAQMD's jurisdiction.

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

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

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

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

a. 1) an independently owned and operated business; 2) not dominant in its field of operation; 3) together with affiliates is either:

- **A service, construction, or non-manufacturer with 100 or fewer employees, and average annual gross receipts of ten million dollars ($10,000,000) or less over the previous three years, or**
- A manufacturer with 100 or fewer employees.

b. Manufacturer means a business that is both of the following:

1) Primarily engaged in the chemical or mechanical transformation of raw materials or processed substances into new products.

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

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

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

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

Most Favored Customer as used in this policy means that the SCAQMD 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. December 2014)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

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

Print or type
See **Specific Instructions** on page 2.

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

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

3 Check appropriate box for federal tax classification; check only **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. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.
☐ 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.)

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 Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

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 on page 3.

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

General Instructions

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

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

Purpose of Form

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

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

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

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

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

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

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

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

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

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

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

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

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

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

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

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

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

Backup Withholding

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

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

Payments you receive will be subject to backup withholding if:

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

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

Also see *Special rules for partnerships* above.

What is FATCA reporting?

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

Updating Your Information

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

Penalties

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

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

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

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

Specific Instructions

Line 1

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

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

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

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

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

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

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

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

Line 2

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

Line 3

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

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

Line 4, Exemptions

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

Exempt payee code.

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

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

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

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

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

4—A foreign government or any of its political subdivisions, agencies, or instrumentalities

5—A corporation

6—A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

7—A futures commission merchant registered with the Commodity Futures Trading Commission

8—A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10—A common trust fund operated by a bank under section 584(a)

11—A financial institution

12—A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

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

IF the payment is for . . .	THEN the payment is exempt for . . .
Interest and dividend payments	All exempt payees except for 7
Broker transactions	Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4
Payments over $600 required to be reported and direct sales over $5,000[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.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

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

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

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

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

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security Card, from your local SSA office or get this form online at *www.ssa.gov*. 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. You can get Forms W-7 and SS-4 from the IRS by visiting IRS.gov or by calling 1-800-TAX-FORM (1-800-829-3676).

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

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

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

Part II. Certification

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

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

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

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

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

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

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

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

What Name and Number To Give the Requester

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

[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* on page 2.

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

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

Secure Your Tax Records from Identity Theft

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

To reduce your risk:

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

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

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

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

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

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

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

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@irs.gov*. 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 contact them at *www.ftc.gov/idtheft* or 1-877-IDTHEFT (1-877-438-4338).

Visit IRS.gov to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

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

TAXABLE YEAR

CALIFORNIA FORM

2017 Withholding Exemption Certificate 590

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

Withholding Agent Information

Name

Payee Information

Name

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

Address (apt./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** and search for **privacy notice**. To request this notice by mail, call 800.852.5711.

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

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

Payee's signature ▶ _____ Date _____

7061173

Form 590 C2 2016

2017 Instructions for Form 590

Withholding Exemption Certificate

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

General Information

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

A Purpose

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

Form 590 does not apply to payments of backup withholding. For more information, go to **ftb.ca.gov** 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 (SCAQMD) Board Members or members/alternates of the MSRC, including: the name of the party making the contribution (which includes any parent, subsidiary or otherwise related business entity, as defined below), the amount of the contribution, and the date the contribution was made. 2 C.C.R. §18438.8(b).

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

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

The list of current SCAQMD Governing Board Members can be found at SCAQMD 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

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 (SCAQMD) 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 SCAQMD 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 SCAQMD for distribution. This will delay my payment.
2. This authorization remains in effect until SCAQMD receives written notification of changes or cancellation from you.
3. I hereby release and hold harmless SCAQMD 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 SCAQMD Use Only Input By _____ Date _____

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 5

PROPOSAL: Execute Contract to Develop Thermal Management Strategy Using Cylinder Deactivation for Heavy-Duty Diesel Engines

SYNOPSIS: West Virginia University, Jacobs Vehicle Systems, Inc., and Cummins Inc. propose a collaborative effort to evaluate integration of cylinder deactivation hardware in a heavy-duty 15-liter diesel engine to create better thermal management. The proposed study aims to develop a strategy to decrease fuel consumption and reduce NOx at low-load conditions to achieve 0.02 g/bhp-hr NOx over the duty cycle of a heavy-duty diesel engine. This action is to execute a contract with West Virginia University-Center for Alternative Fuels Engines and Emissions to develop a thermal management strategy using cylinder deactivation for heavy-duty diesel engines in an amount not to exceed $250,000 from the Clean Fuels Fund (31).

COMMITTEE: Technology, November 17, 2017; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Chairman to execute a contract with West Virginia University-Center for Alternative Fuels Engines and Emissions to develop a thermal management strategy using cylinder deactivation for heavy-duty diesel engines in an amount not to exceed $250,000 from the Clean Fuels Fund (31).

Wayne Nastri
Executive Officer

MMM:FM:NB:JL

Background
Diesel vehicles are currently one of the largest sources of NOx emissions, which are precursors to ozone formation, in the South Coast Air Basin. The high power efficiency of diesel trucks makes them a popular option among owners. Operations of heavy-duty trucks are plagued by higher NOx emissions typically due to high vehicle traffic density in the basin. In February 2017, the Board approved a project with CARB and

Southwest Research Institute to develop near-zero NOx control strategies and aftertreatment systems specific to the high levels of emissions at low loads and cold starts in a heavy-duty diesel engine. As an optional approach to decrease NOx emissions, without potential complexities associated with aftertreatment systems, cylinder deactivation in a heavy-duty diesel engine may have the potential to promote better thermal management.

Proposal

The project is intended to develop a control strategy using technology developed by Jacobs Vehicle Systems, Inc., (JVS) and Cummins Inc. to disable valve motion and control software in a Cummins 15-liter diesel engine. The study will be aimed at controlling the exhaust temperature over the standard Federal Test Procedure (FTP) on a dynamometer representative of real-world use prevalent in the air basin. Using low-fuel penalty thermal management strategy, a 90 % decrease in NOx can occur during the low-load part of the FTP drive cycle. The program will ultimately conclude with the engine being integrated into an on-road heavy-duty chassis and dynamometer tested over select driving cycles similar to port drayage operations to fully validate its performance and viability.

This action is to execute a contract with the West Virginia University-Center for Alternative Fuels Engines and Emissions (WVU-CAFEE) in a collaborative effort with JVS and Cummins Inc. to develop thermal management strategies using cylinder deactivation on a 15-liter diesel engine in order to achieve near-zero NOx with less fuel consumption.

Sole Source Justification

Section VIII.B.2. of the Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. The request for sole source awards for this project is made under the provisions B.2.d.(1): Projects involving cost-sharing by multiple sponsors; and B.2.d(8): Research and development efforts with educational institutions or nonprofit organizations. The West Virginia University-Center for Alternative Fuels Engines and Emissions will conduct this project, which is cost-shared by U.S. EPA, Cummins Inc., JVS, and Environment Canada.

Benefits to SCAQMD

This project is included in the *Technology Advancement Office Clean Fuels Program 2017 Plan Update* under the category “Engine Systems”. This project is to develop and demonstrate near-zero emission heavy-duty, liquid-fueled engines suitable for Class 8 trucks. Successful demonstration of such projects will contribute to the attainment of clean air standards in the South Coast Air Basin by significantly reducing NOx emissions from replaced diesel trucks. Development of a cylinder deactivation strategy is anticipated to lower NOx emissions and fuel consumption from the heavy-duty diesel engine.

Resource Impacts
The proposed project budget is $700,000, which includes an in-kind contribution from JVS and Cummins Inc. The remaining funding is an anticipated $100,000 from Environment Canada and $250,000 from the U.S. EPA. The SCAQMD's cost-share will not exceed $250,000 from the Clean Fuels Fund (31). The total cost-share for the proposed project is summarized below:

Proposed Project Cost-Share

Funding Source	Funding Amount	% of Project
Environment Canada	$100,000	14
U.S. EPA	$250,000	36
JVS (in-kind)	$50,000	7
Cummins Inc. (in-kind)	$50,000	7
SCAQMD *(requested)*	$250,000	36
Total	**$700,000**	**100**

Sufficient funds are available from the Clean Fuels 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.

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 6

PROPOSAL: Execute Contract to Develop and Demonstrate Near-Zero Emission Opposed Piston Engine

SYNOPSIS: CALSTART, Inc., and Achates Power, Inc., have been awarded $7 million to develop and demonstrate emission opposed piston (OP) engine technology in Class 8 heavy-duty, line-haul trucks that meet a 0.02 g/bhp-hr NOx target, with concurrent reductions in CO2 emissions. The project was awarded under CARB's Low Carbon Transportation Greenhouse Gas (GHG) Reduction Fund Investments, with total project costs estimated at $15.55 million. The trucks will provide revenue service on regional long haul routes within California. Staff proposes to cost-share this project. This action is to execute a contract with CALSTART, Inc., to develop and demonstrate near-zero emission OP engines in an amount not to exceed $1 million from the Clean Fuels Fund (31).

COMMITTEE: Technology, November 17, 2017; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Chairman to execute a contract with CALSTART, Inc., to develop and demonstrate near-zero emission OP engines in an amount not to exceed $1 million from the Clean Fuels Fund (31).

Wayne Nastri
Executive Officer

MMM:FM:NB

Background
In May 2017, CARB issued a grant solicitation under the Fiscal Year 2016-17 Low Carbon Transportation and Fuels Investments and the Air Quality Improvement Programs for On-Road Advanced Technology Demonstrations. In August 2017, CALSTART, with technology provider Achates Power, Inc., (API), submitted a proposal to develop four and demonstrate two opposed piston (OP) engine equipped heavy-duty on-road trucks.

API, whose headquarters is located in San Diego, is leading the effort to modernize and commercialize opposed piston (OP) engines. The company supports original equipment manufacturer (OEM) development and commercialization of OP engines via engineering services and technology licenses and has ten global OEMs among its customers. The first OP engine with technology licensed from API is planned for market release in 2018 for stationary power applications. In addition, API is currently partnered with Cummins to develop a 1,000 horsepower advanced combat engine for the U.S. Army. The OP engines have previously been used in marine, military, stationary and other applications, and OP engines are on the cusp of commercialization in Class 8 line haul trucks. In addition to the efficiency advantages, OP engines have significant advantages in reducing criteria emissions, in part by addressing critical engine cold-start conditions. The unique rapid catalyst light-off capability of the OP engine uses high internal exhaust gas recirculation (EGR) to minimize NOx while elevating exhaust gas temperatures to accelerate catalyst activity during cold-start and low-load engine operation.

On October 19, 2017, CARB notified CALSTART that their project proposal had been selected for a grant award in the amount of $7 million, with the remaining $8.55 million in cost-share to be provided by project partners, which currently include API, Peterbilt Motors Company, Wal-Mart Logistics, LLC, (Walmart), Tyson Foods, Inc., San Joaquin Valley Air Pollution Control District and Sacramento Metropolitan AQMD. Staff proposes to cost-share this project to provide the remaining project funding needed. The project is intended to accelerate the adoption and commercial deployment of near-zero heavy-duty emission technologies by developing and deploying OP technology for long haul truck applications. This will be the first demonstration in the U.S. of a high-efficiency and low-NOx engine powertrain vehicle in Class 7-8 applications.

Proposal

The OP-engine Class 8 demonstration will deploy and validate engine design that will meet the near-zero NOx requirement (0.02 g/bhp-hr), while simultaneously providing a 15-20 percent increase in fuel efficiency compared to 2017 EPA requirements. Specifically, API will develop four 10.6-liter OP engines including aftertreatment systems and install two of the four engines into Class 8 trucks with Peterbilt, a subsidiary of Paccar, an American manufacturer of medium- and heavy-duty commercial vehicles. Peterbilt will secure tractors, perform integration services and support, and perform vehicle calibration and testing. Subsequently, the trucks will be placed into revenue service for a minimum of three months with Walmart and Tyson Foods in regional long haul routes, including disadvantaged communities, located in the jurisdictions of the Sacramento Metropolitan, San Joaquin Valley, San Diego and South Coast air districts. The demonstration will include the use of renewable diesel. The other two engines to be developed by API will be used for testing.

The overall goal of the project is to realize near- and long-term certification and commercialization goals and establish higher efficiency, near-zero emission, liquid-fueled engines as an industry standard. CALSTART, which will administer and provide oversight for this project, has previously worked with numerous manufacturers and fleets engaged in publicly funded programs to develop and deploy near-zero and zero emission heavy-duty vehicles. This action is to execute a contract with CALSTART, Inc., to develop and demonstrate near-zero emission OP engines.

Sole Source Justification

Section VIII.B.2. of the Procurement Policy and Procedure identifies provisions under which a sole source award may be justified. The request for a sole source award for this project is made under the provisions B.2.c.(1): The unique experience and capabilities of the proposed contractor or contractor team; B.2.c.(2): The project involves the use of proprietary technology; and B.2.d.(1): Projects involving cost-sharing by multiple sponsors. CALSTART has extensive experience in administering such projects, and API has extensive knowledge and experience in advanced OP engine technology needed to successfully complete this project and will utilize their proprietary technologies for this project. This demonstration project will be cost-shared by CARB and the other project partners, as described further in Resource Impacts.

Benefits to SCAQMD

Projects to support development and demonstration of various electric and near-zero emission container transport technologies are included in the *Technology Advancement Office Clean Fuels Program 2017 Plan Update* under the category Engine Systems. This project is to develop and demonstrate near-zero emission heavy-duty, liquid-fueled engines suitable for Class 8 trucks. Successful demonstration of such projects will contribute to the attainment of clean air standards in the South Coast Air Basin by significantly reducing NOx emissions from replaced diesel trucks.

Resource Impacts

The SCAQMD's cost-share will not exceed $1 million from the Clean Fuels Fund (31). The estimated total project cost is $15.55 million, as follows:

Proposed Project Cost-Share by Partner

Project Partner	Funding Amount (in millions)	Percent of Project
CARB	$7.0	45.0
Achates Power, Inc.	$6.55	42.0
San Joaquin APCD	$1.0	6.5
SCAQMD *(requested)*	$1.0	6.5
Total	**$15.55**	**100.0**

Sufficient funds are available from the Clean Fuels 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.

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 7

PROPOSAL: Amend Contract for Tier 4 Passenger Locomotives

SYNOPSIS: Under the "Year 16" Carl Moyer Program Announcement released on March 7, 2014, the Southern California Regional Rail Authority (SCRRA) submitted a proposal requesting $58.85 million to cofund the replacement of 17 and the purchase of 3 new Tier 4 locomotives. On September 4, 2015, the Board awarded $22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining $36 million over four phases. The first addition of $9 million was approved by the Board on December 2, 2016. The SCAQMD's cost-share of this $129 million project is only for the replacement component of the project. This action is to amend SCRRA's contract, adding an additional $9 million for a revised total of $40.85 million from the Carl Moyer Program AB 923 Fund (80). The remaining $18 million requested by SCRRA will be considered over two phases in future Board requests.

COMMITTEE: Technology, October 20, 2017; Recommended for Approval

RECOMMENDED ACTION:
Authorize the Chairman to amend a contract with SCRRA, adding an additional $9 million to the previous $31.85 million award for a total of $40.85 million from the Carl Moyer Program AB 923 Fund (80), while noting the remaining $18 million of the requested funds, as set aside by the Board, will be considered over two phases in future Board requests.

Wayne Nastri
Executive Officer

MMM:FM:VAW:MW

Background
At the February 1, 2013 and February 7, 2014 Board meetings, the Board approved awards to SCRRA in the amount of $52 million for the replacement of 20 passenger locomotives with Tier 4 locomotives over a four-year period. Subsequently, under the "Year 16" Carl Moyer Program solicitation, SCRRA submitted a new proposal requesting $58.85 million for the replacement of an additional 17 and the purchase of 3

new Tier 4 passenger locomotives. For that proposal, on September 4, 2015, the Board approved $22.85 million to SCRRA from the Carl Moyer Program AB 923 Fund (80), with a commitment to consider the remaining $36 million over four phases. The first addition of $9 million was approved by the Board on December 2, 2016.

Proposal

This action is to amend a contract with SCRRA, adding an additional $9 million to the previous $31.85 million award for a total of $40.85 million from the Carl Moyer Program AB 923 Fund (80). The remaining $18 million of the requested funds, as set aside by the Board, will be considered over two phases in future Board requests.

The total project cost of $129 million is cost-shared by Caltrans and Metrolink member agencies with 31.9 percent and 22.5 percent, respectively. In compliance with the Carl Moyer Program requirements, the SCAQMD funds will be used only to fund 11 replacement locomotives because they cannot be comingled with Caltrans funds. However, SCAQMD's participation will be contingent upon implementation of all 20 locomotives.

The SCRRA application was evaluated according to CARB's Carl Moyer Program Guidelines, and the requested funding amount is within the cost-effectiveness limit of the Program. In addition, based on the location of the rail tracks, 53 percent of the locomotive operations will be in disproportionately impacted areas, as defined under SCAQMD's Carl Moyer Program criteria.

Benefits to SCAQMD

The replacement of older diesel locomotives with new Tier 4 locomotives will help the South Coast Air Basin meet federal air quality standards. The procurement of Tier 4 locomotives has been identified in the recent U.S. EPA-approved 2007 8-hour Ozone SIP for the South Coast Air Basin. In addition, since SCRRA locomotives travel throughout the South Coast Air Basin, the cleaner Tier 4 locomotives will result in reduced exposure to diesel particulate emissions. Emissions reductions from NOx, PM and ROG from each locomotive will be approximately 12.3 tons per year, 0.33 ton per year and 1.0 ton per year, respectively.

Resource Impacts

The additional funding award for SCRRA's locomotive project shall not exceed $9 million for a total of $40.85 million from the Carl Moyer Program AB 923 Fund (80). The remaining $18 million of the SCRRA-requested funding will be considered over two phases in future Board requests.

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 27

REPORT: Stationary Source Committee

SYNOPSIS: The Stationary Source Committee held a meeting on Friday, November 17, 2017. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Ben Benoit, Chair
Stationary Source Committee

LT:eb

Committee Members

Present**:** Mayor Pro Tem Ben Benoit/Chair, Dr. Joseph Lyou/Vice Chair, Supervisor Sheila Kuehl, Council Member Judith Mitchell, Supervisor Janice Rutherford (videoconference)

Absent: Supervisor Shawn Nelson

Call to Order

Chair Benoit called the meeting to order at 10:30 a.m.

ACTION ITEM:

1. **Utilize Rule 1111 Rebate Fund and Issue RFP for Administration and Promotion of Consumer Rebate Program for Compliant Natural Gas-Fired, Fan-Type Central Furnaces**

   Tracy Goss, Planning and Rules Manager, presented a summary of Rule 1111 background, implementation status, and a rebate program for consumers that staff is developing as a companion with current efforts to amend the rule. The presentation focused on releasing a Request for Proposals to use a third-party contractor to administer a consumer rebate program to incentivize commercialization and use of Rule 1111 compliant furnaces.

   Dr. Lyou asked about the $500 rebate and staff responded that the rebate is meant to offset the incremental difference in the price of the cost of the compliant product for the consumer. Supervisor Kuehl asked about rebate program outreach and suggested

a Google keyword search to direct potential consumers to the SCAQMD webpage for this program information. SCAQMD staff added that the third-party contract includes outreach for the rebate program. Council Member Mitchell asked for price information for compliant and non-compliant products. Staff responded that the differential is about $500 based on input from manufacturers. Dr. Lyou wondered if there were ways to track sales in real time. Staff explained that the current mitigation fee compliance plan provides sales information, but not in real time; it is possible that the third-party contractor for the rebate program can also track sales information in a more real-time fashion.

Mr. Dave Winningham of Lennox Industries Inc. commented that Lennox supports the rebate program. Mr. Rusty Tharp of Goodman Manufacturing commented that: (1) Goodman supports the third-party administration; and (2) higher efficiency (non-condensing) units which have lower emissions and are more fuel efficient should have a higher rebate value. Dr. Lyou asked staff to consider further incentivizing compliant high-efficiency products.

Moved by Lyou; seconded by Kuehl; unanimously approved.

Ayes: Benoit, Kuehl, Lyou, Mitchell, Rutherford
Noes: None
Absent: Nelson

INFORMATIONAL ITEMS:

2. **Proposed Amendments to Rule 1111 – Reduction of NOx Emissions from Natural-Gas-Fired, Fan-Type Central Furnaces**
Tracy Goss, Planning and Rules Manager, presented a summary of Rule 1111 background, implementation status, proposed amendments, and key comments from stakeholders. Dr. Lyou expressed concern about consumer choice and creating a business monopoly when there was only one manufacturer that has compliant products available, and also about the higher mitigation fee being passed on to consumers. Staff explained that the rebate is an incentive to OEMs to commercialize compliant products and for the consumers to purchase the compliant products. Dr. Lyou asked for the emission impact from the proposal. Staff responded that t a CEQA document is being prepared, as the delay in emission reductions will be a significant impact.

Mr. Daniel McGivney of Southern California Gas Company commented that the mitigation fee increase should not be applied uniformly across the board. Council Member Mitchell asked staff's opinion, and understood the challenge of defining commercial availability and the administrative burden with different effective dates. Supervisor Kuehl mentioned that the effective date of the fee increase could be set

after the commercially available date (i.e., 60 days). Council Member Mitchell instructed staff to bring an update to the committee at its next meeting relative to the final staff proposal for the rule amendment.

Mr. Dave Winningham of Lennox Industries Inc. distributed handouts to the committee, (which were copied and made available to the public), and commented that Lennox supported the proposed rule changes and rebate program. Mr. Winningham stated that Lennox will provide a full portfolio of compliant products to meet the market demand by proposed compliance dates for all types of furnaces. He also noted that Lennox unveiled their compliant product on November 2, 2017 at a local trade show in Pasadena, began dealer training, and will initiate CEC and DOE certifications in a few days to begin official sales of their compliant products. To respond to Council Member Mitchell's question if sufficient products would be available for the market, Mr. Winningham stated that their production capacity will meet the demand.

Mr. Rusty Tharp of Goodman Manufacturing commented that Goodman opposed the February 2018 effective date for the mitigation fee increase as the instantaneous change may interrupt business plans for jobs that have already been contracted such as housing development projects which have a long lead time, and requested a delay in the new mitigation fees of at least 8 months after the date of the proposed rule amendment. Mr. Tharp also commented that the proposed mitigation fee would cause a substantial price increase for certain products which is punitive to industries. The current fee is sufficient to mitigate emissions and should only be set for this purpose as he believes that there is not sufficient justification for the fee increase. Mayor Pro Tem Benoit commented that the fee increase to smaller units could be significant.

Mark Woodruff of Ingersoll Rand commented that any change in the fee should be implemented only after the 3-year period for the mitigation fee option currently specified in the rule has expired, to allow manufacturers to develop compliant units within the existing mitigation fee structure. Staff expressed that these comments, relative to the implementation date of the mitigation fee increase, are under consideration and that staff will continue to meet with stakeholders.

3. **Summary of Proposed Amended Rule 2001 – RECLAIM Applicability and Proposed Amended Rule 2002 – Allocations for Oxides of Nitrogen (NOx) and Oxides of Sulfur**

Mr. Goss provided a summary of proposed amendments to RECLAIM Rules 2001 and 2002 to prohibit facilities from entering NOx and SOx RECLAIM and to establish requirements for use of RECLAIM Trading Credits (RTCs) as facilities transition out of NOx RECLAIM to a command and control regulatory structure.

Council Member Mitchell inquired about the meaning of full implementation of AB 617 as it pertains to BARCT for NOx and SOx. Executive Officer Wayne Nastri

and Dr. Philip Fine, Deputy Executive Officer/Planning, Rule Development and Area Sources, replied that the implementation schedules must be established by January 1, 2019, so several rules would require amendments in 2018. Dr. Fine added that full implementation of BARCT would be realized by December 31, 2023 and that NOx BARCT would be addressed first, with SOx at a later date. Council member Mitchell also asked if RTCs have a value today. Susan Nakamura, Assistant Deputy Executive Officer/Planning, Rule Development and Area Sources, responded by stating that once the final determination is made by the Executive Officer that a RECLAIM facility is ready to exit the program, that facility's RTCs will be removed from the program. In addition, she stated that staff is considering freezing the future RTC holdings at the time of the initial notification by the Executive Officer, and confirmed that trading will essentially end for future year RTCs amongst RECLAIM facilities as the entire program is transitioned to a command and control regulatory structure. Mr. Goss added that the BARCT rulemaking would target the largest pieces of equipment first. Council Member Mitchell followed with another question regarding if there would be implementation schedules established for all RECLAIM facilities. Ms. Nakamura responded that staff is proposing the development of a transition rule for RECLAIM (Proposed Rule 1100) which would establish implementation schedules for all equipment. This rule would be presented to the Board multiple times throughout the transition with implementation schedules for both equipment and industry-specific categories. Council Member Mitchell followed up by asking if there would be any technology assessments conducted. Ms. Nakamura responded by saying that some specific industry categories, such as large metal melting equipment, would require technology assessments. Dr. Fine added that there would be some technology assessments conducted, similar to what was done for the 2015 RECLAIM amendments.

Curtis Coleman (Southern California Air Quality Alliance) expressed a concern for RTCs which would be frozen that belong to facilities under common ownership. He would like for these facilities to have an opportunity to transfer these RTCs from a notified facility to other facilities that are still in the RECLAIM program to cover their emissions for compliance. William Pearce representing Boeing also requested flexibility for transferring RTCs between RECLAIM facilities that are under common ownership. Council Member Mitchell concluded by requesting that SCAQMD staff work with the RECLAIM stakeholders.

4. **Summary of Proposed Amended Rule 1469 – Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations**
Ms. Nakamura presented staff's proposal for PAR 1469. PAR 1469 establishes requirements for chromium electroplating and chromic acid anodizing facilities. Proposed amendments will reduce hexavalent chromium emissions from tanks that are currently not regulated, require periodic source testing, building enclosures, periodic measurement of monitoring devices, revised best management practices,

and enhanced housekeeping measures. Council Member Mitchell requested clarification of air sparging. Ms. Nakamura explained that it was a mixing process that uses air and causes air bubbles at the surface which can lead to hexavalent chromium emissions.

Council Member Mitchell asked for the cost of ambient monitors and how much each individual source test would cost. Ms. Nakamura explained that the cost is based on the frequency and the number of samples to be analyzed. Previously PAR 1469 had an element of ambient monitoring, however, ambient monitoring would be addressed during the development of Proposed Rule 1480. Supervisor Kuehl expressed doubts that a small business could control all the hexavalent chromium emissions. She stated that the European Union has required facilities to switch to non-toxic trivalent chromium. She asked for clarification that existing chromic anodizing facilities could comply by meeting the emission standard or by using a certified fume suppressant. Ms. Nakamura explained the existing Rule 1469 establishes emission standards that are based on annual ampere hours and the proximity to a sensitive receptor.

Supervisor Kuehl asked if CARB certified fume suppressants. Ms. Nakamura commented that SCAQMD worked with CARB to certify fume suppressants. Supervisor Kuehl expressed concern that fume suppressants could also be toxic. Dr. Lyou supported Supervisor Kuehl's concern regarding the toxicity of the fume suppressant. Ms. Nakamura commented that CARB sends the product information to OEHHA who evaluates the toxicity. Dr. Lyou requested a copy of OEHHA toxicity assessments and expressed concern about exposing the public to a material that may be toxic.

Supervisor Kuehl questioned if the requirement to do operations in an enclosure only occurs as a result of non-compliance. Ms. Nakamura responded that operations are required to be conducted in a building. A facility would be required to operate in a permanent total enclosure, which is a building under negative air pressure vented to pollution control, as a result of non-compliance with the pollution controls.

Dr. Lyou asked why PAR 1469 is relying on non-compliant source tests to trigger a permanent total enclosure with negative air pressure to address fugitive emissions. He discussed previous instances where fugitive emissions were not related to a point source. Ms. Nakamura responded that inadequate collection from tanks that are known sources of hexavalent chromium can result in fugitive emissions and the focus of the rule was to reduce emissions from high-emitting sources. Dr. Lyou reiterated his concern that fugitive emissions will not be captured by focusing on point source emissions.

Supervisor Kuehl expressed her concern that after implementation there could still be issues near these facilities. Executive Office Wayne Nastri commented that staff is looking at sources that weren't previously considered. Mr. Nastri mentioned studies that will be done, as well as AB 617 and PR 1480 that would utilize monitoring to identify other potential areas of concern.

Wesley Turnbow, representing the Metal Finishing Association of Southern California (MFASC) and EME, commented that there has been a decrease in hexavalent chromium emissions since 2000. He commented that hexavalent chromium would not be easily phased out of aerospace, that he was not a fan of chemical fume suppressants, and that point source controls were a better option. He expressed concern with both the pace of the rule development and that permanent total enclosures would be cost prohibitive for many companies. He also commented that the benefits of a permanent total enclosure would be redundant to point source controls.

Dr. Lyou requested that industry work with SCAQMD staff to identify where trivalent chromium can be used. Ms. Nakamura commented that PAR 1469 allows a pathway to phase out the use of hexavalent chromium.

Bill Pearce, representing Boeing, expressed concern regarding prohibiting air sparging and the cost it would take to comply with the requirement. Ms. Nakamura commented that PAR 1469 has been revised to allow air sparging provided the facility can meet the emission standard. Mr. Pearce appreciated the modification and is waiting for an engineering evaluation to determine what it would take to comply with the parametric monitoring.

Brian Leiker, representing the MFASC and K&L Anodizing, expressed his concern regarding the science behind determining the risks associated with hexavalent chromium. The Association has submitted detailed comments to OEHHA and SCAQMD staff.

Dr. Lyou expressed concern about the continued use of hexavalent chromium in decorative processes and encouraged working with military and aerospace to use hexavalent chromium alternatives.

Brian Ward, representing AAA Plating and the MFASC, agreed with the criticism of the science behind determining the risks associated with hexavalent chromium. He identified sodium dichromate seal tanks as a newly discovered source that is now being addressed by facilities. He commented that source controls are a good method to eliminate hexavalent chromium. He explained the difficulty of getting an alternative from the prime aerospace companies that use subcontractors. He also expressed concern with the cost of compliance and the potential misinterpretation of freeboard requirements by staff.

Joseph Guzman, representing Aircraft X-Ray, stressed the importance of the industry to the economic health of California and that controlling emissions from sodium dichromate tanks would greatly reduce emissions.

Jerry Desmond, representing the MFASC, praised the communication between staff and industry. He commented that fugitive emissions would be reduced through enhanced housekeeping and additional best management practices.

Dr. Lyou urged staff to work with facilities to look for alternatives to hexavalent chromium use. Council Member Mitchell requested additional Stationary Source Committee discussion on this rule. Ms. Nakamura responded that the rule had been delayed to February 2018 and additional discussions would continue to take place with stakeholders and that the item will be brought back to this Committee.

WRITTEN REPORTS:

5. **Home Rule Advisory Group – Bi-Monthly Report for September 2017**
   The report was acknowledged by the Committee.

6. **Notice of Violation Penalty Summary**
   The report was acknowledged by the Committee.

OTHER MATTERS:

7. **Other Business**
   There was no other business.

8. **Public Comment Period**
   There were no public comments.

9. **Next Meeting Date**
   The next regular Stationary Source Committee meeting is scheduled for Friday, January 19, 2018.

Adjournment
The meeting was adjourned at 12:30 p.m.

Attachments
1. Attendance Record
2. Home Rule Advisory Group – Bi-Monthly Report for September 2017 and third quarter attendance record
3. Notice of Violation Penalty Summary

ATTACHMENT 1

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
STATIONARY SOURCE COMMITTEE
Attendance – November 17, 2017

Mayor Pro Tem Ben Benoit ..... SCAQMD Governing Board
Dr. Joseph Lyou..... SCAQMD Governing Board
Supervisor Sheila Kuehl ..... SCAQMD Governing Board
Council Member Judith Mitchell..... SCAQMD Governing Board
Supervisor Janice Rutherford (videoconference) ..... SCAQMD Governing Board

David Czamanske..... Board Consultant (Cacciotti)
Ron Ketcham ..... Board Consultant (McCallon)
Diane Moss ..... Board Consultant (Kuehl)

Curtis Coleman..... SoCal AQ Alliance
Jerry Desmond..... MFASC/EME Inc.
Tony Endres..... FDI
Ray Gutierrez..... Embee Processing
Patrick King..... Morrell's Aerospace
Bryan Leiker..... MFASC/K&L Anodizing
Rita Loof..... RadTech
Daniel McGivney ..... SoCalGas
Jaik Morgan ..... Electrolizing
Lauren Nevitt..... SoCalGas
Bill Pearce ..... Boeing
David Rothbart ..... L.A. County Sanitation Districts
Patty Senecal ..... Western States Petroleum Association
Wesley Turnbow ..... MFASC/EME Inc.
Dave Winningham..... Lennox

Philip Fine ..... SCAQMD staff
Bayron Gilchrist ..... SCAQMD staff
Tracy Goss..... SCAQMD staff
Susan Nakamura..... SCAQMD staff
Wayne Nastri ..... SCAQMD staff
Laki Tisopulos..... SCAQMD staff
Jill Whynot ..... SCAQMD staff
Bill Wong ..... SCAQMD staff

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4182
(909) 396-2000 • www.aqmd.gov

HOME RULE ADVISORY GROUP
Wednesday, September 13, 2017
MEETING MINUTES

CHAIR:
Dr. Joseph Lyou, Governing Board member

MEMBERS PRESENT:
Curt Coleman (Southern California Air Quality Alliance); Jaclyn Ferlita (Air Quality Consultants); Nan Harrold (Orange County Waste & Recycling); Bill LaMarr (California Small Business Alliance); Kristen Torres Pawling (County of Los Angeles, Chief Sustainability Office); Terry Roberts (American Lung Association of California); David Rothbart (Los Angeles County Sanitation District); Patty Senecal (Western States Petroleum Association); and TyRon Turner (Dakota Communications).
The following members participated by conference call: Chris Gallenstein (CARB); Jayne Joy (Eastern Municipal Water District); Rongsheng Luo (SCAG); and Bill Quinn (California Council for Environmental & Economic Balance).

MEMBERS ABSENT:
Micah Ali (Compton Unified School District Board of Trustees); Mike Carroll (Regulatory Flexibility Group); Michael Downs (Downs Energy); Art Montez (AMA International); Penny Newman (Center for Community Action and Environmental Justice); Larry Rubio (Riverside Transit Agency);; Larry Smith (Cal Portland Cement); and Amy Zimpfer (EPA).
Merriest

OTHER ATTENDEES:
Mark Abramowitz (Board Consultant to Dr. Lyou); Doris Lo (EPA); Bridget McCann (Western States Petroleum), Rita Loof (RadTech), Johnny Raymond (CARB); and Susan Stark (Andeavor)

SCAQMD STAFF:

Philip Fine	Deputy Executive Officer
Nicholas Sanchez	Acting Assistant Chief Deputy Counsel
Philip Crabbe	Community Relations Manager
Mike Morris	Program Supervisor
Ann Scagliola	Administrative Secretary

OPENING COMMENTS AND SELF-INTRODUCTIONS
The meeting was called to order at 10:00 a.m. by Dr. Joseph Lyou (Chairman).

APPROVAL OF JULY 2017 MEETING MINUTES

Dr. Lyou asked for comments on the July 12, 2017 meeting minutes. Hearing none, the minutes were approved.

EPA AND FEDERAL ACTIVITIES

Doris Lo-provided an update on recent U.S. EPA and federal activities.

- Final action was taken on August 15, 2017 to approve revisions to the South Coast Air Quality Management District (SCAQMD) portion of the California State Implemented Plan (SIP) concerning RECLAIM. The publication date will be September 14, 2017.
- Final action was taken on August 29, 2017 to approve revisions to the SCAQMD portion of the California State Implemented Plan (SIP) regarding RECLAIM Reasonably Available Control Technologies (RACT) demonstration. The publication date has not yet been determined.
- Final action is being proposed to evaluate RECLAIM rule modifications in relation to the previously identified 2006 State Implementation Plan RACT deficiency.
- Diesel Emission Reduction Act (DERA) funding competitive grant requests for the proposal period is ending July 5, 2017, and staff continues to review submittals and will award grants in the fall of 2017.
- The DERA School Bus Rebate Program will be announced in early October 2017.
- The Tribal DERA Program requests for proposal period will begin this month.
- Targeted Air Shed Grants requests for proposals will close on October 18, 2017.
- National Updates:
  - There are no political appointees yet for Region 9 Regional Administrator and related offices;
  - Bill Wehrum was nominated as EPA Assistant Administrator for the Office of Air and Radiation; and
  - The national ambient air quality standard (NAAQS) for ozone extension request has been withdrawn.

Discussion

Dr. Lyou inquired if Matt Miyasato was advised of the DERA tribal funding. Staff indicated that they would follow-up.

CARB REGULATORY ACTIVITIES

Johnnie Raymond reported on the following items to be discussed at the September 2017 Air Resources Board Meeting and other newsworthy items.

- Recently the California Air Resources Board celebrated its 50th anniversary, which involved new branding, a new logo and a new website is coming soon.
- The Board will consider the approval of the Ozone SIP for East Kern County.
- The Board will hear an update of the PM2.5 SIP for the San Joaquin Valley.
- Last month the Cap and Trade auction results were released, which reflected that it was successful and helped to reflect the market certainty.
- CARB is continuing to implement SB 1383 the Short-lived Climate Pollutant Strategy.
  - A Dairy Digester Subgroup meeting was held on September 7, 2017.
- There are upcoming community meetings in September 2017 to discuss concepts for minimizing community health impacts from large freight facilities including seaports, railyards, warehouses, and distribution centers. These freight related activities will also support CARB's efforts to implement AB 617.

Discussion
Kristen Torres Pawling requested the date of the Long Beach workshop. Johnnie Raymond indicated that the meeting date is September 19, from 6:00 to 8:00 pm, at the Long Beach Main Library.

Dan McGivney inquired about the possibility of having the CARB staff provide a presentation on AB 617. Dr. Lyou suggested that CARB could provide an update at the November Home Rule meeting. Phil Fine commented that AB 617 impacts both CARB and the District, and suggested a coordinated presentation from both agencies. Johnny Raymond indicated that it should not be a problem, but would need to check with the Office of Community Air Protection (OCAP) management to confirm, and will get back to Dr. Fine.

Bill Quinn requested CARB's clarification on how the facility-based measures that came out of the AQMP process are now merged into their AB 617 implementation efforts. Johnny Raymond responded that staff efforts were directed by CARB's Board request for concepts to control pollution from large freight facilities.

David Rothbart inquired if the AB 617 presentation for the November Home Rule meeting could also include the role of CARB versus South Coast. Staff indicated this would be addressed.

LEGISLATIVE UPDATE
Philip Crabbe provided a recap of the September 8, 2017 Legislative Committee meeting.

Update on Federal Legislative Issues
SCAQMD's federal legislative consultants reported that President Trump continues to talk about pushing a major infrastructure bill. This has not happened yet because the legislative agenda is currently crowded with tax reform and other matters. There is no current Administration bill and general principles have been provided regarding this proposed legislation, through which $200 billion of federal money would be invested in order to leverage another $800 billion from other sources to become a trillion dollar investment in infrastructure over the next 10 years. Democrats are balking at this approach and desire a bigger federal investment upfront. Once the process for this federal infrastructure bill gets moving, SCAQMD's goal is to have clean air infrastructure funding included.

The federal consultants reported that President Trump announced an environmental review executive order and reiterated that several things are already underway to streamline the permitting process and expedite infrastructure projects. This effort is designed to get more private investment into infrastructure. The executive order also repealed the previous Administration's executive order on climate change, which required agencies to factor in climate change, such as projected sea level rise and flooding issues, in their decision-making in infrastructure projects.

The Department of Transportation (DOT) announced its next round of Transportation Investment Generating Economic Recovery (TIGER) grants, which would make $500 million available for major transportation infrastructure projects. Applications for these grants are due in October, and grants would be for projects between $5 million and $25 million. In the past, these grants have provided money for clean air related infrastructure developments.

The federal consultants indicated that the House continues to work its way through the spending bill package. A proposed amendment to this legislation by Congressman Gary Palmer (AL) would have tried to cut funding for Diesel Emission Reduction Act (DERA) grants. However, this amendment

as of yet has not been formally presented. The current level being proposed by the spending package is $75 million for DERA.

Currently, there is a continuing resolution in place with regard to spending that lasts through December 8th, so spending issues may not be revisited until then.

Update on State Legislative Issues
The SCAQMD's state consultants reported there is one week left in the state legislative session and a large focus is on the $1.5 billion in Greenhouse Gas Reduction Fund (GGRF) monies, that are yet to be allocated. The Legislature had until Tuesday to get legislation on this issue in print, due to the new rule that requires bills to be in print for 72-hours before they are voted on the Senate or Assembly floors.

Previously, Governor Jerry Brown had released his plan, which included $1.5 billion in spending, and Senate President pro Tem Kevin de Leon also released a proposed spending plan. On Tuesday, bills were released in print that laid out the final agreement regarding allocations of the $1.5 billion in available funding. Two of these bills: AB 134 (with an identical companion bill: SB 119) – allocated $900 million of these monies, including:

- $250 million for Carl Moyer Projects statewide, with 43% (based on percentage of state population) of this going to the South Coast region, i.e. $107.5 million;
- $85 million to reduce agricultural sector related emissions;
- $140 million – for the Freight Equipment and Advanced Demonstration and Pilot Commercial Deployment Project;
- $180 million for the Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), with at least $35 million going to zero-emission buses;
- $140 clean vehicle rebate program (CVRP); and
- $100 million for the enhanced fleet modernization program (EFMP) and EFMP-Plus UP.

An additional bill: AB 109 (with an identical companion bill: SB 93) – allocated the remaining cap and trade monies for items including enhanced community monitoring. These allocations included: $27 million statewide to help local air districts implement new air monitoring requirements under AB 617, for the coming year.

The state consultants provided an update on the SCAQMD sponsored bill AB 1274 (O'Donnell), which delays the first smog check for a vehicle from the end of year six to the end of year eight and instead charges a smog abatement fee of $50 at the end of year six. This fee is less than what the consumer would have paid on average for a smog check, along with the required smog check certificate fee ($8.25). These smog abatement fee monies are directed to the Carl Moyer Program for more effective reductions in diesel particulate matter and nitrogen oxides emissions from heavy duty vehicles.

Mr. Crabbe stated that this bill just passed the Senate on a two-thirds vote and has now headed back to the Assembly for a concurrence vote, which would also be a two-thirds vote. If successful, the bill would head to the Governor to be signed into law.

AB 1274 would add to the Carl Moyer funding pot and would more than double the amount of statewide Carl Moyer funding. SCAQMD's portion would be 43% of this new funding and would range from about $30 million to $40 million per year. This bill would not be implemented until January 1, 2019.

Mr. Crabbe reported that AB 617 (C. Garcia) mandates several new programs and responsibilities for SCAQMD, and other local air districts, including:

- Community Monitoring and Analysis;
- Development and implementation of community emission reduction programs;
- Best Available Retrofit Control Technology or "BARCT" Implementation: which involves new BARCT assessments and subsequent amendments to SCAQMD rules and a fast pace; and
- Uniform Emission Reporting: requires a modification of SCAQMD's Annual Emission Reporting (AER) system. This modification is needed to accommodate additional reporting procedures for a statewide uniform emission reporting system created under AB 617.

AB 617 also increases civil and criminal penalties for air pollution violations, adjusting strict liability penalty limits which have not been increased for decades, and requires inflation adjustments going forward.

Discussion

Bill LaMarr inquired if some of the allocated $10 to 15M will be used to offset the anticipated Rule 1469 monitoring costs. Staff indicated that the rule language has evolved over the last few months and many of the monitoring requirements have been removed.

Dr. Lyou inquired if the members had heard if the European Union had prohibited hexavalent chromium plating operations. Staff indicated that they would check into this.

Jaclyn Ferlita inquired about AB 617 and its effects on the RECLAIM program. Staff indicated that the AB 617 compressed timelines will affect the facilities coming out of RECLAIM and this issue will be addressed in future RECLAIM Working Group meetings.

Curt Coleman inquired about the status of an earlier District sponsored bill to redefine the level of emissions in fleet vehicles. Staff indicated that AB 302 was a directive from the Board as an amendment to the AQMP, which became a two-year bill and will not be addressed until next year and currently stands as a directive from the Board to go ahead and pursue.

Bill Quinn asked about the status of the budget trailer bills and if the District was taking a position. Staff indicated that we are supporting these bills going through the committee process, due to the 72-hour rule no changes can be made at this time.

UPDATE REGARDING LITIGATION ITEMS AND RELATED EPA ACTIONS

Nicholas Sanchez indicated there were no updates to the provided litigation status report handout.

RULE 1466 –CONTROL OF PARTICULATE EMISSIONS FROM SOILS WITH TOXIC AIR CONTAMINANTS

Mike Morris presented an overview of the recently adopted SCAQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants.

Discussion

David Rothbart voiced concerns about the ability for sites to comply with the 25 $\mu g/m^3$ PM10 standard. Staff explained that the concerns were not about meeting the standard but about the calibration and error inherent in the monitors and that initial side-by-side testing with SCAQMD's dust monitors showed reasonable agreement.

Larry Smith asked if a small portion of a site was contaminated, would the entire site be required to comply with the Rule 1466. Staff responded that the rule only applies to soils with toxic air contaminants and that the other parts of the site would not be subject to the rule.

Larry Smith stressed that it should be made clear to contractors that Rule 1466 is not a "shut-down" rule. Staff concurred.

Bill LaMarr asked if clean-up action would be delayed while the Executive Officer makes a determination of rule applicability. Staff answered that the rule provisions only apply once the determination has be finalized and thus there would be no delay.

Bill LaMarr also asked if there were plans to amend Rule 403 – Fugitive Dust. Staff stated that there is a need to amend Rule 403 but given the challenges of the rule development schedule, an amendment to Rule 403 is not imminent.

CONSENSUS BUILDING
There was no report.

Dr. Lyou commented that since this is currently not an active topic that we will remove it from future meeting agendas, but will include the topic when there are items to report on.

SUBCOMMITTEE STATUS REPORTS
A. *Freight Sustainability (Dan McGivney)*
Dan McGivney provided updates on the following items.

- The San Pedro Bay Port Draft Clean Air Action Plan (CAAP) public review and comment period ends on September 18, 2017.
- CARB has initiated their indirect source rule efforts.
- I-710 EIR comment period was extended.

Curt Coleman commented that he attended the Marine Port Committee meeting on August 31, 2017 and thought the discussion and presentation on the CAAP was very interesting, specifically the District's concerns on the lack of identified emission reductions before 2023 and the general interest in moving forward with the near zero-emission technology.

B. Small Business Considerations *(Bill LaMarr)*
Bill LaMarr reported that on September 27, 2017 there will be a walk-through demonstration of the online permit application process, with the leadership from the Korean Drycleaner and California Cleaner Associations.

C. *Environmental Justice (Curt Coleman)*
There was no report.

Dr. Lyou requested for future AB 617 updates to be incorporated into future Environmental Justice subcommittee status reports.

D. *Climate Change (David Rothbart)*
David Rothbart provided an update on California's Cap-and-Trade Program.

Jaclyn Ferlita commented that it was interesting to see the increase in the auction activity and prices, since the passage of AB 398.

REPORT FROM AND TO THE STATIONARY SOURCE COMMITTEE
Dr. Philip Fine provided a recap of the items on the September 15, 2017 meeting agenda.

- Item to address the need to enhance the monitoring and analysis equipment for the Science and Technology Division, for elevated levels of hexavalent chromium in Paramount and Compton.
- Home Rule Advisory Group new membership appointees.
- Updates on Proposed Amended Rules 415, 1148.3, 1168, 1180 and 1420.
- Update on the permit backlog.
- Quarterly report on the RECLAIM amendments.
- Update on Draft Assessment on tBac white paper.

Discussion
Curt Coleman voiced concern about the pace of pushing the rules through Committee, without adequate time to review and provide comments. Staff responded that when we come to the Stationary Source Committee it can be to provide updates of where we are in the rulemaking process and to also consider the rescheduling of rules if needed, since the rule calendar is set at the beginning of the year.

Dan McGivney indicated his concern about the fast schedule for Rule 1180 and the socio-economic report has not come out yet. Staff replied that the socio-economic report will be provided at the 30-day point as required.

Bill LaMarr expressed concern about the rulemaking schedule and requested a status update on the Rule 1147 implementation guide, the use of portable analyzers and getting them accepted, and a list of acceptable low NOx burner manufacturers. Staff responded that we are working on these commitments and can provide updates.

Public Comment
Rita Loof voiced concern about the rulemaking process, the status of the Rule 219 recordkeeping form that has not been provided, and the inconvenience of the October Board meeting at the Biltmore Hotel for Rule 1168. Dr. Lyou indicated that if the issues are resolved for Rule 1168, it could possibly be only a consent item for the Board meeting. Staff indicated that they would inquire about the status of the Rule 219 recordkeeping form.

OTHER BUSINESS
TyRon Turner inquired about a community outreach update, since the last update was May 10, 2017. Bill LaMarr commented that the Local Government and Small Business Assistance Advisory Group (LGSBA) might be the appropriate Advisory Group for this type of update. Dr. Lyou requested that Legislative, Public Affairs and Media be advised of this request and have Mr. Turner added to their meeting distribution.

PUBLIC COMMENT
There were no comments.

ADJOURNMENT
The meeting was adjourned at 11:57 p.m. The next meeting of the Home Rule Advisory Group is scheduled for 10:00 a.m. on November 8, 2017, and will be held at SCAQMD in Conference Room CC-8.

South Coast Air Quality Management District

HOME RULE ADVISORY GROUP – Attendance Record – 2017

	NAME (Term: 1/1/17 - 1/1/2019) Board/Member, Business & Community Reps, SCAQMD Staff	1/11	FEB	3/15	APR	5/10	JUN	7/12	AUG	9/13	OCT	11/8	DEC
1	**Dr. Joseph Lyou, Chairman**	X	dark	X	dark	X	dark	X	dark	X	dark		dark
2	**Dr. Philip Fine** (Agency Member) - **SCAQMD**	X*		X		X*		X		X			
3	**Zimpfer, Amy** (Agency Member) - **EPA** *Representing Elizabeth Adams*	T		A*		T		X		X*			
4	**Gallenstein, Chris** (Agency Member) - **CARB** *Representing Richard Corey*	T*		T		T		A		T			
5	**Chang, Ping** (Agency Member) - **SCAG** *Alternate – Rongsheng Luo*	T*		T*		T*		T*		T*			
6	**Carroll, Mike** (Business Representative) *Alternate – Robert Wyman*	A		A		A		X		A			
7	**Coleman, Curtis** (Business Representative) *Alternate – Susan Stark*	X		X		X		X		X			
8	**Senecal, Patty** (Business Representative)	A		A		A		A		X			
9	**Joy, Jayne** (Business Representative) *Alternate – Al Javier*	T		A*		X		T		T			
10	**La Marr, Bill** (Business Representative)	X		X		X		X		X			
11	**McGivney, Dan** (Business Representative) *Alternate – Lauren Nevitt*	X		X*		X		A		X			
12	**Newman, Penny** (Environmental Representative)	X		X		A		A		A			
13	**Roberts, Terry** (Environmental Representative)	X		X		X		X		X			
14	**Quinn, Bill** (Business Representative)	T		T		T		T		T			
	~~**Wyenn, Morgan** (Environmental Representative)~~	A*		A*		A*		A*					
15	**Ali, Micah** (Community Representative - Parker)	T		A		A		A		A			
16	**Downs, Michael** (Community Representative - McCallon)	X		A		X		A		A			
17	**Ferlita, Jaclyn** (Community Representative - Lyou)	X		A*		X		A		X			
18	**Harrold, Nan** (Community Representative - Nelson)									X			
19	**Montez, Art** (Community Representative - Lyou)	A		X		X		A		A			
	~~**Olson, Mark** (Community Representative - Rutherford)~~	X		A*		X		A*					
20	**Rothbart, David** (Community Representative - Mitchell)	X		X		X		X		X			
21	**Rubio, Larry** (Community Representative - Ashley)	A*		T		T		A*		T			
22	**Smith, Larry** (Community Representative - Benoit)	X		A		X		A		X			
23	**Pawling Torres, Kristen** (Community Representative - Kuehl)									X			
24	**Turner, TyRon** (Community Representative - Burke)	T		X		X		X		X			

Attendance Codes					
X	Present	T	Teleconference	A	Absence
X*	Alternate in Attendance	T*	Alternate Teleconference Participation	A*	Absence Excused

DRAFT
DISTRICT RULES AND REGULATIONS INDEX
FOR OCTOBER 2017 PENALTY REPORT

REGULATION II – PERMITS

Rule 201 Permit to Construct *(Amended 1/5/90)*
Rule 203 Permit to Operate *(Amended 1/5/90)*
Rule 222 Filing Requirements for Specific Emission Sources Not Requiring a Written permit Pursuant to Regulation II

REGULATION III - FEES

Rule 314 Fees for Architectural Coatings

REGULATION IV - PROHIBITIONS

Rule 403 Fugitive Dust
Rule 461 Gasoline Transfer and Dispensing *(Amended 6/15/01)*
Rule 463 Storage of Organic Liquids *(Amended 3/11/94)*

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters *(Amended 11/17/00)*
Rule 1146.1 Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and
Rule 1146.2 Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers *(Adopted 1/9/98)*
Rule 1147 Nox Reductions From Miscellaneous Sources (9/08)
Rule 1176 Sumps and Wastewater Separators *(Amended 9/13/96)*

REGULATION XIV – TOXICS

Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems
Rule 1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations *(Amended 6/13/97)*
Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004 Requirements *(Amended 5/11/01)*
Rule 2011 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_X) Emissions *(Amended*
Rule 2012 Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_X) Emissions *(Amended 5/11/01)*

REGULATION XXX - TITLE V PERMITS

Rule 3002 Requirements *(Amended 11/14/97)*
Rule 3003 Applications (Amended 3/16/01)

CALIFORNIA HEALTH AND SAFETY CODE § 41700

41960.2 Gasoline Vapor Recovery

CALIFORNIA CODE OF REGULATIONS

Title 13 Mobile Sources and Fuels

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

October 2017 Settlement Penalty Report

Total Penalties

Civil Settlements:	**$323,149.00**
MSPAP Settlements:	**$55,365.00**
Total Cash Settlements:	**$378,514.00**
Total SEP Value:	**$0.00**
Fiscal Year through 10 / 2017 Cash Total:	**$2,597,389.97**
Fiscal Year through 10 / 2017 SEP Value Only Total:	**$1,120,000.00**

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Settlements						
800181	CALIFORNIA PORTLAND CEMENT CO	2004 2004	10/10/2017	NSF	P59283 P60580	$11,000.00
139445	CHILLED WATER PLANT, LLC	203 (b)	10/6/2017	BST	P62488	$3,200.00
147808	CHOOSE MANUFACTURING	203(b)	10/24/2017	SMP	P63857	$4,000.00
800091	EXXONMOBIL OIL CORP	463, 3002	10/18/2017	DH	P37238	$25,000.00
24812	FARMER BROS CO	1147	10/6/2017	BST	P60717	$75,000.00
38286	JEFF'S SHELL SERVICE	461(c), 461(c)(2)(B)	10/24/2017	WBW	P65003	$500.00
137961	LAMILL INC	1147	10/5/2017	NSF	P64116	$1,000.00
157216	MK'S FAIRVIEW 76 Small Claims Case No. 30-2017-00941542-sc-sc-cjc	203(a), 461, 461 (e) (2) 203 (a) 461, 461(c), 41960.2	10/27/2017	BST	P61972 P63003 P64329	$1,000.00
7427	OWENS-BROCKWAY GLASS CONTAINER INC	2004	10/19/2017	BST	P62080	$9,000.00
94272	RGF ENTERPRISES INC	3002, 3003	10/12/2017	BST	P62752	$2,250.00
800026	ULTRAMAR INC	1176(e)(1) 1176(e)(1), 3002(c)(1) 201, 2004, 2011, 2012	10/17/2017 10/10/2017	NAS	P60355 P60356 P61020	$84,500.00
158685	VALSPAR CORP.	314	10/12/2017	MJR	P50629	$99,999.00
159801	VEXCON CHEMICALS INC./POLYSAT INC.	314	10/20/2017	BST	P64820	$500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
2846	VISTA PAINT CORP	3002(c)(1)	10/4/2017	WBW	P60679	$5,000.00

Total Civil Settlements: $321,949.00

MSPAP Settlements

149101	A + CLEANER	201, 1421	10/4/2017	JS	P64078	$550.00
165227	AIRPORT COURTHOUSE, JCC/AOC	1146.2	10/10/2017	JS	P63678	$3,600.00
222	ARCHITECTURAL WOODWORKING CO	3002, 3003	10/27/2017	JS	P64133	$770.00
182732	B & J TREE SERVICE	403(d)(1)	10/4/2017	JS	P56742	$3,640.00
12129	BEVERLY HOSPITAL	203(b), 1146	10/10/2017	JS	P64132	$4,620.00
182058	BM EXTRUSION	203 (a)	10/5/2017	JS	P64164	$2,200.00
109461	BURLINGTON NORTHERN/SANTA FE RAILWAY CO	201, 203 (a)	10/5/2017	JS	P64134	$1,100.00
115488	CARDLOCK FUELS SYSTEM, INC.	461	10/18/2017	JS	P65712	$1,800.00
177755	CHEVRON EXTRA MILE	461 (e) (1), 461(e)(2)	10/4/2017	JS	P65455	$1,600.00
175492	CITY OF BEAUMONT - POLICE DEPARTMENT	1470	10/18/2017	JS	P64365	$770.00
142874	CITY OF ONTARIO, POLICE DEPT,	203 (b)	10/5/2017	TF	P65362	$375.00
119665	CONDON JOHNSON & ASSOCIATES INC	Title 13	10/10/2017	JS	P65254	$850.00
108802	D & H SUPER SERVICE	203 (b), 461	10/4/2017	GC	P65005	$300.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
		461(c)(2)(B), 41960.2				
174205	DION AND SONS	201, 203(a)	10/18/2017	GC	P64016	$600.00
184450	EASTERN MUNICIPAL WATER DISTRICT	403, 403(d)(1) 403(d)(2)	10/5/2017	JS	P59694	$7,425.00
182165	EXPRESS TANK LINES, INC.	461	10/5/2017	GC	P64337	$400.00
146890	GALAXY OIL CO	461	10/4/2017	GC	P64343	$150.00
158390	H&S ENERGY, LLC. H&S 21	203 (b)	10/5/2017	GC	P64958	$640.00
92642	HF & SJ INC, HUNTINGTON BEACH ARCO	461, 41960.2	10/5/2017	GC	P64342	$300.00
132187	HOME DEPOT USA, INC., 3 E COMPANY	203 (b)	10/20/2017	GC	P64067	$3,200.00
800003	HONEYWELL INTERNATIONAL INC	3002(c)(1)	10/10/2017	GC	P64461	$425.00
62862	IMPERIAL IRRIGATION DISTRICT/ COACHELLA	3002(c)(1)	10/27/2017	GC	P56048	$400.00
96025	ISLAND MARINE FUEL	461(E)(2)(A) 461(e)(2)(C)	10/4/2017	GC	P63604	$1,100.00
112655	LONG BEACH POLICE, WEST STATION	461	10/5/2017	TF	P64222	$150.00
172542	LONG BEACH UNIFIED SCHOOL DISTRICT	222, 1415	10/19/2017	TF	P64227	$1,500.00
184917	MA (MARIANO AVILA)	203 (a)	10/18/2017	TF	P63864	$300.00
134211	MONTAGE RESORTS & SPA	1146.1	10/18/2017	TF	P64076	$2,200.00
173522	NAMSA	1146.2	10/5/2017	TF	P63611	$1,100.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
63951	NORDSTROM	203 (b)	10/5/2017	TF	P64075	$375.00
109105	OAKLEY INC.	203 (b)	10/5/2017	TF	P64074	$50.00
114608	ONE HOUR CLEANERS, JAE C RYU, DBA	1421	10/18/2017	TF	P63716	$450.00
164601	PHIL'S CONCRETE PUMPING, INC.	203 (a)	10/18/2017	TF	P59690	$300.00
177498	POTENTIA FUEL, INC.	461, 41960	10/20/2017	TF	P64914	$550.00
142375	RALPH'S STORE #45	203	10/20/2017	TF	P63133	$1,000.00
185156	RYKO PRODUCTS, INC	203 (a)	10/4/2017	TF	P65364	$2,750.00
173381	SO. CALIFORNIA HOSPITAL AT CULVER CITY	1146.1	10/27/2017	GV	P63675	$2,000.00
158430	STATE OF CALIF, DEPT OF VETERANS AFFAIRS	203, 1146	10/5/2017	JS	P63685	$3,375.00
145733	UNITED RENTAL	461	10/5/2017	GV	P64208	$850.00
145733	UNITED RENTAL	461	10/4/2017	GV	P64220	$800.00
184743	WOOD OIL COMPANY	461(c)(1)(B)	10/4/2017	GV	P65360	$800.00

Total MSPAP Settlements: $55,365.00

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 28

REPORT: Technology Committee

SYNOPSIS: The Technology Committee held a meeting on Friday, November 17, 2017. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Sheila Kuehl, Vice Chair
Technology Committee

MMM:pmk

Committee Members
Present: Supervisor Sheila Kuehl/Vice Chair, Mayor Pro Tem Larry McCallon (videoconference), Council Member Judith Mitchell and Council Member Dwight Robinson

Absent: Council Member Joe Buscaino/Chair and Supervisor Janice Rutherford

Call to Order
Vice Chair Kuehl called the meeting to order at 12:27 p.m.

ACTION ITEMS:

1. **Amend and Execute Technical Assistance Contracts for Implementation of Incentive Funding Programs**
   On June 3, 2016, the Board approved contracts for technical assistance for the demonstration and deployment of mobile and stationary source advanced technologies and implementation of incentive funding programs. The contractors were selected from proposals received in response to a solicitation issued in February 2016. Since that time, the SCAQMD has been successful in generating large amounts of incentive program funding that must be encumbered and expended expeditiously. Thus, it is necessary to increase funding for technical assistance for the implementation of incentive funding programs, including the Carl Moyer Program and the Enhanced Fleet Modernization Program (EFMP). This action is to execute two agreements with Clean Fuel Connection, Inc., a contract amendment for Carl Moyer Program technical support in an amount not to exceed $150,000 and a

new contract for EFMP implementation support in an amount not to exceed $150,000 from, respectively, the administrative portions of the Carl Moyer Program AB 923 Fund (80) and the HEROS II Special Revenue Fund (56).

Council Member McCallon asked if the $51 million will be used for demonstration projects or to incentivize the replacement of trucks. Staff responded the funds will be used for commercial-ready projects, including the replacement of trucks.

Moved by Mitchell; seconded by Robinson; unanimously approved.

Ayes: Kuehl, McCallon, Mitchell and Robinson
Noes: None
Absent: Buscaino and Rutherford

2. Amend Contract to Improve Online Application Database for Carl Moyer Program and Reimburse General Fund for Administrative Costs

In November 2015, the Board approved a contract with Trinity Technology Group to develop an online application database for the Carl Moyer Program. This online database, which successfully launched for the "Year 19" Carl Moyer Program, greatly facilitated the application submittal process and expedited evaluation of applications. However, improvements are necessary to incorporate changes in the newly revised Carl Moyer Program Guidelines, including updated cost-effectiveness calculations and new funding categories. Other modifications are needed to improve the online application submittal experience for the participants as well. This action is to amend a contract with Trinity Technology Group to modify and enhance the existing online application database for the Carl Moyer Program in an amount not to exceed $85,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80) and reimburse the General Fund up to $187,500 for administrative costs from the Carl Moyer Program SB 1107 Fund (32).

Moved by Robinson; seconded by McCallon; unanimously approved.

Ayes: Kuehl, McCallon, Mitchell and Robinson
Noes: None
Absent: Buscaino and Rutherford

3. Execute Contract to Develop Thermal Management Strategy Using Cylinder Deactivation for Heavy-Duty Diesel Engines

West Virginia University, Jacobs Vehicle Systems, Inc., and Cummins Inc. propose a collaborative effort to evaluate integration of cylinder deactivation hardware in a heavy-duty 15-liter diesel engine to create better thermal management. The proposed study aims to develop a strategy to decrease fuel consumption and reduce NOx at low-load conditions to achieve 0.02 g/bhp-hr NOx over the duty cycle of a heavy-duty diesel engine. This action is to execute a contract with West

Virginia University-Center for Alternative Fuels Engines and Emissions to develop a thermal management strategy using cylinder deactivation for heavy-duty diesel engines in an amount not to exceed $250,000 from the Clean Fuels Fund (31).

Council Member Mitchell asked whether the cylinder deactivation technology will be triggered manually when the vehicle is in an idling mode and about the incremental cost of the engine compared to an existing engine. Staff responded that the technology will be electronically controlled during low load and low temperature (idling) vehicle modes and the incremental cost should be minimal.

Supervisor Kuehl asked whether the technology is transferable to other areas for emission reduction. Staff responded that the technology may be used in other areas where thermal management strategy is needed to support aftertreatment technology performance, such as off-road and marine equipment.

Moved by Mitchell; seconded by Robinson; unanimously approved.

Ayes: Kuehl, McCallon, Mitchell and Robinson
Noes: None
Absent: Buscaino and Rutherford

4. Execute Contract to Develop and Demonstrate Near-Zero Emission Opposed Piston Engine

CALSTART, Inc., and Achates Power, Inc., have been awarded $7 million to develop and demonstrate opposed-piston (OP) engine technology in Class 8 heavy-duty, line-haul trucks that meet a 0.02 g/bhp-hr NOx target, with concurrent reductions in CO2 emissions. The project was awarded under CARB's Low Carbon Transportation Greenhouse Gas (GHG) Reduction Fund Investments, with total project costs estimated at $15.55 million. The trucks will provide revenue service on regional long-haul routes within California. Staff proposes to cost-share this project. This action is to execute a contract with CALSTART, Inc., to develop and demonstrate near-zero emission OP engines in an amount not to exceed $1 million from the Clean Fuels Fund (31).

Supervisor Kuehl indicated that the technology has been available for a while and inquired about the timing of the project. Staff explained that the coordinated benefits of reducing criteria pollutants, greenhouse gases and fuel consumption have created interest with heavy-duty engine OEMs, leading towards this project.

Council Member Mitchell commented she does not have a financial interest, but she is required to identify for the record that she is a governing board member of the California Air Resources Board which is involved in the item.

Moved by Mitchell; seconded by Robinson; unanimously approved.

Ayes: Kuehl, McCallon, Mitchell and Robinson
Noes: None
Absent: Buscaino and Rutherford

5. Recognize Revenue and Adopt Resolution to Implement AB 617

On September 16, 2017, the Governor approved AB 134 to amend the Budget Act of 2017. This amendment adds appropriations to the Budget Act of 2017, taking effect immediately as a Budget Bill. Under Schedule 3 of this Bill, $250 million is to be distributed by CARB to air districts for implementation of projects pursuant to the Carl Moyer Memorial Air Quality Standards Attainment Program. SCAQMD's allocation of these funds is $107.5 million. This action is to adopt a Resolution recognizing funds up to $107.5 million from CARB into the Carl Moyer Program Fund (32) and accepting terms and conditions for funds as appropriated under Schedule 3 of AB 134 Budget Act of 2017.

This item was pulled by staff. It will appear on the November 20, 2017 Special Administrative Committee agenda.

OTHER MATTERS:

6. Other Business:

There was no other business.

7. Public Comment Period:

There were no public comments.

8. Next Meeting Date

The next regular Technology Committee meeting is scheduled for Friday, January 19, 2018 at noon.

Adjournment

The meeting adjourned at 12:52 p.m.

Attachment

Attendance Record

ATTACHMENT

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
TECHNOLOGY COMMITTEE MEETING
Attendance – November 17, 2017

Supervisor Sheila Kuehl.....SCAQMD Board Member
Mayor Pro Tem Larry McCallon (videoconference) .....SCAQMD Board Member
Council Member Judith Mitchell .....SCAQMD Board Member
Council Member Dwight Robinson .....SCAQMD Board Member

Mark Abramowitz .....Board Consultant (Lyou)
David Czamanske.....Board Consultant (Cacciotti)
Ron Ketcham.....Board Consultant (McCallon)
Diane Moss.....Board Consultant (Kuehl)
Marisa Perez.....Board Consultant (Mitchell)
Andrew Silva.....Board Consultant (Rutherford)

Tom Gross .....Southern California Edison
Daniel McGivney .....SoCalGas
Jordan Smith.....Southern California Edison

Naveen Berry.....SCAQMD Staff
Jennifer De La Loza .....SCAQMD Staff
Marjorie Eaton.....SCAQMD Staff
Drue Hargis .....SCAQMD Staff
Pat Krayser .....SCAQMD Staff
Fred Minassian .....SCAQMD Staff
Lisa Mirisola.....SCAQMD Staff
Matt Miyasato.....SCAQMD Staff
Ron Moskowitz .....SCAQMD Staff
Adewale Oshinuga .....SCAQMD Staff
Walter Shen .....SCAQMD Staff
Cynthia Snyder.....SCAQMD Staff
Veera Tyagi .....SCAQMD Staff
Mei Wang.....SCAQMD Staff
Vicki White .....SCAQMD Staff
Jill Whynot .....SCAQMD Staff
Paul Wright.....SCAQMD Staff

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 23

PROPOSAL: Annual Audited Financial Statements for FY Ended June 30, 2017

SYNOPSIS: This item transmits the annual audited financial statements of the SCAQMD. The SCAQMD has received an unmodified opinion (the highest obtainable) on its financial statements.

COMMITTEE: Administrative, November 9, 2017, Reviewed

RECOMMENDED ACTION:
Receive and file the SCAQMD's Comprehensive Annual Financial Report (CAFR) and Single Audit Reports for the FY ended June 30, 2017.

Wayne Nastri
Executive Officer

MBO:SJ:av

Background
The audit of the SCAQMD financial statements, along with the Single Audit Reports for the Fiscal Year ended June 30, 2017, have been completed by BCA Watson Rice, LLP. SCAQMD has received an unmodified opinion on its financial statements. An unmodified opinion is the highest obtainable, assuring interested parties that SCAQMD's financial statements fairly present the agency's financial position.

Attachments
- The Comprehensive Annual Financial Report (CAFR), which includes the Independent Auditor's Report, was previously provided to Board Members and is available for public viewing at SCAQMD's library or website at http://www.aqmd.gov/home/about/finance.
- Single Audit Reports that include Independent Auditor's Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of the Financial Statements Performed in Accordance with Government Auditing Standards, Independent Auditor's Report on Compliance with Each Major Federal Program; Report on Internal Control over Compliance; and Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance. Copies were previously provided to Board Members and are available in SCAQMD's library for public viewing.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

SINGLE AUDIT REPORTS

FOR THE YEAR ENDED JUNE 30, 2017
(With Independent Auditor's Reports Thereon)

BCA Watson Rice LLP
Certified Public Accountants and Advisors

21250 Hawthorne Blvd. Suite 150 Torrance, CA 90503
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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
SINGLE AUDIT REPORTS
FOR THE YEAR ENDED JUNE 30, 2017
(With Independent Auditor's Reports Thereon)

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Schedule of Findings and Questioned Costs 8

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Governing Board of
South Coast Air Quality Management District
Diamond Bar, California

We have audited in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, the blended component unit, each major fund, and the aggregate remaining fund information of the South Coast Air Quality Management District (SCAQMD) as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise SCAQMD's basic financials statements, and have issued our report thereon dated October 13, 2017.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered SCAQMD's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SCAQMD's internal control. Accordingly, we do not express an opinion on the effectiveness of SCAQMD's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether SCAQMD's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

BCA Watson Rice, LLP

Torrance, California
October 13, 2017

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INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS REQUIRED BY UNIFORM GUIDANCE

To the Governing Board of
South Coast Air Quality Management District
Diamond Bar, California

Report on Compliance for Each Major Federal Program

We have audited the South Coast Air Quality Management District's (SCAQMD) compliance with the types of compliance requirements described in the U.S. *Office of Management and Budget (OMB) Compliance Supplement* that could have a direct and material effect on each of SCAQMD's major federal programs for the year ended June 30, 2017. SCAQMD's major federal programs are identified in the summary of auditor's results section of the accompanying Schedule of Findings and Questioned Costs.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of SCAQMD's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Those standards and the Uniform Guidance require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about SCAQMD's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination on SCAQMD's compliance.

Opinion on Each Major Federal Program

In our opinion, SCAQMD's complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2017.

Report on Internal Control over Compliance

Management of SCAQMD is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered SCAQMD's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program as a basis for designing auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of SCAQMD's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the governmental activities, the business-type activities, the blended component unit, each major fund, the aggregate remaining fund information of SCAQMD as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise SCAQMD's basic financial statements. We issued our report thereon dated October 13, 2017, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from

and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditure of Federal Awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

BCA Watson Rice, LLP

Torrance, CA
October 13, 2017

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
For the Year Ended June 30, 2017

Federal Grantor/Pass-Through Grantor / Program Title	CFDA Number	Program Identification Number	Total Expenditures
U.S. Department of Transportation			
Highway Planning and Construction			
Diesel Emission Reduction Program	20.205	07-6373R	$ 650,000
U.S. Environmental Protection Agency			
Air Pollution Control Program Support:			
EPA Section 105 Air Grant	66.001*	A00909416-2	1,266,477
EPA Section 105 Air Grant	66.001*	A00909417-0	3,172,482
			4,438,959
Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act:			
PM 2.5 Monitoring	66.034	PM-00T86701-4	711,291
National Air Toxics Trend Stations	66.034	XA-99T27601-2	258,251
Near Road Monitoring	66.034	XA-00T82301-4	123,804
Community Scale Air Toxics Monitoring	66.034	XA-99T33501-0	70,755
			1,164,101
National Clean Diesel Emissions Reduction Program:			
National Clean Diesel Program	66.039*	DE-00T96201-3	864,777
DERA-School Bus Replacement Project	66.039*	DE-99T07001-3	10,154
DERA-On Road SH Truck and School Buss	66.039*	DE-99T24701-2	183,466
			1,058,397
Congressionally Mandated Projects:			
Targeted Air Shed	66.202*	EM-83493501-5	601,140
Emission Reduction	66.202*	EM-00T34701-4	480,833
			1,081,973
Science To Achieve Results (STAR) Research Program			
STAR Engage, Educate, and Empower	66.509	RD-83618401-1	20,069
Total U.S. Environmental Protection Agency			7,763,499
U.S. Department of Energy			
Conservative Research and Development:			
Zero Emission Cargo Transport Demo	81.086	DE-EE0005961-6	1,119,516
San Pedro Bay Ports FCEV and HEV Demo	81.086	DE-EE0006874-5	4,261,698
Total Department of Energy			5,381,214
U.S. Department of Homeland Security			
Homeland Security Biowatch Program			
Biowatch Program	97.091	2006-ST-091-000013-11	1,504,882
Total Federal Expenditures			$ 15,299,595

* Type A Major Program

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
For the Year Ended June 30, 2017

NOTE 1 – BASIS OF PRESENTATION

The accompanying schedule of expenditures of federal awards (the Schedule) includes the federal award activity of the South Coast Air Quality Management District (SCAQMD) under programs of the federal government for the year ended June 30, 2017. The information in this Schedule is presented in accordance with the audit requirements of Title 2 U.S. Code of Federal Regulations (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the Schedule presents only a selected portion of the operations of SCAQMD, it is not intended to and does not present the financial position, changes in net position or cash flows of the SCAQMD.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Expenditures reported in the Schedule are reported on the modified accrual basis of accounting. Such expenditures are recognized following, as applicable, either the cost principles in *OMB Circular A-87, Cost Principles for State, Local, and Indian Tribal Governments*, or the cost principles contained in the *Uniform Guidance*, wherein certain types of expenditures are not allowable or are limited as to reimbursement.

NOTE 3– INDIRECT COST RATE

The SCAQMD has elected not to use the 10-percent de minimis indirect cost rate allowed under the Uniform Guidance.

NOTE 4– EXPENDITURES FROM PREVIOUS FISCAL YEAR

Included in the schedule of expenditures of federal awards are the expenditures related to the SCAQMD's diesel emission reduction program that were expended in fiscal year 2015-2016 but not previously reported because the SCAQMD was not notified by its pass-through agency that grant funds were re-obligated and approval by the federal agency of the re-obligated grant funds were not received until the current fiscal year. The following are the details of the expenditures:

CFDA No.	Program Identification Number	Program Title	Amount
20.205	07-6373R	Diesel Emission Program	$ 650,000

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
For the Year Ended June 30, 2017

SECTION I – SUMMARY OF AUDITOR'S RESULTS

A - Financial Statements

1) Type of auditor's report issued:	Unmodified
2) Internal control over financial reporting:	
a) Material weakness(es) identified?	No
b) Significant deficiency(ies) identified not considered to be material weaknesses?	None reported
3) Noncompliance material to financial statements noted?	No

B - Federal Awards

1) Type of auditor's report issued on compliance for major programs:	Unmodified
2) Internal control over major programs:	
a) Material weakness(es) identified?	No
b) Significant deficiency(ies) identified not considered material weakness(es)?	None reported
3) Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	No

4) Identification of major programs:

CFDA No.	Name of Federal Program
66.001	Air Pollution Control Program Support
66.039	National Clean Diesel Emissions Reduction Program
66.202	Congressionally Mandated Projects

5) Dollar threshold used to distinguish between Type A and Type B programs:	$750,000
6) Auditee qualified as low-risk auditee?	Yes

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
For the Year Ended June 30, 2017

SECTION II – FINANCIAL STATEMENT FINDINGS

None reported.

SECTION III – FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

None reported.

SECTION IV – STATUS OF PRIOR YEAR FINDINGS AND QUESTIONED COSTS

None reported.

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 20

REPORT: Lead Agency Projects and Environmental Documents Received By SCAQMD

SYNOPSIS: This report provides, for the Board's consideration, a listing of CEQA documents received by the SCAQMD between October 1, 2017 and October 31, 2017, and those projects for which the SCAQMD is acting as lead agency pursuant to CEQA.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

PF:SN:JW:LS:LW

CEQA Document Receipt and Review Logs (Attachments A and B) – Each month, the SCAQMD receives numerous CEQA documents from other public agencies on projects that could adversely affect air quality. A listing of all documents received and reviewed during the reporting period October 1, 2017 through October 31, 2017 is included in Attachment A. A list of active projects from previous reporting periods for which SCAQMD staff is continuing to evaluate or has prepared comments is included in Attachment B. A total of 105 CEQA documents were received during this reporting period and 30 comment letters were sent. There are no notable projects to report.

The Intergovernmental Review function, which consists of reviewing and commenting on the adequacy of the air quality analysis in CEQA documents prepared by other lead agencies, is consistent with the Board's 1997 Environmental Justice Guiding Principles and Environmental Justice Initiative #4. As required by the Environmental Justice Program Enhancements for FY 2002-03 approved by the Board in October 2002, each of the attachments notes those proposed projects where the SCAQMD has been contacted regarding potential air quality-related environmental justice concerns. The SCAQMD has established an internal central contact to receive information on projects with potential air quality-related environmental justice concerns. The public may contact the SCAQMD about projects of concern by the following means: in writing via

fax, email, or standard letters; through telephone communication; as part of oral comments at SCAQMD meetings or other meetings where SCAQMD staff is present; or by submitting newspaper articles. The attachments also identify for each project the dates of the public comment period and the public hearing date, if applicable, as reported at the time the CEQA document is received by the SCAQMD. Interested parties should rely on the lead agencies themselves for definitive information regarding public comment periods and hearings as these dates are occasionally modified by the lead agency.

At the January 6, 2006 Board meeting, the Board approved the Workplan for the Chairman's Clean Port Initiatives. One action item of the Chairman's Initiatives was to prepare a monthly report describing CEQA documents for projects related to goods movement and to make full use of the process to ensure the air quality impacts of such projects are thoroughly mitigated. In response to describing goods movement, CEQA documents (Attachments A and B) are organized to group projects of interest into the following categories: goods movement projects; schools; landfills and wastewater projects; airports; general land use projects, etc. In response to the mitigation component, guidance information on mitigation measures were compiled into a series of tables relative to: off-road engines; on-road engines; harbor craft; ocean-going vessels; locomotives; fugitive dust; and greenhouse gases. These mitigation measure tables are on the CEQA webpages portion of the SCAQMD's website at: http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies. Staff will continue compiling tables of mitigation measures for other emission sources, including airport ground support equipment and other sources.

As resources permit, staff focuses on reviewing and preparing comments for projects: where the SCAQMD is a responsible agency; that may have significant adverse regional air quality impacts (e.g., special event centers, landfills, goods movement, etc.); that may have localized or toxic air quality impacts (e.g., warehouse and distribution centers); where environmental justice concerns have been raised; and those projects for which a lead or responsible agency has specifically requested SCAQMD review. If staff provided written comments to the lead agency as noted in the column "Comment Status," there is a link to the "SCAQMD Letter" under the Project Description. In addition, if staff testified at a hearing for the proposed project, a notation is provided under the "Comment Status." If there is no notation, then staff did not provide testimony at a hearing for the proposed project.

During the period October 1, 2017 through October 31, 2017, the SCAQMD received 105 CEQA documents. Of the total of 128 documents* listed in Attachments A and B:

- 30 comment letters were sent;
- 55 documents were reviewed, but no comments were made;
- 28 documents are currently under review;
- 3 documents did not require comments (e.g., public notices);
- 0 documents were not reviewed; and
- 12 documents were screened without additional review.

* These statistics are from October 1, 2017 to October 31, 2017 and may not include the most recent "Comment Status" updates in Attachments A and B.

Copies of all comment letters sent to lead agencies can be found on the SCAQMD's CEQA webpage at the following internet address: http://www.aqmd.gov/home/regulations/ceqa/commenting-agency.

SCAQMD Lead Agency Projects (Attachment C) – Pursuant to CEQA, the SCAQMD periodically acts as lead agency for stationary source permit projects. Under CEQA, the lead agency is responsible for determining the type of CEQA document to be prepared if the proposal is considered to be a "project" as defined by CEQA. For example, an Environmental Impact Report (EIR) is prepared when the SCAQMD, as lead agency, finds substantial evidence that the proposed project may have significant adverse effects on the environment. Similarly, a Negative Declaration (ND) or Mitigated Negative Declaration (MND) may be prepared if the SCAQMD determines that the proposed project will not generate significant adverse environmental impacts, or the impacts can be mitigated to less than significance. The ND and MND are written statements describing the reasons why proposed projects will not have a significant adverse effect on the environment and, therefore, do not require the preparation of an EIR.

Attachment C to this report summarizes the active projects for which the SCAQMD is lead agency and is currently preparing or has prepared environmental documentation. As noted in Attachment C, the SCAQMD continued working on the CEQA documents for five active projects during October.

Attachments

A. Incoming CEQA Documents Log
B. Ongoing Active Projects for Which SCAQMD Has or Will Conduct a CEQA Review
C. Active SCAQMD Lead Agency Projects

ATTACHMENT A*
INCOMING CEQA DOCUMENTS LOG
October 01, 2017 to October 31, 2017

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Goods Movement **LAC171003-06** Berths 226-236 [Everport] Container Terminal Improvements Project	The document extends the public hearing date from October 6, 2017 to October 19, 2017 for the proposed project. The proposed project consists of dredging and disposal of 38,000 cubic yards of sediment, structural improvements to stabilize the wharf, raising of up to five existing cranes, installation of five new cranes, construction of vessel servicing infrastructure with five maritime power vaults, and development of a 23-acre terminal backlands on 229 acres. The project is located on Terminal Island at Berths 226-236, on the west side of Terminal Island along the Main Channel and near the Main Channel Turning Basin in the Port of Los Angeles. Reference LAC170421-03 and LAC141231-05 Comment Period: N/A Public Hearing: 10/19/2017	Notice of Public Notice	City of Los Angeles Harbor Department	Document reviewed - No comments sent
Warehouse & Distribution Centers **LAC171003-27** Development Plan Approval (DPA) Case No. 919-1 & Conditional Use Permit (CUP) Case No. 776.1	The proposed project consists of installment of seven 7,000-gallon steel storage tanks. The project is located at 12904 Park Street near the southwest corner of Telegraph Road and Shoemaker Avenue. Comment Period: N/A Public Hearing: 10/9/2017	Notice of Public Hearing	City of Santa Fe Springs	Document reviewed - No comments sent
Warehouse & Distribution Centers **LAC171004-01** California State University, Long Beach (CSULB) Technology Park Phase III	The proposed project consists of construction of a 205,060-square-foot warehouse on 10 acres. The project is located on the northwest corner of State Route 1 and Cota Avenue. Reference LAC170908-04 Comment Period: N/A Public Hearing: N/A	Technical Data	City of Long Beach	Document reviewed - No comments sent
Warehouse & Distribution Centers **LAC171012-01** Simply Self-Storage Development Project	The proposed project consists of demolition of three buildings and construction of a 145,032-square-foot warehouse and a 1,344-square-foot office building on 2.04 acres. The project is located on the northwest corner of Best Avenue and Rosecrans Avenue. Comment Period: 10/12/2017 - 11/1/2017 Public Hearing: 11/13/2017	Mitigated Negative Declaration	City of Santa Fe Springs	Document reviewed - No comments sent

**Sorted by Land Use Type (in order of land uses most commonly associated with air quality impacts), followed by County, then date received.*

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

** Disposition may change prior to Governing Board Meeting

Documents received by the CEQA Intergovernmental Review program but not requiring review are not included in this report.

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
October 01, 2017 to October 31, 2017

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC171003-14** Date Palm Business Park Project	The proposed project consists of construction of a 1,200,000-square-foot industrial business park on 82 acres. The project is located near the southeast corner of Avenue 48 and Harrison Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102017-mnd-date-palm-business-park.park.pdf Comment Period: 9/29/2017 - 10/29/2017 Public Hearing: 10/18/2017	Mitigated Negative Declaration	City of Coachella	SCAQMD staff commented on 10/20/2017
Warehouse & Distribution Centers **RVC171004-04** Duke Warehouse at Patterson Avenue and Markham Street Project	The proposed project consists of construction of a 811,620-square-foot warehouse on 37.3 acres. The project is located on the southeast corner of Markham Street and Patterson Avenue. Comment Period: 10/4/2017 - 11/2/2017 Public Hearing: 11/1/2017	Notice of Preparation	City of Perris	** Under review, may submit written comments
Warehouse & Distribution Centers **RVC171006-01** Duke Warehouse at Indian Avenue and Markham Street Project	The proposed project consists of construction of a 668,681-square-foot warehouse on 31 acres. The project is located on the southwest corner of Markham Street and Indian Avenue. Reference RVC170614-07 and RVC170125-02 Comment Period: N/A Public Hearing: 10/18/2017	Response to Comments	City of Perris	Document reviewed - No comments sent
Warehouse & Distribution Centers **RVC171006-03** Plot Plan No. 26220, Amended No. 3 - EA43004	The proposed project consists of construction of a trucking distribution center with a 73,825-square-foot loading dock and a 10,000-square-foot office on 19.19 acres. The project is located on the northeast corner of Placentia Avenue and Harvill Avenue in the community of Mead Valley. Reference RVC170901-12, RVC170526-02 and RVC170330-13 Comment Period: N/A Public Hearing: 10/26/2017	Site Plan	County of Riverside	Document reviewed - No comments sent

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
October 01, 2017 to October 31, 2017

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC171013-03** Meridian West Campus-Lower Plateau Project	The proposed project consists of construction of two warehouses totaling 1,845,000 square feet, three industrial buildings totaling 362,000 square feet, and 66,000 square feet of retail and office uses on 130 acres. The project is located on the southwest corner of Alessandro Boulevard and Meridian Parkway. Reference RVC170620-10 and RVC160610-01 Comment Period: N/A Public Hearing: N/A	Response to Comments	March Joint Powers Authority	Document reviewed - No comments sent
Warehouse & Distribution Centers **RVC171018-06** Meridian West Campus-Lower Plateau Project	The proposed project consists of construction of two warehouses totaling 1,845,000 square feet, three industrial buildings totaling 362,000 square feet, and 66,000 square feet of retail and office uses on 130 acres. The project is located on the southwest corner of Alessandro Boulevard and Meridian Parkway. Reference RVC171013-03, RVC170620-10 and RVC160610-01 Comment Period: N/A Public Hearing: 10/25/2017	Notice of Public Hearing	March Joint Powers Authority	Document reviewed - No comments sent
Warehouse & Distribution Centers **RVC171019-01** Development Review (DPR) 17-00006	The proposed project consists of construction of a 210,629-square-foot industrial building on 9.8 acres. The project is located on the southwest corner of Harley Knox Boulevard and Redlands Avenue. Comment Period: 10/19/2017 - 11/13/2017 Public Hearing: N/A	Site Plan	City of Perris	SCAQMD staff commented on 11/8/2017
Warehouse & Distribution Centers **SBC171005-05** Pacific Freeway Center	The proposed project consists of construction of two warehouses totaling 522,000 square feet on 26.62 acres. The project is located at 10829 Etiwanda Avenue on the southeast corner of Interstate 10 and Etiwanda Avenue. Reference SBC170406-06 Comment Period: 10/5/2017 - 11/20/2017 Public Hearing: 11/7/2017	Draft Environmental Impact Report	City of Fontana	** 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
October 01, 2017 to October 31, 2017

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **SBC171025-02** Cedar Avenue Technology Center (P20161600435/CUP)	The proposed project consists of construction of a 184,770-square-foot warehouse on 9.8 acres. The project is located on the northeast corner of Cedar Avenue and Orange Street in the community of Bloomington. Comment Period: 10/25/2017 - 11/13/2017 Public Hearing: N/A	Mitigated Negative Declaration	County of San Bernardino	** Under review, may submit written comments
Industrial and Commercial **LAC171003-11** Development Plan Approval Case No. 922, Modification Permit Case No. 1279, Lot Line Adjustment Case No. 2017-02, Revocation of Conditional Use Permit Case No. 507 & Environmental Documents	The proposed project consists of construction of a 71,743-square-foot industrial building on 3.52 acres. The project is located at 14013 Marquardt Avenue near the northwest corner of Rosecrans Avenue and Marquardt Avenue. Comment Period: 9/18/2017 - 10/8/2017 Public Hearing: 10/9/2017	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Santa Fe Springs	Document reviewed - No comments sent
Industrial and Commercial **LAC171020-02** L.A. Valley Garden Plaza Project (9933 Valley Blvd.)	The proposed project consists of demolition of a 12,000-square-foot structure and construction of a 17,000-square-foot commercial building with subterranean parking on 0.52 acres. The project is located on the northwest corner of Valley Boulevard and Eunice Avenue. Reference LAC170629-07 Comment Period: N/A Public Hearing: 10/24/2017	Response to Comments	City of El Monte	Document reviewed - No comments sent

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

ATTACHMENT A
INCOMING CEQA DOCUMENTS LOG
October 01, 2017 to October 31, 2017

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **RVC171003-01** Thompson Village (Specific Plan No. 284 Amendment 4, Change of Zone No. 7951, Plot Plan No. 26344, Conditional Use Permit No. 3779, Tentative Parcel Map No. 37404 - EA43061)	The proposed project consists of construction of a 133,877-square-foot shopping center with a gas station on 21.16 acres. The project is located on the northeast corner of Winchester Road and Thompson Road in the Southwest community. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-thompsonvillage-100417.pdf Comment Period: N/A Public Hearing: 10/5/2017	Site Plan	County of Riverside	SCAQMD staff commented on 10/4/2017
Industrial and Commercial **RVC171013-02** Coachella Brands Project (Conditional Use Permit 289 and Variance 17-05)	The proposed project consists of demolition of a 7,500-square-foot building and construction of a 91,948-square-foot industrial facility on 6.48 acres. The project is located at 84-805 Avenue 48 near the southeast corner of Avenue 48 and Dillon Road. Comment Period: 10/7/2017 - 10/27/2017 Public Hearing: 11/1/2017	Mitigated Negative Declaration	City of Coachella	Document reviewed - No comments sent
Industrial and Commercial **RVC171025-01** Coachella Green Project	The proposed project consists of construction of 14 industrial buildings totaling 644,567 square feet on 49.17 acres. The project is located at 86-601 Industrial Way on the northeast corner of Industrial Way and Polk Street. Comment Period: 10/25/2017 - 11/13/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Coachella	Document reviewed - No comments sent
Industrial and Commercial **SBC171011-01** Chino RV Storage Facility Project	The proposed project consists of construction of a recreational vehicle facility with 313 storage spaces and a 384-square-foot office on 7.19 acres. The project is located on the northwest corner of Mountain Avenue and Edison Avenue. Reference SBC141205-06, SBC140627-02 and SBC131219-02 Comment Period: 10/11/2017 - 11/23/2017 Public Hearing: N/A	Notice of Availability of a Recirculated Draft Environmental Impact Report	City of Chino	** 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
October 01, 2017 to October 31, 2017

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Waste and Water-related **LAC171003-10** Palos Verdes Recycled Water Pipeline Project	The proposed project consists of a 20,000-linear-foot pipeline extension, and construction of a water storage tank and a 1,000-square-foot building on 2,400 square feet. The project is located on the northwest corner of Paseo Del Campo and Via Campesina in the northern portion of the City of Palos Verdes Estates and the southern portion of the City of Torrance. Comment Period: 9/22/2017 - 10/23/2017 Public Hearing: N/A	Mitigated Negative Declaration	West Basin Municipal Water District	Document reviewed - No comments sent
Waste and Water-related **LAC171003-23** Corrective Action Complete with Controls for HRL Laboratories, LLC.	The proposed project consists of completion of assessment and determination of no significant impacts from contamination as part of Resource Conservation Recovery Act (RCRA) permit closure activities. The project is located at 3011 Malibu Canyon Road on the northwest corner of Potter Road and Malibu Canyon Road in the City of Malibu in Los Angeles County. Comment Period: 10/2/2017 - 11/1/2017 Public Hearing: N/A	Community Notice	Department of Toxic Substances Control	Document reviewed - No comments sent
Waste and Water-related **LAC171013-05** Phillips 66 Carson Refinery	The proposed project consists of renewal of post-closure permit for continued storage of process water and oil/water sludge. The project is located at 1520 East Sepulveda Boulevard near the southeast corner of East Sepulveda Boulevard and South Wilmington Avenue in the City of Carson. Comment Period: N/A Public Hearing: N/A	Permit Renewal	Department of Toxic Substances Control	Document reviewed - No comments sent
Waste and Water-related **LAC171017-01** Raytheon Space & Airborne Systems - Request for Class 1 Permit Modification	The proposed project consists of update to the approved closure plan to convert existing storage yards to 90-day hazardous waste storage areas on 127 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. Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent

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Waste and Water-related **LAC171024-05** Draft Cleanup Plan for Proposed Pathway High School Independent Studies (a Portion of Hosler Middle School)	The proposed project consists of excavation, disposal, and transport of 148 cubic yards of contaminated soil. The project is located at 11387 Bullis Road on the northwest corner of Bulllis Road and Platt Avenue in the City of Lynwood. Comment Period: 10/19/2017 - 11/18/2017 Public Hearing: N/A	Draft Removal Action Work Plan	Department of Toxic Substances Control	Document reviewed - No comments sent
Waste and Water-related **LAC171024-06** Veolia ES Technical Solutions, LLC.	The proposed project consists of permit renewal to change contact information. The project is located at 9211 Oakdale Avenue on the southwest corner of Praire Street and Oakdale Avenue in the community of Chatsworth. Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent
Waste and Water-related **ORC171010-03** Seawater Desalination Project	The proposed project consists of construction of a 50-million-gallon-per-day seawater desalination facility with modifications to the outfall and intake pipelines on 11.78 acres. The project is located on the southeast corner of Newland Street and Edison Drive in the City of Huntington Beach. Reference ORC170530-02, ORC161122-08, ORC100824-01 and ORC100507-06 Comment Period: N/A Public Hearing: 10/19/2017	Notice of Availability of a Final Supplemental Environmental Impact Report	California State Lands Commission	Document reviewed - No comments sent
Waste and Water-related **ORC171013-04** Kinsbursky Brothers, Inc. - Notice of Class 1 Permit Modification	The proposed project consists of update to the facility closure cost financial assurance mechanism. The project is located at 1314 North Anaheim Boulevard on the northeast corner of West Commercial Street and North Anaheim Boulevard in the City of Anaheim. Comment Period: N/A Public Hearing: N/A	Permit Modification	Department of Toxic Substances Control	Document reviewed - No comments sent

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Waste and Water-related **ORC171025-07** Eastwood Recycled Water Pump Station Project	The proposed project consists of construction of a 6,800-square-foot station with 14 pumps, three surge tanks, and stormwater drainage infrastructure on 0.75 acres. The project is located on the northwest corner of Jeffrey Road and Irvine Boulevard in the City of Irvine. Comment Period: 10/24/2017 - 11/22/2017 Public Hearing: N/A	Mitigated Negative Declaration	Irvine Ranch Water District	Document reviewed - No comments sent
Waste and Water-related **RVC171003-22** Perris Dam Emergency Release Facility Project	The proposed project consists of construction of an emergency release facility and modification to existing emergency water release valve and control system on 75 acres. The project is located along Ramona Expressway between East Rider Street and the Perris Valley Channel in the City of Perris in Riverside County. Reference RVC160913-09 and RVC130911-03 Comment Period: 9/29/2017 - 11/13/2017 Public Hearing: N/A	Notice of Availability of a Recirculated Draft Environmental Impact Report	California Department of Water Resources	Document reviewed - No comments sent
Waste and Water-related **RVC171025-06** Stringfellow Superfund Site Project Update	The proposed project consists of soil and surface water samplings and analyses as part of the ongoing cleanup activities. The project is located at 3400 Pyrite Street near the northeast corner of Granite Hill Drive and Pyrite Street in the City of Jurupa Valley. Reference RVC150814-02 and SBC140319-01 Comment Period: N/A Public Hearing: 10/18/2017	Community Notice	Department of Toxic Substances Control	Document reviewed - No comments sent
Waste and Water-related **SBC171018-02** Advanced Environmental, Inc. DBA World Oil Environmental Services	The proposed project consists of permit renewal to increase hazardous waste storage capacity from 472,560 gallons to 535,460 gallons on 4.3 acres. The project is located at 13579 Whittram Avenue on the southwest corner of Mulberry Avenue and Whittram Avenue in the City of Fontana. Comment Period: N/A Public Hearing: N/A	Permit Renewal	Department of Toxic Substances Control	Document reviewed - No comments sent

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Waste and Water-related **SBC171019-08** Filter Recycling Services, Inc.	The proposed project consists of permit renewal to continue the storage and treatment of hazardous waste within a 15,000-square-foot building. The project is located at 180 West Monte Avenue on the northwest corner of West Mindanao Street and South Riverside Avenue in the City of Rialto. Comment Period: N/A Public Hearing: N/A	Permit Renewal	Department of Toxic Substances Control	Document reviewed - No comments sent
Utilities **LAC171017-05** Inglewood Oil Field Specific Plan Project	The proposed project consists of update and superseding of the City's existing oil drilling regulations to establish safeguards and controls for drilling and production of oil, gas, and other hydrocarbon substances on 77.8 acres. The project is located on the northwest corner of South Fairfax Avenue and La Cienega Boulevard. Reference LAC170914-10, LAC170905-03, LAC170711-11, LAC170117-01 and LAC151008-17 Comment Period: 9/15/2017 - 11/14/2017 Public Hearing: 10/24/2017	Notice of Public Hearing	City of Culver City	Document reviewed - No comments sent
Transportation **LAC171003-17** Asilomar Boulevard Landslide Mitigation Project	The proposed project consists of improvements to roadways of 600 feet in length and 50 feet in width. The project is located along Asilomar Boulevard between Almar Avenue and Wynola Street in the community of Pacific Palisades. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102417NOPasilomarblvd.pdf Comment Period: 9/28/2017 - 10/27/2017 Public Hearing: 10/10/2017	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 10/24/2017
Transportation **LAC171010-05** Rosecrans/Marquardt Grade Separation Project	The proposed project consists of construction of grade-separation of Rosecrans Avenue and Marquardt Avenue from the Burlington Northern Santa Fe railway. The project is located at the intersection of Rosecrans Avenue and Marquardt Avenue. Comment Period: N/A Public Hearing: 10/17/2017	Notice of Public Hearing	City of Santa Fe Springs	Document does not require comments

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Transportation **LAC171013-07** Division 20 Portal Widening and Turnback Facility Project	The proposed project consists of demolition of 306,875 square feet of existing buildings, construction of tracks and switches on Metro Red and Purple lines, installation of traction power substation and emergency backup power generator, reconfiguration of existing tracks and access roads, and modification to the 1st Street Bridge on 45 acres. The project is located on the southeast corner of Commercial Street and Center Street in the community of Central City North. Comment Period: 10/18/2017 - 11/17/2017 Public Hearing: 10/25/2017	Notice of Preparation	Los Angeles County Metropolitan Transportation Authority	** Under review, may submit written comments
Transportation **LAC171013-08** Division 20 Portal Widening and Turnback Facility Project	The proposed project consists of demolition of 306,875 square feet of existing buildings, construction of tracks and switches on the Metro Red and Purple Lines, installation of traction power substation and emergency backup power generator, reconfiguration of existing tracks and access roads, and modification to the 1st Street Bridge on 45 acres. The project is located on the southeast corner of Commercial Street and Center Street in the community of Central City North. Reference LAC171013-07 Comment Period: N/A Public Hearing: 10/25/2017	Notice of Public Hearing	Los Angeles County Metropolitan Transportation Authority	Document reviewed - No comments sent
Transportation **LAC171020-01** Firestone Boulevard Regional Corridor Capacity Enhancements Project	The proposed project consists of installation of bus shelters, benches, trash receptacles, banners, and sculptures, and improvements to landscape and traffic circulation along Firestone Boulevard between Alameda Street and Rayo Avenue. Comment Period: N/A Public Hearing: N/A	Community Notice	City of South Gate	Document reviewed - No comments sent
Transportation **LAC171026-05** Liberty Canyon Wildlife Crossing Project	The proposed project consists of construction of a one-mile wildlife crossing over U.S. Route 101 west of Liberty Canyon Road from Postmile 32.8 to Postmile 33.8 in the City of Agoura Hills. Comment Period: 9/7/2017 - 10/26/2017 Public Hearing: 10/12/2017	Notice of Intent to Adopt a Mitigated Negative Declaration	California Department of Transportation	Document reviewed - No comments sent

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Transportation **ORC171024-04** Laguna Beach Village Entrance Project	The proposed project consists of roadway improvements for parking reconfiguration, landscape enhancements, multi-purpose pathway, and center median improvements along 0.6 miles of Laguna Canyon Road between Forest Avenue and Canyon Acres Drive. Comment Period: 10/23/2017 - 11/21/2017 Public Hearing: 12/5/2017	Mitigated Negative Declaration	City of Laguna Beach	Document reviewed - No comments sent
Institutional (schools, government, etc.) **LAC171003-04** Mt. San Antonio College West Parcel Solar Parcel	The proposed project consists of construction of a 2.2-megawatt solar panel system on 27.65 acres. The project is located on the southwest corner of Grand Avenue and Temple Avenue in the City of Walnut. Reference LAC170728-02, LAC170616-04, LAC170526-01 and LAC151229-13 Comment Period: N/A Public Hearing: 10/11/2017	Response to Comments	Mt. San Antonio College District	Document reviewed - No comments sent
Institutional (schools, government, etc.) **LAC171003-05** San Pedro High School Comprehensive Modernization Project	The proposed project consists of demolition of 13 buildings totaling 50,904 square feet and construction of two buildings totaling 58,102 square feet on 22.9 acres. The project will also include a Remedial Action Workplan to remove 226 cubic yards of contaminated soil. The project is located at 1001 West 15th Street on the northeast corner of South Leland Street and West 17th Street in the community of San Pedro. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/october-24-2017---nop---san-pedro-high-school-comprehensive-modernization-project.pdf Comment Period: 9/29/2017 - 10/28/2017 Public Hearing: 10/3/2017	Notice of Preparation	Los Angeles Unified School District	SCAQMD staff commented on 10/24/2017
Institutional (schools, government, etc.) **LAC171018-01** Roosevelt High School Comprehensive Modernization Project	The proposed project consists of demolition of 17 portable classroom buildings and construction of six administrative and classroom buildings totaling 236,000 square feet on 22.7 acres. The project is located at 456 South Mathews Street on the northeast corner of South Soto Street and East 6th Street in the community of Boyle Heights. Comment Period: 10/18/2017 - 11/16/2017 Public Hearing: N/A	Notice of Preparation	Los Angeles Unified School District	** Under review, may submit written comments

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Institutional (schools, government, etc.) **LAC171018-07** Ulysses S. Grant High School Comprehensive Modernization Project	The proposed project consists of demolition of 87,298 square feet, remodeling of 49 classrooms totaling 142,081 square feet, and construction of three classrooms totaling 89,760 square feet on 32.4 acres. The project is located on the southeast corner of Oxnard Street and Ethel Avenue in the community of Valley Glen in the City of Los Angeles. Comment Period: 10/17/2017 - 11/17/2017 Public Hearing: 10/19/2017	Mitigated Negative Declaration	Los Angeles Unified School District	Document reviewed - No comments sent
Institutional (schools, government, etc.) **LAC171019-02** Los Angeles County Consolidated Correctional Treatment Facility Project (Men's Central Jail Replacement Project)	The proposed project consists of demolition of the existing jail facility and construction of a 2.4 million-square-foot new facility with 3,885 beds on 17.7 acres. The project will also include construction of a parking structure with either 1,500 spaces under Option One or 3,000 spaces under Option Two. The project is located on the northeast corner of North Vignes Street and Bauchet Street in the community of Central City North. Reference LAC150618-14 Comment Period: 10/19/2017 - 12/18/2017 Public Hearing: 10/30/2017	Draft Environmental Impact Report	County of Los Angeles	** Under review, may submit written comments
Institutional (schools, government, etc.) **LAC171026-02** ArtCenter College of Design Master Plan	The proposed project consists of development of two campuses: the Hillside Campus and the South Campus over 15 years. The Hillside Campus will include construction of two buildings totaling 19,020 square feet and photovoltaic canopies with a maximum height of 20 feet on 155.95 acres. The South Campus will include construction of two student housing buildings with a maximum of 850 beds totaling 240,000 square feet and four administrative buildings totaling 220,000 square feet on 6.68 acres. The Hillside Campus of the project is located at 1700 Lida Street on the southeast corner of Pegfair Lane and Figueroa Street. The South Campus of the project is located on the northeast corner of South Raymond Avenue and East Glenarm Street. Comment Period: 10/26/2017 - 12/11/2017 Public Hearing: 11/8/2017	Draft Environmental Impact Report	City of Pasadena	** Under review, may submit written comments
Institutional (schools, government, etc.) **LAC171026-03** LACMA Building for the Permanent Collection	The proposed project consists of demolition of five museum facilities totaling 392,871 square feet and construction of a 387,500-square-foot museum building on 2.5 acres. The project is located on the southeast corner of Wilshire Boulevard and Spaulding Avenue. Reference LAC160804-06 Comment Period: 10/26/2017 - 12/15/2017 Public Hearing: 11/7/2017	Draft Environmental Impact Report	County of Los Angeles	** Under review, may submit written comments

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Institutional (schools, government, etc.) **ODP171025-04** The Hawaii-Southern California Training and Testing Activities	The proposed project consists of conducting ongoing military training and testing activities. The proposal also includes use of active sonar and explosives. The project is located off the coasts of Hawaii and Southern California near the San Diego Naval Base. Reference ODP120531-05 Comment Period: 10/13/2017 - 12/12/2017 Public Hearing: 11/13/2017	Notice of Availability of a Draft Environmental Impact Statement/ Overseas Environmental Impact Statement	United States Department of the Navy	Document reviewed - No comments sent
Institutional (schools, government, etc.) **ORC171003-03** Santa Ana Unified School District - Carver Elementary	The proposed project consists of demolition of eight portable classrooms totaling 8,000 square feet and construction of a 11,300-square-foot building on 2.3 acres. The project is located at 1401 West Santa Ana Boulevard on the northeast corner of Santa Ana Boulevard and North Pacific Avenue in the City of Santa Ana, Orange County. Comment Period: 9/29/2017 - 10/18/2017 Public Hearing: 11/28/2017	Mitigated Negative Declaration	Santa Ana Unified School District	Document reviewed - No comments sent
Institutional (schools, government, etc.) **SBC171025-03** Ling Yen Mountain Temple	The proposed project consists of construction of 24 buildings totaling 145,174 square feet on 37 acres. The project is located at 13938 Decliff Drive on the northwest corner of Decliff Drive and Dawnridge Drive in the community of Etiwanda. Comment Period: 10/25/2017 - 11/27/2017 Public Hearing: N/A	Notice of Preparation	County of San Bernardino	** Under review, may submit written comments
Medical Facility **LAC171024-07** ENV-2016-1662/Providence Tarzana Medical Center	The proposed project consists of demolition of 37,198 square feet of existing structures and construction of 294,000 square feet on 13 acres. The project is located at 18321 Clark Street on the northwest corner of Clark Street and Etiwanda Avenue in the community of Encino-Tarzana. Reference LAC170616-03 and LAC160715-01 Comment Period: N/A Public Hearing: 11/14/2017	Notice of Public Hearing	City of Los Angeles	Document reviewed - No comments sent

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Retail **LAC171003-07** 550 N. Third Street Hotel Project	The proposed project consists of demolition of 11,477 square feet and construction of a 17,340-square-foot hotel with 196 rooms with subterranean parking on 0.89 acres. The project is located on the southeast corner of Cypress Avenue and Third Street. Comment Period: 9/28/2017 - 10/18/2017 Public Hearing: 10/23/2017	Negative Declaration	City of Burbank	Document reviewed - No comments sent
Retail **LAC171003-16** Arts Club Project	The proposed project consists of demolition of a 19,670-square-foot commercial building and construction of a 132,000-square-foot building with subterranean parking on 20,241 square feet. The project is located at 8920 West Sunset Boulevard and 1024-1036 North Hilldale Avenue on the southeastern corner of West Sunset Boulevard and North Hilldale Avenue. Reference LAC160429-04 and LAC160421-08 Comment Period: 9/28/2017 - 11/13/2017 Public Hearing: N/A	Draft Environmental Impact Report	City of West Hollywood	Document reviewed - No comments sent
Retail **RVC171003-08** Revision to the Junction Commercial Center (Plot Plan No. 2017-287)	The proposed project consists of construction of 269,496 square feet of retail buildings, a 82,630-square-foot hotel, and a 248,992-square-foot senior facility on 54.01 acres. The project is located on the northwest corner of Haun Road and Scott Road. Reference RVC140225-04 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-junctioncommercial-101717.pdf Comment Period: 9/25/2017 - 10/18/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 10/17/2017
Retail **RVC171012-02** Vinters Retail Center - Conditional Use Permit No. 2016-290 and Tentative Parcel Map No. 2016-091 - PC1	The proposed project consists of construction of a 28,925-square-foot retail center and a 4,608-square-foot gas station with six fueling pumps on 4.82 acres. The project is located on the northwest corner of Trumble Road and Highway 74. Comment Period: 10/11/2017 - 11/3/2017 Public Hearing: N/A	Site Plan	City of Menifee	** Under review, may submit written comments

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Retail **RVC171024-02** Planning Application No. 2017-061	The proposed project consists of subdivision of 15.33 acres for future development of a gasoline dispensing station with eight dual pumps, a 3,800-square-foot convenience store, a 2,080-square-foot car wash facility, and a 4,365-square-foot restaurant. The project is located on the southwest corner of Ethanac Road and Barnett Road. Comment Period: 10/24/2017 - 11/8/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 11/7/2017
Retail **RVC171026-01** General Plan Amendment No. 1165, Change of Zone No. 7900, and Conditional Use Permit No. 3739 AMD No. 1 (EA42871)	The proposed project consists of construction of a gasoline dispensing station with 10 fueling pumps, a 5,881-square-foot convenience store, a 1,262-square-foot car wash facility, and a 6,549-square-foot canopy on 2.6 acres. The project is located on the northeast corner of Cajalco Road and Temescal Canyon Road in the community of Temescal Canyon. Comment Period: 10/26/2017 - 11/15/2017 Public Hearing: 11/15/2017	Negative Declaration	County of Riverside	** Under review, may submit written comments
Retail **SBC171024-01** P201700395/CUP	The proposed project consists of construction of a 340-square-foot building, a 5,112-square-foot canopy, and a gasoline fueling station on 1.11 acres. The project is located on the southwest corner of Whittram Avenue and Cherry Avenue within the boundaries of City of Fontana. Comment Period: 10/24/2017 - 11/2/2017 Public Hearing: N/A	Site Plan	County of San Bernardino	** Under review, may submit written comments
General Land Use (residential, etc.) **LAC171003-15** 668 S. Alameda Street Project (ENV-2016-3576-EIR)	The proposed project consists of demolition of four buildings totaling 131,350 square feet, and construction of a 577,301-square-foot building with 475 residential units and subterranean parking on 3.75 acres. The project is located on the southeast corner of South Alameda Street and Industrial Street in the community of Central City North. Reference LAC161202-01 Comment Period: 9/28/2017 - 11/13/2017 Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	SCAQMD staff commented on 11/8/2017

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General Land Use (residential, etc.) **LAC171003-18** 945 W. 8th Street Project (ENV-2017-2513-EIR)	The proposed project consists of construction of a 791,843-square-foot building with 781 residential units, 84,700 square feet of open space, and subterranean parking on a 1.29-acre portion of 7.7 acres. The project is located on the northwest corner of Figueroa Street and 8th Street in the community of Central City. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102417nop945w8thst.pdf Comment Period: 9/28/2017 - 10/27/2017 Public Hearing: 10/19/2017	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 10/24/2017
General Land Use (residential, etc.) **LAC171003-21** 6433 La Tuna Canyon Road	The proposed project consists of subdivision of 58.32 acres for construction of 229 residences. The project is located on the northwest corner of La Tuna Canyon Road and Tujunga Canyon Boulevard in the community of Tujunga. Reference LAC151204-03 Comment Period: 9/28/2017 - 11/13/2017 Public Hearing: N/A	Recirculated Draft Environmental Impact Report	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) **LAC171003-25** Lot Line Adjustment Case No. 2017-03	The proposed project consists of consolidation of four existing parcels on seven acres. The project is located at 8820 Dice Road near the southeast corner of Burke Street and Dice Road. Comment Period: N/A Public Hearing: 10/9/2017	Notice of Public Hearing	City of Santa Fe Springs	Document reviewed - No comments sent
General Land Use (residential, etc.) **LAC171005-02** ENV-2016-2684: 1800 E. 7th St.	The proposed project consists of demolition of a parking lot and construction of a 129,440-square-foot building with 122 residential units and subterranean parking on 0.67 acres. The project is located on the southeast corner of 7th Street and Decatur Street in the community of Central City North. Comment Period: 10/5/2017 - 11/6/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	** Under review, may submit written comments

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General Land Use (residential, etc.) **LAC171005-03** ENV-2016-3609: 800-824 S. Western Ave. & 801 S. Oxford Ave.	The proposed project consists of demolition of 11,450 square feet, and construction of two buildings totaling 229,138 square feet with 96 residential units and a 148-room hotel on 1.41 acres. The project is located on the southwest corner of 8th Street and Oxford Avenue in the community of Wilshire. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102517mnd-env-2016-3609.pdf Comment Period: 10/5/2017 - 10/25/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 10/25/2017
General Land Use (residential, etc.) **LAC171005-04** ENV-2016-3181: 1000 S. Vermont Ave.	The proposed project consists of demolition of a gas station with 12 pumps and construction of a 271,242-square-foot building with 228 residential units on 2.16 acres. The project is located on the southeast corner of Vermont Avenue and Olympic Boulevard in the community of Wilshire. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102017mnd1000-s-vermont-ave.pdf Comment Period: 10/5/2017 - 10/25/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	SCAQMD staff commented on 10/20/2017
General Land Use (residential, etc.) **LAC171006-06** 1001 Olympic (Olympia) - ENV-2016-4889-EIR	The proposed project consists of demolition of a 43,892-square-foot medical facility, and construction of three buildings totaling 1,845,831 square feet with subterranean parking on 3.26 acres. The project will be developed with one of the two options. Option one will include 1,367 residential units. Option two will include 879 residential units and a hotel with 1,000 rooms. The project is located on the northwest corner of Olympic Boulevard and Georgia Street in the community of Central City. Comment Period: 10/5/2017 - 11/6/2017 Public Hearing: 10/19/2017	Notice of Preparation	City of Los Angeles	** Under review, may submit written comments
General Land Use (residential, etc.) **LAC171010-01** Tentative Parcel Map No. 74368 - Planning Case No. PL 2017-25	The proposed project consists of subdivision of 13.35 acres into three parcels. The project is located at 21680 and 21688 Gateway Center Drive near the northeast corner of Golden Springs Drive and Gateway Center Drive. Reference LAC170907-04 Comment Period: N/A Public Hearing: 10/17/2017	Notice of Public Hearing	City of Diamond Bar	Document reviewed - No comments sent

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General Land Use (residential, etc.) **LAC171012-03** The Fig (ENV-2016-1892-EIR)	The proposed project consists of demolition of eight residential buildings totaling 33,720 square feet, and construction of a 624,167-square-foot building with a 298-room hotel, 408 residential units, and subterranean parking on 4.4 acres. The project is located on the southwest corner of 39th Street and Flower Drive in the community of Southeast Los Angeles. Reference LAC160719-02 Comment Period: 10/12/2017 - 11/27/2017 Public Hearing: N/A	Draft Environmental Impact Report	City of Los Angeles	** Under review, may submit written comments
General Land Use (residential, etc.) **LAC171013-01** 945 W. 8th Street Project (ENV-2017-2513-EIR)	The document consists of extension of the public comment period from October 27, 2017 to November 10, 2017. The document consists of no changes to project description in the original Notice of Preparation for the proposed project. The proposed project consists of construction of a 791,843-square-foot building with 781 residential units, 84,700 square feet of open space, and subterranean parking on a 1.29-acre portion of 7.7 acres. The project is located on the northwest corner of Figueroa Street and 8th Street in the community of Central City. Reference LAC171003-18 Comment Period: 10/12/2017 - 11/10/2017 Public Hearing: 11/2/2017	Recirculated Notice of Preparation	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) **LAC171017-02** The District at South Bay Specific Plan	The proposed project consists of construction of 1,601,500 square feet of commercial uses, 1,250 residential units, and two hotels with a total of 350 rooms on 168 acres. The project is located on the southeast corner of East Del Amo Boulevard and Main Street. Reference LAC170801-08 Comment Period: N/A Public Hearing: N/A	Technical Data	City of Carson	** Under review, may submit written comments
General Land Use (residential, etc.) **LAC171017-06** The District at South Bay Specific Plan	The proposed project consists of construction of 1,601,500 square feet of commercial uses, 1,250 residential units, and two hotels with a total of 350 rooms on 168 acres. The project is located on the southeast corner of East Del Amo Boulevard and Main Street. Reference LAC171017-02 and LAC170801-08 Comment Period: 10/3/2017 - 11/17/2017 Public Hearing: N/A	Notice of Availability of Draft Supplemental Environmental Impact Report	City of Carson	** 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
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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **LAC171019-04** ENV-2017-1213: 1340-1364 S. Hill St., 145-147 W. 14th St. and 1363 S. Broadway	The proposed project consists of construction of a 270,717-square-foot building with 235 residential units on 54,149 square feet. The project is located on the northeast corner of South Hill Street and West 14th Street in the community of Central City. Comment Period: 10/19/2017 - 11/8/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) **LAC171024-08** 6901 Santa Monica Boulevard Mixed-Use Project (ENV-2015-4612-EIR)	The proposed project consists of demolition of a 54,661-square-foot office and automobile storage buildings and construction of a 15,000-square-foot building with 231 residential units and subterranean parking on 1.67 acres. The project is located on the northwest corner of Santa Monica Boulevard and North Orange Drive in the Hollywood community. Reference LAC170822-04, LAC170307-01 and LAC160211-03 Comment Period: N/A Public Hearing: 11/15/2017	Notice of Public Hearing	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) **LAC171026-04** ENV-2016-4955: 1800-1850 W. Beverly Blvd, 114-118 3/4 S. Bonnie Brae St., and 101-111 S. Burlington Ave.	The proposed project consists of construction of a 223,007-square-foot building with 243 residential units on 1.66 acres. The project is located on the southwest corner of Beverly Boulevard and South Bonnie Brave Street in the community of Westlake. Comment Period: 10/26/2017 - 11/15/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Los Angeles	Document reviewed - No comments sent
General Land Use (residential, etc.) **ORC171003-24** Permit No. 5-15-1670-A2	The proposed project consists of removal of two sludge transport pipelines of four inches in diameter and construction of one sludge transport pipeline of six inches in diameter. The project is located on the northwest corner of Aliso Creek Road and Wood Canyon Drive in the City of Aliso Viejo in Orange County. Comment Period: N/A Public Hearing: N/A	Permit Modification	California Coastal Commission	Document reviewed - No comments sent

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **ORC171004-02** Euclid and Broadway Residential Project (Development Project No. 2016-00042)	The proposed project consists of demolition of 102,432 square feet of commercial buildings and construction of 39 residential units totaling 87,529 square feet on 2.35 acres. The project is located at 312-400 South Euclid Street and 1678 West Broadway on the southeast corner of Euclid Street and West Broadway. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/101817-mnd-euclid-and-broadway-residential-project.pdf Comment Period: 10/5/2017 - 10/24/2017 Public Hearing: 11/13/2017	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Anaheim	SCAQMD staff commented on 10/18/2017
General Land Use (residential, etc.) **ORC171005-01** Village Center	The proposed project consists of demolition of 155,296 square feet of commercial uses, construction of 237 residential units totaling 281,368 square feet, and redevelopment of 42,300 square feet of commercial uses on 21.87 acres. The project is located on the northwest corner of Beach Boulevard and Garden Grove Boulevard. Comment Period: 10/4/2017 - 11/6/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Stanton	SCAQMD staff commented on 11/3/2017
General Land Use (residential, etc.) **ORC171013-06** The Koll Center Residences Project	The document consists of cancelation of the October 19, 2017 Planning Commission study session for the proposed project. The proposed project consists of construction of a mixed-use development with 260 residential units, a 1.17-acre public park, and subterranean parking on 13.16 acres. The project is located at 4400 Von Karman Avenue on the southeast corner of Birch Street and Von Karman Avenue. Reference ORC170914-07 and ORC170201-03 Comment Period: N/A Public Hearing: N/A	Community Notice	City of Newport Beach	Document reviewed - No comments sent
General Land Use (residential, etc.) **ORC171018-04** Aliso Creek Ecosystem Restoration Project	The document consists of corrections to the Draft Integrated Feasibility Report and Integrated Environmental Statement and Environmental Impact Report for the proposed project. The proposed project consists of evaluation of four alternatives for restoring aquatic and riparian habitat connectivity along lower Aliso Creek through the Aliso and Wood Canyons Wilderness Park on 4,200 acres. The four alternatives include: (1) no action; (2) maintenance of similar streambed elevation; (3) restoration of historic streambed elevation; and (4) maintenance of similar streambed elevation with limited grading. The project is located along Alicia Parkway between Pacific Park Drive and the Pacific Ocean in the City of Aliso Viejo in Orange County. Reference ORC170926-12 Comment Period: N/A Public Hearing: N/A	Community Notice	United States Army Corps of Engineers, Los Angeles District	Document reviewed - No comments sent

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **ORC171019-07** The Koll Center Residences Project	This document extends the public review period from October 27, 2017 to November 3, 2017 for the proposed project. The proposed project consists of construction of a mixed-use development with 260 residential units, a 1.17-acre public park, and subterranean parking on 13.16 acres. The project is located at 4400 Von Karman Avenue on the southeast corner of Birch Street and Von Karman Avenue. Reference ORC170914-07 and ORC170201-03 Comment Period: 10/27/2017 - 11/3/2017 Public Hearing: N/A	Extension of Time	City of Newport Beach	Document reviewed - No comments sent
General Land Use (residential, etc.) **RVC171003-02** Tentative Tract Map No. 37028	The proposed project consists of subdivision of 43.91 acres for future development of 154 residential units, three water quality basins, and one drainage basin. The project is located on the southeast corner of Thompson Road and Washington Street in the Southwest community. Comment Period: N/A Public Hearing: 10/18/2017	Notice of Intent to Adopt a Negative Declaration	County of Riverside	Document reviewed - No comments sent
General Land Use (residential, etc.) **RVC171006-04** Tentative Tract Map No. 37089, Amended No. 1 - EA42898	The proposed project consists of subdivision of 48.4 acres for future development of 21 residential units. The project is located on the northwest corner of Pourroy Road and Keller Road in the Southwest community. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102417-SPttm37089.pdf Comment Period: N/A Public Hearing: 10/26/2017	Site Plan	County of Riverside	SCAQMD staff commented on 10/24/2017
General Land Use (residential, etc.) **RVC171018-05** MA17224 (EOT for TTM32722)	The document consists of a request to extend the expiration of the Tentative Tract Map from October 3, 2017 to October 3, 2018 for the proposed project. The proposed project consists of subdivision of 5.66 acres for future development of 16 residences. The project is located on the southwest corner of Mission Boulevard and Sunnyhill Drive. Comment Period: 10/18/2017 - 11/1/2017 Public Hearing: N/A	Extension of Time	City of Jurupa Valley	Document reviewed - No comments sent

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **RVC171024-03** Coachella Village Residential Project	The proposed project consists of construction of 15 residential buildings totaling 223,740 square feet with 242 units on 9.7 acres. The project will also include construction of a 5,000-square-foot daycare facility and a 5,000-square-foot recreation building. The project is located on the southwest corner of Avenue 48 and Van Buren Street. Comment Period: 10/19/2017 - 11/8/2017 Public Hearing: 11/15/2017	Mitigated Negative Declaration	City of Coachella	Document reviewed - No comments sent
General Land Use (residential, etc.) **SBC171006-07** Victoria and Hermosa Residential Project	The proposed project consists of subdivision of 5.43 acres for construction of 19 residential units. The project is located on the northwest corner of Hermosa Avenue and Victoria Street. Comment Period: 10/9/2017 - 11/8/2017 Public Hearing: 11/8/2017	Mitigated Negative Declaration	City of Rancho Cucamonga	Document reviewed - No comments sent
General Land Use (residential, etc.) **SBC171011-02** Parkford Drive Project	The proposed project consists of construction of a 5,000-square-foot retail building, a 9,900-square-foot child care center, and a 120-foot freeway-oriented sign on 6.13 acres. The project is located at 1035-1045 Parkford Drive on the northeast corner of Parkford Drive and Marshall Street. Reference SBC170915-04 and SBC170727-04 Comment Period: N/A Public Hearing: 10/24/2017	Response to Comments	City of Redlands	Document reviewed - No comments sent
Plans and Regulations **ALL171018-03** Title 22, Federal Post-Closure Rule Draft State Regulations, Addition of Enforceable Documents and Flexibility for Post-Closure Requirements	The proposed project consists of adoption of California Code of Regulations, Title 22, Division 4.5, sections 662164.90, 66264.110, 66264.121, 66265.90, 66265.110, 66265.121, 66270.1, 66270.14, and 66270.28 to impose post-closure requirements through alternative and enforceable mechanisms. Comment Period: 10/13/2017 - 12/1/2017 Public Hearing: 12/1/2017	Notice of Public Hearing	Department of Toxic Substances Control	Document reviewed - No comments sent

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **LAC171006-05** Amendment to the Walnut Municipal Code	The proposed project consists of amendment to the accessory dwelling unit zoning code in Title VI (Planning and Zoning), Chapter 25 (Zoning), Article I (General), Section 25-26.4 (Accessory Housing). Comment Period: 10/2/2017 - 10/31/2017 Public Hearing: 11/1/2017	Notice of Intent to Adopt a Negative Declaration	City of Walnut	Document does not require comments
Plans and Regulations **RVC171010-02** Commercial Marijuana Cultivation Permit-17-02/COMC-17-02	The proposed project consists of use of the existing 26,643 square feet of buildings for cultivation of marijuana plants on 3.1 acres. The project is located at 474 West Esplanade Avenue on the southeast corner of West Esplanade Avenue and Commerce Lane. Comment Period: 9/28/2017 - 10/17/2017 Public Hearing: 10/3/2017	Site Plan	City of San Jacinto	Document does not require comments
Plans and Regulations **RVC171025-05** General Plan Amendment No. 1171 and Conditional Use Permit No. 3741	The document extends the public review period from October 18, 2017 to November 1, 2017 for the proposed project. The proposed project consists of amendments to land use designation from Open Space and Conservation to Agriculture on 202 acres. The project also increases green material processing capacity from 12,500 cubic yards to 130,000 cubic yards. The project is located on the southwest corner of Bridge Street and Bettinger Avenue in the community of San Jacinto Valley. Reference RVC170920-03 Comment Period: 9/20/2017 - 11/1/2017 Public Hearing: 10/18/2017	Extension of Time	County of Riverside	Document reviewed - No comments sent
Plans and Regulations **SBC171010-04** Armstrong Ranch Specific Plan/PSP15-002	The proposed project consists of construction of 891 residential units and a 10-acre elementary school on 189.8 acres. The project is located on the northeast corner of Vineyard Avenue and Chino Avenue. Reference SBC161004-06 Comment Period: N/A Public Hearing: 10/24/2017	Notice of Public Hearing	City of Ontario	Document reviewed - No comments sent

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Plans and Regulations **SBC171012-04** Palm Desert Campus 2016 Master Plan	The proposed project consists of development of a planning framework, goals, and programs, and identification of facility needs for future growth in student enrollment. The project is located on the northeast corner of Cook Street and Frank Sinatra Drive in the City of Palm Desert, Riverside County. Comment Period: 10/12/2017 - 11/27/2017 Public Hearing: 11/15/2017	Draft Environmental Impact Report	California State University	** Under review, may submit written comments
Plans and Regulations **SBC171017-03** San Bernardino Countywide Plan	The proposed project consists of development of a countywide General Plan. The project will include four components: (1) a County Policy Plan to develop a new planning policy and approach to county planning, (2) a County Plans Continuum to replace existing Community Plans, (3) a County Business Plan to outline policies and strategies for providing municipal services, and (4) a Regional Issues Forum to share countywide information. Comment Period: 10/17/2017 - 11/20/2017 Public Hearing: 10/26/2017	Notice of Preparation	County of San Bernardino	** Under review, may submit written comments

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ATTACHMENT B*
ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS OR IS CONTINUING TO CONDUCT A CEQA REVIEW

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **LAC170926-11** The Culver Studios Innovation Plan - Comprehensive Plan Amendment No. 7	The proposed project consists of demolition of buildings totaling 236,293 square feet, and construction of a new building and two parking structures totaling 649,420 square feet on 14.3 acres. The project is located at 9336 Washington Boulevard on the southwest corner of Washington Boulevard and Ince Boulevard. Reference LAC170926-06 and LAC161117-06 Comment Period: 9/22/2017 - 11/6/2017 Public Hearing: 10/12/2017	Draft Environmental Impact Report	City of Culver City	**Under review, may submit written comments
Waste and Water-related **ODP170908-05** Santa Susana Field Laboratory Project	The proposed project consists of cleanup of contaminated soil and groundwater and removal of existing facilities on 2,850 acres. The project is located on the southeast corner of Service Area Road and Woolsey Canyon Road in Ventura County. Reference ODP170420-07, ODP170405-01, ODP140116-02, ODP131121-02, ODP100930-02, LAC131018-05, LAC130918-13 and LAC110510-12 Comment Period: 9/7/2017 - 12/7/2017 Public Hearing: 10/5/2017	Draft Program Environmental Impact Report	Department of Toxic Substances Control	**Under review, may submit written comments
Utilities **LAC170914-10** Inglewood Oil Field Specific Plan Project	The proposed project consists of update and superseding of the City's existing oil drilling regulations to establish safeguards and controls for drilling and production of oil, gas, and other hydrocarbon substances on 77.8 acres. The project is located on the northwest corner of South Fairfax Avenue and La Cienega Boulevard. Reference LAC170905-03, LAC170711-11, LAC170117-01 and LAC151008-17 Comment Period: 9/15/2017 - 11/14/2017 Public Hearing: 10/24/2017	Draft Environmental Impact Report	City of Culver City	**Under review, may submit written comments
Warehouse & Distribution Centers **LAC170908-04** California State University, Long Beach (CSULB) Technology Park Phase III	The proposed project consists of construction of 205,060 square feet of warehouse on 10 acres. The project is located on the northwest corner of State Route 1 and Cota Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-csulbtechnology-101017.pdf Comment Period: 9/8/2017 - 10/10/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Long Beach	SCAQMD staff commented on 10/10/2017
Warehouse & Distribution Centers **RVC170906-04** First Perry Logistics Project (Development Plan Review 201600013)	The proposed project consists of construction of a 241,000-square-foot warehouse on 11.12 acres. The project is located on the southwest corner of Redlands Avenue and Perry Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-firstperry-100517.pdf Comment Period: 9/6/2017 - 10/6/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Perris	SCAQMD staff commented on 10/5/2017

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

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ATTACHMENT B
ONGOING ACTIVE PROJECTS FOR WHICH SCAQMD HAS OR IS CONTINUING TO CONDUCT A CEQA REVIEW

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Warehouse & Distribution Centers **RVC170926-05** Sahara Scaffold (Planning Application Plot Plan No. 2017-179)	The proposed project consists of construction of a scaffolding storage yard on 9.57 acres. The project is located on the southwest corner of Ethanac Road and Antelope Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-saharascaffold-101017.pdf Comment Period: 9/20/2017 - 10/13/2017 Public Hearing: N/A	Site Plan	City of Menifee	SCAQMD staff commented on 10/10/2017
Warehouse & Distribution Centers **SBC170905-02** Southwest Fontana Logistics Center	The proposed project consists of construction of two warehouses totaling 1,628,936 square feet on 73.3 acres. The project is located on the southeast corner of Santa Ana Avenue and Oleander Avenue. Reference SBC160923-01 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/101817deir-southwest-fontana-logistics-center.pdf Comment Period: 9/5/2017 - 10/19/2017 Public Hearing: 10/3/2017	Draft Environmental Impact Report	City of Fontana	SCAQMD staff commented on 10/18/2017
Industrial and Commercial **LAC170920-02** 4th and Hewitt Project (ENV-2017-470-EIR)	The proposed project consists of demolition of 14,980 square feet of commercial uses and 39,751 square feet of parking structure, and construction of a 289,203-square-foot commercial building on 1.31 acres. The project is located on the southwest corner of South Hewitt Street and East 4th Street in the community of Central City North. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-4thandhewitt-101717.pdf Comment Period: 9/20/2017 - 10/20/2017 Public Hearing: 10/10/2017	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 10/17/2017
Industrial and Commercial **RVC170922-06** Planning Cases P15-0907 (CUP), P15-0908 (CUP), P15-0909 (DR), P16-0285 (VR), P16-0651 (VR), P17-0544 (PCRN) & P17-0646 (GE) - Main Street Plaza	The proposed project consists of construction of a 2,546-square-foot restaurant, a gas station with 16 pumps, a vehicle service station with a 4,855-square-foot canopy, a 968-square-foot car wash, and a 3,645-square-foot convenience store on 1.99 acres. The project is located at 2234 North Main Street, 2225 Orange Street, and 2243 Orange Street on the northwest corner of Russell Street and Orange Street. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-mainstreetplaza-101017.pdf Comment Period: 9/22/2017 - 10/11/2017 Public Hearing: 10/19/2017	Notice of Intent to Adopt a Mitigated Negative Declaration	City of Riverside	SCAQMD staff commented on 10/10/2017

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Industrial and Commercial **SBC170926-02** Chino Parcel Delivery Facility Project	The proposed project consists of construction of either two industrial buildings totaling 1,420,000 square feet, or one 489,415-square-foot building with a truck re-fueling island on 74.4 acres. The project is located on the southwest corner of Merrill Avenue and Flight Avenue. Reference SBC161222-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-chinoparceldelivery-101717.pdf Comment Period: 9/23/2017 - 10/23/2017 Public Hearing: 10/11/2017	Notice of Preparation	City of Chino	SCAQMD staff commented on 10/17/2017
Waste and Water-related **LAC170912-01** Biogas Renewable Generation Project	The proposed project consists of construction of a 12-megawatt power generation facility, a 0.67-mile natural gas pipeline, a one-mile water pipeline, and two water tanks on a 2.2-acre portion of 95 acres within the 535-acre Scholl Canyon Landfill. The project is located at 3001 Scholl Canyon Road on the northwest corner of North Figueroa Street and Scholl Canyon Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-schollcanyon-101717.pdf Comment Period: 8/30/2017 - 10/20/2017 Public Hearing: N/A	Mitigated Negative Declaration	City of Glendale	SCAQMD staff commented on 10/17/2017
Waste and Water-related **RVC170926-01** Fox Tank Project	The proposed project consists of demolition of an existing tank, and construction of a 1.0-million gallon (MG) tank, a 0.15-MG detention basin, and a pipeline of 12 inches in diameter on 3.35 acres. The project is located on the southeast corner of Headly Road and Fox Street in the community of Mead Valley in Riverside County. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-foxtank-101717.pdf Comment Period: 9/21/2017 - 10/20/2017 Public Hearing: N/A	Notice of Preparation	Eastern Municipal Water District	SCAQMD staff commented on 10/17/2017
Transportation **LAC170721-01** I-710 Corridor Project	The proposed project consists of two new alternatives that were developed in response to public comments on the 2012 Draft EIS/EIR for the proposed project. The new alternatives would include a zero emission and near zero emission truck deployment program, expanded transit services, and a community health benefit program. The project is located along Interstate 710 between Ocean Boulevard and State Route 60 in the County of Los Angeles. Reference LAC150625-10, LAC151013-01, LAC130326-01, LAC120626-01, LAC110429-01, LAC110426-02, LAC110325-03 and LAC100831-06 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/102717-710corridor.pdf Comment Period: 7/21/2017 - 10/23/2017 Public Hearing: 8/23/2017	Recirculated Draft Environmental Impact Report/ Supplemental Draft Environmental Impact Statement	California Department of Transportation	SCAQMD staff commented on 10/20/2017

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SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
Transportation **LAC170914-05** Castaic High School Project Southern Access	The proposed project consists of construction of 1.3 miles of roadway improvements. The project is located on the northwest corner of Hillcrest Parkway and Sloan Canyon Road in the community of Castaic in the County of Los Angeles. Reference LAC140408-04, LAC120724-04, LAC120131-08, LAC111007-04 and LAC110225-04 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-castaichighschool-101017.pdf Comment Period: 9/13/2017 - 10/13/2017 Public Hearing: N/A	Notice of Preparation	William S. Hart Union High School District	SCAQMD staff commented on 10/10/2017
Transportation **LAC170922-05** Reeves Avenue Marine Services Support Yard Project	The proposed project consists of improvement to a 1,000-square-foot area of damaged asphalt and paving of a 5,000-square-foot compacted soil area on 12 acres. The project is located at 801 Reeves Avenue on the northeast corner of Navy Way and Reeves Avenue on Terminal Island in the community of San Pedro. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/101817-nd-reeves-avenue-marine-services-support-yard.pdf Comment Period: 9/22/2017 - 10/23/2017 Public Hearing: N/A	Negative Declaration	Port of Los Angeles	SCAQMD staff commented on 10/18/2017
Medical Facility **LAC170921-03** Kaiser Permanente Los Angeles Medical Center Project	The proposed project consists of demolition of 234,607 square feet of residential, commercial, and parking uses, and construction of 1,082,415 square feet of health care facilities on 15.34 acres. The project is located on the southwest corner of Maubert Avenue and Vermont Boulevard in the community of Hollywood. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-kaiserpermanentela-101717.pdf Comment Period: 9/21/2017 - 10/20/2017 Public Hearing: 10/2/2017	Notice of Preparation	City of Los Angeles	SCAQMD staff commented on 10/17/2017
Retail **ORC170912-14** Bolsa Row Specific Plan - Project Case No. PC 2017-06	The proposed project consists of construction of a 150-room hotel, 20,000 square feet of public assembly area, 45,000 square feet of retail uses, and 205 residential units on six acres. The project is located on the southeast corner of Brookhurst Street and Bolsa Avenue. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-bolsarow-100417.pdf Comment Period: 9/11/2017 - 10/11/2017 Public Hearing: 9/19/2017	Notice of Preparation	City of Westminster	SCAQMD staff commented on 10/4/2017
General Land Use (residential, etc.) **LAC170914-08** Los Robles Apartments Project	The proposed project consists of demolition of 173 residential units, and construction of 307 residential units, 55,180 square feet of recreational areas, and subterranean parking on 3.53 acres. The project is located on the southeast corner of North Los Robles Avenue and East Corson Street. Reference LAC170207-04 and LAC170112-09 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/october-27-2017---deir---los-robles-apartments-project.pdf Comment Period: 9/13/2017 - 10/30/2017 Public Hearing: 10/25/2017	Notice of Availability of a Draft Environmental Impact Report	City of Pasadena	SCAQMD staff commented on 10/27/2017

- 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 SCAQMD HAS OR IS CONTINUING TO CONDUCT A CEQA REVIEW

SCAQMD LOG-IN NUMBER PROJECT TITLE	PROJECT DESCRIPTION	TYPE OF DOC.	LEAD AGENCY	COMMENT STATUS
General Land Use (residential, etc.) **RVC170912-13** Rancho Cucamonga North Eastern Sphere Annexation Specific Plan	The proposed project consists of construction of 3,800 residential units, 280,000 square feet of commercial uses, 20 to 25 acres of open space, and a 16-acre elementary school on a 579-acre portion of 4,388 acres. The project is located northwest of the intersection between Interstate 210 and Interstate 15. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/nop-northeasternsphere-100417.pdf Comment Period: 9/11/2017 - 10/10/2017 Public Hearing: 9/27/2017	Notice of Preparation	City of Rancho Cucamonga	SCAQMD staff commented on 10/4/2017
General Land Use (residential, etc.) **RVC170920-01** MA14143 (TTM36748)	The proposed project consists of subdivision of 33.8 acres for future development of 125 residential units. The project is located at 8601 Limonite Avenue on the northeast corner of Limonite Avenue and Pedley Road. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-ma14143-100417.pdf Comment Period: 9/20/2017 - 10/6/2017 Public Hearing: N/A	Site Plan	City of Jurupa Valley	SCAQMD staff commented on 10/4/2017
General Land Use (residential, etc.) **RVC170922-03** Conditional Use Permit No. 3778 and Tentative Parcel Map No. 37205	The proposed project consists of construction of two restaurants totaling 5,378 square feet, a 7,790-square-foot retail store, a 3,016-square-foot convenience store, a gas station with 12 pumps, and a 3,600-square-foot canopy on 4.29 acres. The project is located on the southeast corner of Cherry Valley Boulevard and Interstate 10 in the community of Cherry Valley. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/sp-cupno3778-101017.pdf Comment Period: N/A Public Hearing: 10/12/2017	Site Plan	County of Riverside	SCAQMD staff commented on 10/10/2017
Plans and Regulations **RVC170901-27** City of Riverside 2014-2021 Housing Element Update Project	The proposed project consists of updates to the Housing Element of the City's General Plan. The project identifies existing and projected housing needs, establishes housing policies, and develops a housing program to respond to current and future housing needs. Reference RVC170413-03 http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/deir-riversidehousing-101317.pdf Comment Period: 9/1/2017 - 10/23/2017 Public Hearing: 10/19/2017	Draft Environmental Impact Report	City of Riverside	SCAQMD staff commented on 10/13/2017
Plans and Regulations **RVC170920-03** General Plan Amendment No. 1171 and Conditional Use Permit No. 3741	The proposed project consists of amendments to land use designation from Open Space and Conservation to Agriculture on 202 acres. The project also consists of increase of green material processing capacity from 12,500 cubic yards to 130,000 cubic yards. The project is located on the southwest corner of Bridge Street and Bettinger Avenue in the community of San Jacinto Valley. http://www.aqmd.gov/docs/default-source/ceqa/comment-letters/2017/mnd-gpa1171cup3741-103117.pdf Comment Period: 9/20/2017 - 11/1/2017 Public Hearing: 10/18/2017	Notice of Intent to Adopt a Mitigated Negative Declaration	County of Riverside	SCAQMD staff commented on 10/31/2017

- 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 SCAQMD LEAD AGENCY PROJECTS
THROUGH OCTOBER 31, 2017

PROJECT DESCRIPTION	PROPONENT	TYPE OF DOCUMENT	STATUS	CONSULTANT
Edgington Oil Company (Edgington) is proposing the following modifications at its existing Edgington Refinery site to allow for additional flexibility in using the site for terminalling operations: 1) add 18 offloading arms at its existing rail tank car loading facility to allow for the offloading of distillates, biodiesel, and renewables (diesel and jet fuels), ethanol, naphtha, alkylates, reformate, and isooctane; 2) modify seven truck loading racks to allow distillates, biodiesel, and renewables to be loaded; 3) modify one rack (two arms) to allow unloading of crude oil from trucks; and 4) modify 16 existing fixed-roof asphalt storage tanks to allow storage of distillates, biodiesel, and renewables.	Edgington Oil Company	Initial Study (IS)	An Initial Study has been prepared by the consultant and SCAQMD staff has provided comments. The consultant is in the process of revising the Initial Study.	InterAct
The Phillips 66 (formerly ConocoPhillips) Los Angeles Refinery Ultra Low Sulfur Diesel project was originally proposed to comply with federal, state and SCAQMD requirements to limit the sulfur content of diesel fuels. Litigation against the CEQA document was filed. Ultimately, the California Supreme Court concluded that the SCAQMD had used an inappropriate baseline and directed the SCAQMD to prepare an EIR, even though the project has been built and has been in operation since 2006. The purpose of this CEQA document is to comply with the Supreme Court's direction to prepare an EIR.	Phillips 66 (formerly ConocoPhillips), Los Angeles Refinery	Environmental Impact Report (EIR)	The Notice of Preparation/Initial Study (NOP/IS) was circulated for a 30-day public comment period on March 26, 2012 to April 26, 2012. The consultant submitted the administrative Draft EIR to SCAQMD in late July 2013. The Draft EIR was circulated for a 45-day public review and comment period from September 30, 2014 to November 13, 2014. Two comment letters were received and responses to comments are being prepared.	Environmental Audit, Inc.
Quemetco is proposing an increase in the daily furnace feed rate.	Quemetco	Environmental Impact Report (EIR)	A Notice of Preparation/Initial Study (NOP/IS) has been prepared by the consultant and SCAQMD staff has provided comments. The consultant is in the process of revising the NOP/IS.	Trinity Consultants

ATTACHMENT C
ACTIVE SCAQMD LEAD AGENCY PROJECTS
THROUGH OCTOBER 31, 2017

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

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 8

PROPOSAL: Adopt Resolution Recognizing Funds and Accepting Terms and Conditions for Funds Appropriated Under AB 134

SYNOPSIS: On September 16, 2017, the Governor approved AB 134 to amend the Budget Act of 2017. This amendment adds appropriations to the Budget Act of 2017, taking effect immediately as a Budget Bill. Under Schedule 3 of this Bill, $250 million is to be distributed by CARB to air districts for implementation of projects pursuant to the Carl Moyer Memorial Air Quality Standards Attainment Program. SCAQMD's allocation of these funds is $107.5 million. This action is to adopt a Resolution recognizing funds up to $107.5 million from CARB into the Carl Moyer Program Fund (32) and accepting terms and conditions for funds as appropriated under Schedule 3 of AB 134 in the amended Budget Act of 2017.

COMMITTEE: Special Administrative, November 20, 2017; Recommended for Approval

RECOMMENDED ACTION:
Adopt the attached Resolution recognizing, upon receipt, up to $107.5 million from CARB into the Carl Moyer Program Fund (32) and accepting the terms and conditions for the funds as appropriated under Schedule 3 of AB 134 in the amended Budget Act of 2017.

Wayne Nastri
Executive Officer

MMM:FM

Background
On September 16, 2017, the Governor approved AB 134 to amend the Budget Act of 2017. This amendment adds appropriations to the Budget Act of 2017, taking effect immediately as a Budget Bill. Under Schedule 3 of this Bill, $250 million is to be distributed by CARB to air districts for implementation of projects pursuant to the Carl Moyer Memorial Air Quality Standards Attainment Program. SCAQMD's allocation of these funds is $107.5 million.

Proposal
This action is to adopt the attached Resolution recognizing up to $107.5 million from CARB into the Carl Moyer Program Fund (32) and accepting the terms and conditions for the funds as appropriated under Schedule 3 of AB 134 in the amended Budget Act of 2017.

Benefits to SCAQMD
The SCAQMD has supported a number of activities directed to the advancement of new technologies and commercialization of low-emission alternative fuel technologies. Utilizing the funds allocated to the SCAQMD for implementation of projects under AB 134 will expedite the penetration of advanced low-emitting commercial technologies in impacted communities and will result in reduced emissions of criteria pollutants. The vehicles and equipment funded under this Program will operate many years, providing long-term emission reductions.

Resource Impacts
Under AB 134, SCAQMD will receive up to $107.5 million from CARB which will be placed into the Carl Moyer Program Fund (32).

Attachment
Resolution

RESOLUTION NO. 17-_____

A Resolution of the South Coast Air Quality Management District Board Recognizing Funds and Accepting the Terms and Conditions of the AB 134 Grant Award

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

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

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

WHEREAS, the SCAQMD Governing Board has prioritized funding of low-emitting on- and off-road vehicles and equipment in disproportionally impacted communities; and

WHEREAS, the SCAQMD is committed to further implement incentives to benefit disadvantaged communities as envisioned in AB 617 and to address AB 1550 targets for Greenhouse Gas Reduction Funds; and

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

THEREFORE, BE IT RESOLVED that the SCAQMD Governing Board in regular session assembled on December 1, 2017, does hereby accept the terms and conditions of the AB 134 Budget Act of 2017 grant award and recognize up to $107.5 million in AB 134 funds.

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

_____ _____

Date Clerk of the Boards

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 9

PROPOSAL: Amend and Execute Technical Assistance Contracts for Implementation of Incentive Funding Programs

SYNOPSIS: On June 3, 2016, the Board approved contracts for technical assistance for the demonstration and deployment of mobile and stationary source advanced technologies and implementation of incentive funding programs. The contractors were selected from proposals received in response to a solicitation issued in February 2016. Since that time, the SCAQMD has been successful in generating large amounts of incentive program funding that must be encumbered and expended expeditiously. Thus, it is necessary to increase funding for technical assistance for the implementation of incentive funding programs, including the Carl Moyer Program and the Enhanced Fleet Modernization Program (EFMP). This action is to execute two agreements with Clean Fuel Connection, Inc., a contract amendment for Carl Moyer Program technical support in an amount not to exceed $150,000 and a new contract for EFMP implementation support in an amount not to exceed $150,000 from, respectively, the administrative portions of the Carl Moyer Program AB 923 Fund (80) and the HEROS II Special Revenue Fund (56).

COMMITTEE: Technology, November 17, 2017; Recommended for Approval

RECOMMENDED ACTIONS:
Authorize the Chairman to execute the following agreements with Clean Fuel Connection, Inc.:

1. A contract amendment for technical assistance for the Carl Moyer Program for an additional $150,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80); and
2. A new contract for technical assistance for the Enhanced Fleet Modernization Program in an amount not to exceed $150,000 from the administrative portion of the HEROS II Special Revenue Fund (56).

Wayne Nastri
Executive Officer

MMM:FM:VW:MW

Background
The Carl Moyer Program is a voluntary grant program that offers incentive funding to vehicle and equipment owners to implement cleaner-than-required engines, equipment and other sources of air pollution. The SCAQMD administers and implements the Carl Moyer Program on an annual basis, and this year marks the 19th year of implementation. Following the issuance of Program Announcements in April 2017, the SCAQMD received a total of 164 proposals requesting over $118 million in program funding. Staff completed the evaluation of these proposals in accordance with the new 2017 Revisions to the Carl Moyer Program Guidelines, which were approved by CARB on April 27, 2017. Subsequently, last month, the Board approved the execution of contracts for "Year 19" of the Carl Moyer Program in an amount totaling $27,379,771 using available funds from Carl Moyer Program SB 1107 Fund (32) and AB 923 Fund (80).

In September 2017, the Governor signed AB 134 making $250 million available statewide for the Carl Moyer Program, of which 43% will be allocated to SCAQMD. As stated in AB 134, these funds must be encumbered by June 30, 2019, and liquidated by June 30, 2021. Due to the early encumbrance and liquidation deadlines, last month the Board also approved the execution of contracts for all remaining eligible projects submitted under the "Year 19" Carl Moyer Program in an amount totaling $51,573,116 with funds to be allocated by CARB as approved under AB 134. The new funding allocated to the Carl Moyer Program through AB 134 will require additional staffing resources and administrative support to manage the implementation of the additional projects.

Additionally, the SCAQMD has experienced increased participation and interest in the Enhanced Fleet Modernization Program (EFMP). Given the popularity of the EFMP and the increased funding allocated to SCAQMD by CARB for this program, staff anticipates the need for additional case management support to process the applications and assist with program implementation.

Proposal
This action is to amend a contract with Clean Fuel Connection, Inc., (CFCI) for an additional $150,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80) to provide additional staffing resources and administrative support for the Carl Moyer Program. The existing contract with CFCI for technical assistance, implementation and outreach support for the Carl Moyer Program was awarded by the Board in June 2016 after a formal solicitation process.

In addition, this action is to execute a new contract with CFCI in an amount not to exceed $150,000 from the administrative portion of the of the HEROS II Special Revenue Fund (56) to provide case management support, including but not limited to: processing applications, bilingual support, assisting participants with retirement and

replacement of vehicles or other mobility options, such as transit passes or car-sharing, for the EFMP.

Sole Source Justification
Section VIII. B. 2 of the Procurement Policy and Procedure identifies four major provisions under which a sole source award may be justified. This request for a sole source award is made under provision B.2.d.: Other circumstances exist which in the determination of the Executive Officer require such waiver in the best interests of the SCAQMD. Such circumstances may include but are not limited to: (4) Level-of-effort expert consultation services. In 2016, CFCI was selected through a competitive bid process to provide technical assistance to the SCAQMD for programs involving alternative fuels, electric vehicles, charging and fueling infrastructure, renewable energy as well as the continued implementation of the SCAQMD incentive funding programs. While CFCI hasn't previously provided support on the EFMP, they have extensive experience in assisting SCAQMD with implementation of incentive funding programs.

Benefits to SCAQMD
The proposed awards will support the implementation of the Carl Moyer Program and EFMP and reduce emissions by accelerating the turnover of high-emitting vehicles and equipment with cleaner and/or more fuel-efficient options.

Resource Impacts
The total amount of funding for these contract awards will not exceed $300,000, comprised of $150,000 each from the administrative portions of the Carl Moyer Program AB 923 Fund (80) and the HEROS II Special Revenue Fund (56). Sufficient funds are available in the administrative portions of the Carl Moyer Program and EFMP.

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 10

PROPOSAL: Amend Contract to Improve Online Application Database for Carl Moyer Program and Reimburse General Fund for Administrative Costs

SYNOPSIS: In November 2015, the Board approved a contract with Trinity Technology Group to develop an online application database for the Carl Moyer Program. This online database, which successfully launched for the "Year 19" Carl Moyer Program, greatly facilitated the application submittal process and expedited evaluation of applications. However, improvements are necessary to incorporate changes in the newly revised Carl Moyer Program Guidelines, including updated cost-effectiveness calculations and new funding categories. Other modifications are needed to improve the online application submittal experience for the participants as well. This action is to amend a contract with Trinity Technology Group to modify and enhance the existing online application database for the Carl Moyer Program in an amount not to exceed $85,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80) and reimburse the General Fund up to $187,500 for administrative costs from the Carl Moyer Program SB 1107 Fund (32).

COMMITTEE: Technology Committee, November 17, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Authorize the Chairman to amend the contract with Trinity Technology Group to modify and enhance the existing online application database for the Carl Moyer Program in an amount not to exceed $85,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80).
2. Reimburse the General Fund up to $187,500 for administrative costs from the Carl Moyer Program SB 1107 Fund (32).

Wayne Nastri
Executive Officer

MMM:FM:VW:WS

Background
In November 2015, the Board approved a contract with Trinity Technology Group to develop an online application database to receive and process applications for the Carl Moyer Program. This online database, referred to as CMP Online Application Program, was successfully launched in April 2017 for the "Year 19" Carl Moyer Program. It greatly facilitated the online application submittal process for participants this year as well as expedited the application evaluation process. Staff proposes to amend the contract with Trinity Technology Group to modify and enhance the existing online application database.

In October 2016, the Board adopted a Resolution recognizing funds for the "Year 18" Carl Moyer Multidistrict Program including administrative funds in the amount of $187,500. At this time, there is a need to reimburse the General Fund for these administrative costs.

Proposal
Improvements to the CMP Online Application Program are necessary to incorporate changes in CARB's newly revised Carl Moyer Program Guidelines, including updated cost-effectiveness calculations and new funding categories, such as on-road vehicle replacements and infrastructure projects. Other modifications are needed to improve the online application submittal experience and functionality for the participants based on the results of the "Year 19" process. Additional functionality will include email notifications and improved application interface. Trinity Technology Group will design, develop and conduct testing of the enhanced online application database for the Carl Moyer Program and provide technical support after the launch of these enhancements. This action is to amend the contract with Trinity Technology Group to modify and enhance the existing online application database for the Carl Moyer Program.

This action is to also reimburse the General Fund up to $187,500 for administrative costs for the "Year 18" Carl Moyer Multidistrict Program from the Carl Moyer Program SB 1107 Fund (32).

Benefits to SCAQMD
The Carl Moyer Program is an important and successful program that provides incentive funding to owners of diesel vehicles and equipment to reduce emissions beyond regulatory requirements by replacing, repowering or retrofitting their older engines. The Carl Moyer Program provides significant reductions of NOx and PM emissions for the life of the projects resulting in long-term emission reduction and public health benefits. The modifications and enhancements of the existing online application database will further facilitate the online application submittal process for participants as well as streamline the project evaluation process.

Resource Impacts
Total funding for this project will not exceed $85,000 from the administrative portion of the Carl Moyer Program AB 923 Fund (80). Funding to reimburse the General Fund for administrative costs up to $187,500 for "Year 18" is available from the Carl Moyer SB 1107 Fund (32).

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 11

PROPOSAL: Recognize Revenue and Appropriate Funds for 2017 Sensor Conference

SYNOPSIS: On September 27-28, 2017, SCAQMD hosted the "Making Sense of Sensors" Conference at SCAQMD's headquarters to share information about the technology revolution in low-cost, portable air quality sensors. The Conference, attended by more than 350 participants from 22 U.S. states and nine countries, brought together experts from the sensor industry along with government, academia, environmental and research organizations and community groups. It also featured over 40 speakers, 22 exhibitors, 27 technical posters and special tours of SCAQMD's exclusive AQ-SPEC chamber testing system. This action is to recognize revenue from cosponsors and attendee registration fees and appropriate funds to Science & Technology Advancement's FY 2017-18 Budget to reimburse expenses incurred from hosting the Conference.

COMMITTEE: Administrative, November 9, 2017; Recommended for Approval

RECOMMENDED ACTION:
Recognize revenue, upon receipt, up to $32,000 into the General Fund and appropriate up to $18,000 from the General Fund Undesignated (Unassigned) Fund Balance to Science & Technology Advancement's FY 2017-18 Budget (Org 43), Services and Supplies Major Object, to reimburse expenses incurred from hosting the 2017 Sensor Conference.

Wayne Nastri
Executive Officer

MMM:JCL:DAH

Background
On September 27-28, 2017, SCAQMD hosted the "Making Sense of Sensors" Conference (www.aqmd.gov/aq-spec/conference-2017) at SCAQMD's headquarters to share information about a technology revolution in low-cost, portable air quality monitors. The Conference was co-hosted by the Bay Area AQMD and the California Air Pollution Control Officers Association (CAPCOA) and cosponsored by several companies in the sensor industry. The Conference brought together experts from government, academia, environmental and research organizations, community groups, and industry. More than 350 participants from nine countries and 22 states in the U.S. attended the two-day event; webcast participation over the two days included 714 live views from 15 countries. Keynote speakers from Internet-based Weather Underground and Microsoft were amongst the more than 40 speakers, which also included experts from the University of California Los Angeles, U.S. EPA, Massachusetts Institute of Technology, CARB, Harvard University and NASA's Jet Propulsion Laboratory. Technical sessions covered the history of air quality sensors, recent advances in sensor technology, data interpretation and mapping, the integration of satellite and low-cost sensor data, and the use and application of this emerging technology by environmental justice communities. The Conference also included 22 exhibitors displaying sensor technology, data management tools, data visualization software, and networking solutions, and 27 technical posters were presented on sensor network deployments and sensor evaluations. On Wednesday evening, over 125 attendees networked at a reception at the Diamond Bar Golf Course, and special tours of the SCAQMD's exclusive AQ-SPEC chamber testing system were attended by more than 220 of the participants over the two days. Raffles of low-cost sensors, donated by five sensor manufacturers, were also held.

The Conference was well-received by participants and onsite feedback was very positive. Speaker presentations are available on the SCAQMD website: http://www.aqmd.gov/aq-spec/conference-2017/conference-presentations. Staff anticipates conducting a future event, subject to Board approval.

Proposal
This action is to recognize revenue up to $32,000 from cosponsors and attendee registration fees into the General Fund and appropriate up to $18,000 from the General Fund to Science & Technology Advancement's FY 2017-18 Budget, Services and Supplies Major Object, to reimburse expenses incurred conducting the Conference.

Benefits to SCAQMD
This event fostered information and perspective exchange among all the major stakeholders and contributed to important dialogue between governmental organizations, academic institutions, technology developers and community groups on sensor technology, implementation of networks and sensor applications.

Resource Impacts
Actual revenue received from cosponsors and attendee registration fees, up to $32,000, for the "Making Sense of Sensors" Conference will be received into the General Fund and up to $18,000 will be appropriated from the General Fund Undesignated (Unassigned) Fund Balance to Science & Technology Advancement's FY 2017-18 Budget (Org 43), Services and Supplies Major Object. The remaining balance offsets costs for some of the staff time and overhead costs spent coordinating and implementing the conference.

Committed Revenue

Organization	**Amount**
Bay Area AQMD	$10,000
Cosponsors	$10,000
--AirThinx	
--Axetris	
--Clarity Movement Co.	
--DR DAS LTD	
--EnviroSuite	
--Netronix Inc.	
--Sonoma Technology, Inc.	
Registration Fees	$11,840
Total	**$31,840***

**CAPCOA will directly reimburse speaker travel up to $20,000*

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 12

PROPOSAL: Execute Contracts for Strategic Consulting Services and for Legislative Representation in Sacramento, California

SYNOPSIS: At the September 1, 2017 meeting, the Board approved release of an RFP to solicit proposals for legislative representation in Sacramento, California. Two proposals were received, one from Gonzalez, Quintana and Hunter, LLC, and another from Joe A. Gonsalves & Son. On November 9, 2017, the Administrative Committee recommended approval of the execution of contracts with Gonzalez, Quintana & Hunter, LLC for $207,000 and Joe A. Gonsalves & Son for $143,000, for a total amount not to exceed $350,000. Subsequent to the Administrative Committee meeting, the SCAQMD was notified that Gonzalez, Quintana & Hunter, LLC was splitting into two separate entities – The Quintana Company and California Advisors, LLC. Staff recommends splitting the original proposed contract for Gonzalez, Quintana and Hunter, LLC into two separate contracts for the two new entities. This item is to approve a contract with Joe A. Gonsalves & Son in the amount of $143,000 for legislative representation in Sacramento; approve a contract with The Quintana Company in the amount of $103,500 for consulting regarding strategic planning, communications and messaging in support of the 2016 AQMP; and to approve a contract with California Advisors, LLC for $103,500 for legislative representation in Sacramento.

COMMITTEE: Administrative, November 9, 2017; Recommended for Approval, as to Joe A. Gonsalves & Son
Special Administrative, November 20, 2017; Recommended for Approval as to The Quintana Company and California Advisors, LLC.

RECOMMENDED ACTIONS:

1. Authorize the Chairman to execute a contract for Joe A. Gonsalves & Son in an amount not to exceed $143,000 for legislative representation in Sacramento, California for one year, beginning in January 2018. The contract includes options for up to two one-year renewals, contingent on satisfactory performance and approval of subsequent budgets, upon approval of the Board.

2. Authorize the Chairman to execute a contract with The Quintana Company, which was formerly part of Gonzalez, Quintana & Hunter, LLC, in an amount not to exceed $103,500, for consulting regarding strategic planning, communications and messaging to the stakeholders, the Legislature and the Governor's Administration in support of the 2016 AQMP and its required elements, for one-year, beginning in January 2018. The contract includes options for up to two one-year renewals, contingent on satisfactory performance and approval of subsequent budgets, upon approval of the Board.
3. Authorize the Chairman to execute a contract with California Advisors, LLC, which was formerly part of Gonzalez, Quintana & Hunter, LLC, in an amount not to exceed $103,500 for legislative representation in Sacramento, California, for one year, beginning in January 2018. The contract includes options for up to two one-year renewals, contingent on satisfactory performance and approval of subsequent budgets, upon approval of the Board.

Wayne Nastri
Executive Officer

DJA:PFC:JS

Background

The current contracts for legislative representation in Sacramento, California expire on December 31, 2017.

As a leading air quality agency in California and an innovative leader in developing emission reduction programs, SCAQMD is an important contributor to the policy discussions in Sacramento. It is important to ensure that SCAQMD's input continues to be conveyed in a timely and meaningful manner, and that SCAQMD is involved in the day-to-day policy discussions in Sacramento that promote cleaner air, both through policy development and adequate funding. Therefore, it is appropriate to continue direct representation in Sacramento to advance Board policy priorities and SCAQMD programs.

This effort includes providing technical information and assistance to legislators on air quality matters, acting as a liaison between the SCAQMD and legislators regarding the Board's priorities, funding and program support for technology advancement and emission reduction projects, and advocating for SCAQMD's position on air quality related bills, especially those efforts in support of the 2016 Air Quality Management Plan (AQMP). This work also includes fostering state support for SCAQMD's federal initiatives, as appropriate.

The 2016 AQMP puts a priority on maximizing emission reductions utilizing zero emission technologies wherever cost effective and feasible, and near-zero emission technologies in all other applications. Incentives are critically important to achieve near-term attainment goals, and serve to accelerate the transition to zero and near-zero emission technologies. Incentives totaling an estimated $11 billion to $14 billion, or about $1 billion per year over the next 15 years, are needed in order to achieve clean air goals. Should the region fail to meet federally mandated clean air goals, U.S. EPA could impose sanctions that are far more onerous and costly to the Basin's residents and businesses than the 2016 AQMP.

The development of SCAQMD's 2018 Legislative Goals and Objectives will be reflective of the outcomes of the 2017 legislative year. However, many of the prior years' program elements are expected to continue and be built upon in the coming legislative year in Sacramento. SCAQMD's legislative priorities for 2018 will be presented to the Legislative Committee for review and approval, and then to the full Board for final approval.

At the September 1, 2017 meeting, the Board approved release of an RFP to solicit proposals for legislative representation in Sacramento, California. Only two proposals were received, one from Gonzalez, Quintana and Hunter, LLC, and another from Joe A. Gonsalves & Son. Subsequently, on November 9, 2017, the Administrative Committee recommended approval of the execution of contracts with the firms of Gonzalez, Quintana & Hunter, LLC for $207,000 and Joe A. Gonsalves & Son for $143,000, for a total amount not to exceed $350,000. Subsequent to this Administrative Committee meeting, the SCAQMD was notified that Gonzalez, Quintana & Hunter, LLC firm was splitting into two separate entities – The Quintana Company and California Advisors, LLC.

Outreach

In accordance with SCAQMD's Procurement Policy and Procedure, a public notice advertising the RFP and inviting bids was published in the Los Angeles Times, the Los Angeles Sentinel, the Orange County Register, the San Bernardino Sun, Riverside County's Press Enterprise, and the Sacramento Bee newspapers, as well as through Eastern Group Publications, Inc. to leverage the most cost-effective method of outreach to the entire South Coast Basin and beyond.

Additionally, thirty RFP notification letters were mailed to lobbying and public affairs firms in Sacramento and San Rafael, CA. Notice of the RFP was also e-mailed to the Black, Latino, and Asian Pacific Islander Legislative Caucuses and various minority chambers of commerce and business associations, and placed on the Internet at SCAQMD's website (http://www.aqmd.gov).

Bid Evaluation
Two proposals were received in response to the RFP. Both of the proposals received were from SCAQMD's current state legislative representative firms in Sacramento, California – Gonzalez, Quintana & Hunter, LLC and Joe A. Gonsalves & Son.

Given that staff and Board Members are already familiar with these firms based on multiple years of prior service, and because only two proposals were received, both proposals were referred to the Administrative Committee for consideration. After the November 9, 2017 Administrative Committee meeting, staff was notified that Gonzalez, Quintana & Hunter, LLC was splitting into two separate entities – The Quintana Company and California Advisors, LLC. This board letter modifies the original recommendations to reflect three contracts.

During the 2017 state legislative year, Joe A. Gonsalves & Son and the firm formerly known as Gonzalez, Quintana & Hunter, LLC, of which The Quintana Company and California Advisors, LLC are derived from, were actively involved in successfully securing the passage of AB 1132 (Garcia) which authorizes the heads of local air agencies, including SCAQMD, to issue temporary orders for abatement requiring a facility to cease operations causing emission violations resulting in an imminent and substantial endangerment to the public health, welfare, or environment, pending a hearing by the air district's hearing board; and AB 1274 (O'Donnell) which, beginning January 1, 2019, will redirect funds to the Carl Moyer Program, resulting in an at least $30 million per year being available to reduce air pollution within the South Coast region caused by emissions from heavy duty vehicles. In addition, Joe A. Gonsalves & Son and Gonzalez, Quintana & Hunter, LLC, played a key role in helping to secure, through AB 134, $107.5 million in additional Carl Moyer Program funding for the South Coast region, as well as helping to facilitate the availability of several hundreds of millions of dollars in various pots of clean air-related grant funding, which SCAQMD will have the opportunity to seek, largely through the grant application process. Also, these two firms helped obtain, through AB 109, $27 million in statewide monies to fund initial implementation of community air monitoring systems and community emission reduction programs, mandated by state law in 2017, with a significant portion of those funds being directed to the South Coast region.

Sole Source Justification
Because The Quintana Company and California Advisors, LLC were not involved in the RFP process, staff recommends executing a sole source contract with each firm. Both Will Gonzalez and David Quintana, who will each be principals in the two separate firms, were key to SCAQMD's success in prior endeavors. Efforts by both Mr. Gonzalez and Mr. Quintana will be needed as the SCAQMD seeks additional funding to implement the 2016 AQMP.

David Quintana, principal of The Quintana Company, has a professional history which spans over 18 years, with extensive expertise in a wide range of issue areas. Mr. Quintana served as a Legislative Director in the State Senate and as a Consultant for the Senate Committee on Public Safety. He has extensive experience in numerous sectors, including environmental, energy, tribal issues, labor, finance, education, and high-tech/social media. With a comprehensive understanding of both politics and policy, Mr. Quintana is able to adopt effective strategies that fit SCAQMD's needs. Consequently, his firm has special and unique capabilities that will ensure the SCAQMD's communications and messaging to the California Legislature and others are the most effective to garner support for SCAQMD's funding needs for the 2016 AQMP.

Will Gonzalez, principal of California Advisors, LLC, has over 15 years of legislative and political experience. In 2002 he established his own firm, Gonzalez Public Affairs, which specialized in legislative advocacy on transportation, environmental, and energy issues and prided itself on its policy expertise and close bipartisan relationships. The firm achieved significant legislative victories for its clients including securing millions in state transportation funding, helping pass sweeping renewable energy laws, and spearheading efforts to reform state procurement. Prior to starting Gonzalez Public Affairs, Mr. Gonzalez served as Legislative Director to Assemblyman Darrell Steinberg who was elected at the time as the Senate Pro Tem. As Legislative Director, he helped secure over $180 million in state funding for compressed Natural Gas (CNG) transit buses and for innovative air quality programs aimed at helping the Sacramento region meet its conformity requirements. He also served as a Consultant to the Assembly Labor Committee and the Native American Repatriation Select Committee. Upon leaving the legislature, Mr. Gonzalez joined Ford Motor Company where he lobbied on behalf of the company and the Alliance of Automobile Manufactures in California and twelve other western states. He is credited with securing state grants and tax incentives for electric and alternative fuel vehicles worth over $140 million. With a comprehensive understanding of both politics and policy and with an extensive history of directly and successfully representing SCAQMD's policy interests in Sacramento, Mr. Gonzalez is able to effectively represent SCAQMD's needs and policy priorities in Sacramento going forward, with the Legislature, Governor and state agencies, as needed. His firm has special and unique capabilities that will ensure that the District is effectively represented in Sacramento in a manner that will best garner support for SCAQMD's funding needs for the 2016 AQMP.

Section VIII.B.2 of the Procurement Policy and Procedure identifies provisions by which the sole source award may be justified. This request for a sole source award is made under provision B.2.d: Other circumstances exist which in the determination of the Executive Officer requires such waiver in the best interest of the SCAQMD, based upon the noted Principal's successful past experience with the SCAQMD as detailed above.

Proposal
Staff proposes to execute a contract with Joe A. Gonsalves & Son in an amount not to exceed $143,000 for legislative representation in Sacramento, California, for one-year, beginning in January 2018. The contract includes options for up to two one-year renewals, contingent on satisfactory performance and approval of subsequent budgets, upon approval of the Board.

Staff requires professional consulting services related to the development and implementation of the 2016 AQMP. In order to communicate, promote, and advance the state legislative action necessary to achieve clean air goals, staff proposes to execute a contract with The Quintana Company, which was formerly part of Gonzalez, Quintana & Hunter, LLC, in an amount not to exceed $103,500 for consulting regarding strategic planning, communications and messaging to the stakeholders, the Legislature and the Governor's Administration in support of the 2016 AQMP, for one-year, beginning in January 2018. The contract includes options for up to two one-year renewals, contingent on satisfactory performance and approval of subsequent budgets, upon approval of the Board.

Staff also proposes to execute a contract with California Advisors, LLC, which was formerly part of Gonzalez, Quintana & Hunter, LLC, in an amount not to exceed $103,500 for legislative representation in Sacramento, California, for one-year, beginning in January 2018. The contract includes options for up to two one-year renewals, contingent on satisfactory performance and approval of subsequent budgets, upon approval of the Board.

Resource Impacts
Funding for these contracts is available in the Legislative & Public Affairs FY 2017-18 Budget. Funding for the two optional one-year extensions in all three contracts is contingent upon Board approval of the Budget for the respective fiscal years.

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 13

PROPOSAL: Transfer and Appropriate Funds and Amend Contracts to Provide Short- and Long-Term Systems Development, Maintenance and Support Services

SYNOPSIS: SCAQMD currently has contracts with several companies for short- and long-term systems development, maintenance and support services. These contracts are periodically amended as additional needs are defined. This action is to transfer and appropriate funds and amend three contracts previously approved by the Board to add additional funding for needed development and maintenance work.

COMMITTEE: Administrative, November 9, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Transfer and appropriate $710,000 from the Designation for Permit Streamlining (Assigned Fund Balance) to Information Management's FY 2017-18 Budget, Capital Outlays Major Object, Capital Outlays Account, for continuation of permitting systems automation projects listed in Attachment 1.
2. Transfer and appropriate $25,000 from the Designation for Permit Streamlining (Assigned Fund Balance) to the Services & Supplies Major Object and/or the Capital Outlay Major Object to purchase hardware and software for evaluating workflows for paperless permit processing.
3. Transfer $5,060 from Information Management's FY 2017-18 Budget, Services and Supplies, Professional and Specialized Services account to Information Management's FY 2017-18 Capital Outlays Major Object, Capital Outlays account for continuation of Air Quality Index (AQI) Development work.

4. Authorize the Executive Officer to execute amendments to the contracts for systems development services in the amount of $225,000 to Prelude Systems, $155,060 to Sierra Cybernetics, and $360,000 to Varsun e-Technologies from the FY 2017-18 budget for the specific task orders listed in Attachment 1.

Wayne Nastri
Executive Officer

RMM:OSM:jga

Background

At the October 3, 2014 meeting, the Board authorized staff to initiate level-of-effort contracts with several vendors, for systems development, maintenance and support services. At the time these contracts were executed, it was expected that they would be modified in the future to add funding from approved budgets as system development requirements were identified and sufficiently defined so that task orders could be prepared.

At the November 4, 2016 meeting, the Board approved $450,000 to develop and implement the online Application Filing system on the SCAQMD website. The system allows the regulated community to file an Application for an Authority to Construct or a Permit to Operate on line, directly from their office or home computer. In addition, when certain conditions are met, users may be able to receive their Permit to Operate within minutes. This phase 1 development effort has been deployed and is currently in production.

Additional funding is now needed to continue with the second phase of this multi-year e-Permitting Systems Automation project. In addition, funding is also needed to purchase hardware and software solutions (Services and Supplies and/or Capital Outlays Major Objects) that will be used to analyze the permitting process in an effort to convert it to a paperless, automated workflow. (Projects 1 to 5 in Attachment 1 are in support of this effort.)

System development and maintenance efforts are currently needed to enhance system functionality and to provide staff with additional automation for improving productivity. The estimated cost to complete the work on these additional tasks exceeds the amount of funding in the existing contracts. The contracts are for one year with the option to renew for two one-year periods. This item is listed on the Board Meeting agenda item "Status Report on Major Projects for Information Management."

Proposal
Staff proposes the transfer and appropriation of $735,000 from the Designation for Permit Streamlining (Assigned Fund Balance) into Information Management's FY 2017-18 Budget to the Capital Outlays Major Object and/or Services and Supplies Major Objects to fund the second phase of the Permitting Systems Automation project in addition to a $5,060 transfer from Information Management's FY 2017-18 Budget Services and Supplies Major Object to the Capital Outlays Major Object.

Finally, staff proposes the contracts be amended in the amount of $225,000 to Prelude Systems, $155,060 to Sierra Cybernetics, and $360,000 to Varsun e-Technologies for the specific task orders listed in Attachment 1.

Resource Impacts
Upon Board approval, funding in the amount of $740,060 will be available in Information Management's FY 2017-18 Budget subsequent to the budget transfer in Recommended Action No. 3 and the transfer from the Designation for Permit Streamlining (Assigned Fund Balance). This designation has a balance of $2,288,385 per the September 2017 General Ledger.

Attachment
1. Task Order Summary

Attachment

Task Order Summary

Section A – Funding Totals for all Systems Development Contracts

CONTRACTOR	PREVIOUS FUNDING	THIS ADDITION	TOTAL FUNDING
AgreeYa Solutions	$519,340	$0	$519,340
Prelude Systems	$751,500	$225,000	$976,500
Sierra Cybernetics	$1,375,500	$155,060	$1,530,560
Varsun eTechnologies	$1,670,370	$360,000	$2,030,370
TOTAL	$4,316,710	$740,060	$5,056,770

Section B – Task Orders and Projects Scheduled for Award

	TASK	DESCRIPTION	ESTIMATE	AWARDED TO
1	On Line Form Filing and Workflow Automation, Phase 2 Development	Continue Online Application Filing system automation work. Phase 2 modifications and enhancements and Phase 3 initiation work	$300,000	Varsun
2	On Line Filing and Registration, Phase 2 Development	Continue Online Permit Application Filing. Phase 2 modifications and enhancements and Phase 3 initiation work	$225,000	Prelude
3	On Line Permit Processing Dashboard	Develop and Implement the Online Permit Processing Dashboard to provide an overview of all permit applications submitted to the District.	$100,000	Sierra
4	On-Line Facility ID Creation Development and Implementation	Enhance and integrate the Facility ID Creation module into the District's Security Portal to allow users to create Facility IDs.	$35,000	Varsun
5	Payment Portal Integration with Online Application Filing system	Enhancement of financial web services to include new functionalities required by online application filing.	$50,000	Sierra
6	PeopleSoft Financials 9.2 Upgrade	Additional funding for PeopleSoft Finance 9.2 upgrade related to increased effort required by using the new PeopleSoft Upgrade Assistant manager.	$25,000	Varsun
7	Air Quality Index (AQI) Conversion and Migration from FORTRAN to DMS	Additional funding needed for conversion of the Air Quality Index (AQI) calculation to a Web Service/Web API and migration from the existing Data Acquisition System (FORTRAN) to STA's Data Management System (DMS)	$5,060	Sierra
	TOTAL		$740,060	

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 14

PROPOSAL: Amend Provisions of SCAQMD's Salary Resolution and Labor Contracts with Teamsters Local 911 and SCPEA Relating to Vacation Leave Balances

SYNOPSIS: Due to high priority operational needs, staff has been required to limit the use of vacation time this year. As a result, a number of employees will exceed the cap on vacation leave balances, and will be prohibited from accruing vacation time or will be required to forfeit vacation hours accrued. This proposal seeks approval of an amendment of SCAQMD's Salary Resolution and the bargaining unit MOUs, in order to suspend the limitations on vacation leave balances for 2017.

COMMITTEE: Administrative, November 9, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Approve the proposed amendments to the 2015-2017 Teamsters MOU, representing the Technical-Enforcement and Office Clerical and Maintenance bargaining units, and the 2015-2017 SCPEA MOU, representing the Professional bargaining unit employees. Changes to the 2015-2017 Teamsters MOU are shown in Attachment A and changes to the 2015-2017 SCPEA MOU are shown in Attachment B.
2. Adopt the Resolution in Attachment C, amending Section 41 (Time of Taking Vacations) of SCAQMD's Salary Resolution.

Wayne Nastri
Executive Officer

MOK:AJO:mm

Background

Article 15, Section 5, of the Teamsters MOU and Article 15, Section 6, of the SCPEA MOU provide that employees are not permitted to have vacation leave balances in excess of 360 hours at the end of the last pay period beginning in December. Represented employees whose vacation balances exceed 360 hours forfeit any vacation hours above this cap. Section 41 of SCAQMD's Salary Resolution provides that employees are not permitted to accrue additional vacation time if the employee's

vacation leave balance exceeds 360 hours by the end of the last pay period beginning in December. Vacation accrual resumes when the employee's vacation leave balance falls to 360 hours or less.

Last year, due to operational needs and the implementation of SCAQMD work plan goals, the Board approved amendments to SCAQMD's Salary Resolution and the bargaining unit MOUs suspending the limitations on vacation leave balances for 2016.

Proposal
High priority operational and program needs, such as the Permit Backlog Reduction Action Plan, have continued to require maximum capacity resources throughout this past year, which again necessitated limiting approvals for employees to take vacation time off. These circumstances make it difficult for employees with vacation leave balances at or near the cap, often the most knowledgeable and experienced employees, to control the effects of exceeding the limits.

This proposal seeks approval of amendments to the SCAQMD's Salary Resolution, and the Memoranda of Understanding with the represented employees. For bargaining unit members, the MOUs would be amended to allow employees whose vacation leave balances are in excess of 360 hours at the end of the last pay period beginning in December 2017 to carry over and use the excess hours. The 360-hour accrual carry-over maximum will be reinstated at the end of the last pay period beginning in December 2018. Management has reached a tentative agreement with the representatives of the bargaining units on this issue. For unrepresented classifications, the Salary Resolution would be amended to allow employees whose vacation leave balances exceed 360 hours at the end of the last pay period beginning in December 2017 to continue to accrue vacation time. The 360-hour accrual maximum will be reinstated at the end of the last pay period beginning in December 2018.

Fiscal Impacts
Approval of these amendments will not have a significant fiscal impact on the 2017-18 Fiscal Year budget.

Attachments
Attachment A – Teamsters MOU Amendments
Attachment B – SCPEA MOU Amendments
Attachment C – Resolution regarding Salary Resolution Amendments

ATTACHMENT A

SOUTH COAST AIR QUALITY

MANAGEMENT DISTRICT

MEMORANDUM OF UNDERSTANDING

TECHNICIAL & ENFORCEMENT
AND
OFFICE CLERICAL & MAINTENANCE UNITS

January 1, 2015 – December 31, 2017

Article 15 - VACATIONS, Section 5 (Time of Taking Vacations) of this MOU is amended by the following:

~~There is a one-time exception to the 360-hour accrual carry-over maximum:~~ Employees whose vacation leave balances are in excess of 360 hours at the end of the last pay period beginning in December ~~2016~~2017 may carry over and use the excess hours. The 360-hour accrual carry-over maximum will be reinstated at the end of the last pay period beginning in December ~~2017~~2018.

ATTACHMENT B

SOUTH COAST AIR QUALITY

MANAGEMENT DISTRICT

MEMORANDUM OF UNDERSTANDING

PROFESSIONAL UNIT

January 1, 2015 – December 31, 2017

Article 15 - VACATIONS, Section 6 (Time of Taking Vacations) of this MOU is amended by the following:

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ATTACHMENT C

RESOLUTON NO. 17-_____

A Resolution of the South Coast Air Quality Management District Board amending SCAQMD's Salary Resolution.

WHEREAS, Section 41 (TIME OF TAKING VACATIONS) of SCAQMD's *Salary Resolution* provides that employees are not permitted to accrue additional vacation if the employee's vacation leave balance exceeds 360 hours by the end of the last pay period beginning in December. Vacation accrual resumes at the beginning of the pay period immediately following the pay period in which the vacation leave balance falls to 360 hours or less.

WHEREAS, in consideration of SCAQMD operational needs, the Board of SCAQMD desires to amend Section 41 to allow employees whose vacation balances exceed 360 hours at the end of the last pay period beginning in December 2017 to continue to accrue vacation time.

THEREFORE, BE IT RESOLVED that the Board of the SCAQMD, does hereby amend Section 41 of the Salary Resolution as follows:

> Employees whose vacation leave balances exceed 360 hours at the end of the last pay period beginning in December 2017 will continue to accrue vacation time. The 360-hour accrual maximum will be reinstated at the end of the last pay period beginning in December 2018.

AYES:

NOES:

ABSENT:

DATED: _____ _____

Denise Garzaro, Clerk of the Boards

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 14

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COMMITTEE: Administrative, November 9, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Approve the proposed amendments to the 2015-2017 Teamsters MOU, representing the Technical-Enforcement and Office Clerical and Maintenance bargaining units, and the 2015-2017 SCPEA MOU, representing the Professional bargaining unit employees. Changes to the 2015-2017 Teamsters MOU are shown in Attachment A and changes to the 2015-2017 SCPEA MOU are shown in Attachment B.
2. Adopt the Resolution in Attachment C, amending Section 41 (Time of Taking Vacations) of SCAQMD's Salary Resolution.

Wayne Nastri
Executive Officer

MOK:AJO:mm

Background

Article 15, Section 5, of the Teamsters MOU and Article 15, Section 6, of the SCPEA MOU provide that employees are not permitted to have vacation leave balances in excess of 360 hours at the end of the last pay period beginning in December. Represented employees whose vacation balances exceed 360 hours forfeit any vacation hours above this cap. Section 41 of SCAQMD's Salary Resolution provides that employees are not permitted to accrue additional vacation time if the employee's

vacation leave balance exceeds 360 hours by the end of the last pay period beginning in December. Vacation accrual resumes when the employee's vacation leave balance falls to 360 hours or less.

Last year, due to operational needs and the implementation of SCAQMD work plan goals, the Board approved amendments to SCAQMD's Salary Resolution and the bargaining unit MOUs suspending the limitations on vacation leave balances for 2016.

Proposal
High priority operational and program needs, such as the Permit Backlog Reduction Action Plan, have continued to require maximum capacity resources throughout this past year, which again necessitated limiting approvals for employees to take vacation time off. These circumstances make it difficult for employees with vacation leave balances at or near the cap, often the most knowledgeable and experienced employees, to control the effects of exceeding the limits.

This proposal seeks approval of amendments to the SCAQMD's Salary Resolution, and the Memoranda of Understanding with the represented employees. For bargaining unit members, the MOUs would be amended to allow employees whose vacation leave balances are in excess of 360 hours at the end of the last pay period beginning in December 2017 to carry over and use the excess hours. The 360-hour accrual carry-over maximum will be reinstated at the end of the last pay period beginning in December 2018. Management has reached a tentative agreement with the representatives of the bargaining units on this issue. For unrepresented classifications, the Salary Resolution would be amended to allow employees whose vacation leave balances exceed 360 hours at the end of the last pay period beginning in December 2017 to continue to accrue vacation time. The 360-hour accrual maximum will be reinstated at the end of the last pay period beginning in December 2018.

Fiscal Impacts
Approval of these amendments will not have a significant fiscal impact on the 2017-18 Fiscal Year budget.

Attachments
Attachment A – Teamsters MOU Amendments
Attachment B – SCPEA MOU Amendments
Attachment C – Resolution regarding Salary Resolution Amendments

ATTACHMENT A

SOUTH COAST AIR QUALITY

MANAGEMENT DISTRICT

MEMORANDUM OF UNDERSTANDING

TECHNICIAL & ENFORCEMENT
AND
OFFICE CLERICAL & MAINTENANCE UNITS

January 1, 2015 – December 31, 2017

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ATTACHMENT B

SOUTH COAST AIR QUALITY

MANAGEMENT DISTRICT

MEMORANDUM OF UNDERSTANDING

PROFESSIONAL UNIT

January 1, 2015 – December 31, 2017

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ATTACHMENT C

RESOLUTON NO. 17-_____

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WHEREAS, in consideration of SCAQMD operational needs, the Board of SCAQMD desires to amend Section 41 to allow employees whose vacation balances exceed 360 hours at the end of the last pay period beginning in December 2017 to continue to accrue vacation time.

THEREFORE, BE IT RESOLVED that the Board of the SCAQMD, does hereby amend Section 41 of the Salary Resolution as follows:

> Employees whose vacation leave balances exceed 360 hours at the end of the last pay period beginning in December 2017 will continue to accrue vacation time. The 360-hour accrual maximum will be reinstated at the end of the last pay period beginning in December 2018.

AYES:

NOES:

ABSENT:

DATED: _____ _____

Denise Garzaro, Clerk of the Boards

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 15

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

SYNOPSIS: This action is to appropriate $350,000 from Undesignated Fund Balance to Legal's FY 2017-18 Budget and amend contracts to expend these funds for prequalified counsel approved by the Board and for specialized legal counsel and services for environmental litigation.

COMMITTEE: Administrative, November 9, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Appropriate $350,000 from Undesignated (Unassigned) Fund Balance to Legal's FY 2017-18 Budget, Services and Supplies Major Object, Professional and Special Services.
2. Authorize the Chairman or the Executive Officer, depending on whether the amount exceeds $75,000, to amend or initiate contracts with legal counsel handling existing matters, as well as prequalified counsel approved by the Board, and specialized legal counsel and services, as the need arises. This action will bring the total amount of outside counsel costs approved by FY 2017-18 to $629,500.

Wayne Nastri
Executive Officer

KRW:vmr

Background
The FY 2017-18 Budget for Legal included $279,500 for litigation expenses in environmental law cases and specialized legal counsel and services. The total amount currently allocated will not cover current and anticipated costs of legal counsel and specialized counsel and services.

SCAQMD will require an additional amount of up to $350,000 for these services. Monies will be expended on lawsuits and legal proceedings, including a bankruptcy hearing in Delaware on December 19, 2017 in the Exide matter; court proceedings in a challenge to the Board's adoption of the December 2015 RECLAIM amendments; and defending the challenge to the SCAQMD's environmental analysis of the Tesoro Los Angeles Refinery Integration Project. In the Tesoro case, Tesoro will reimburse the SCAQMD for attorney's fees and other costs once the case is completed. Accordingly, Legal staff is requesting an appropriation of funds in the amount of $350,000, for a total expected expenditure of $629,500 this fiscal year.

Proposal
In order to defend on-going litigation, it is necessary to appropriate additional funds for expenditure by outside counsel. It is expected that on-going lawsuits will require an additional $350,000 to be appropriated for attorney's fees and costs for prequalified counsel approved by the Board and with specialized legal counsel and services, as the need arises.

Resource Impacts
Sufficient funds will be available in Legal's FY 2017-18 Budget upon approval of this Board letter.

Clean Transportation
Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 16

PROPOSAL: Approve Contract Awards and Modification and Issue Solicitation Approved by MSRC

SYNOPSIS: As part of their FYs 2016-18 Work Program, the MSRC approved sole source contracts for a Hydrogen Infrastructure Partnership Program, for a Southern California Future Communities Partnership Program, and for electric vehicle charging infrastructure planning analysis. The MSRC also allocated $125,903 to exercise the option clause to extend the contract with the Better World Group for programmatic outreach services, and approved the release of an Invitation to Negotiate for a County Transportation Commission Partnership Program as part of their FYs 2016-18 Work Program. At this time the MSRC seeks Board approval of the contract awards and modification and to release the solicitation.

COMMITTEE: Mobile Source Air Pollution Reduction Review, November 16, 2017; Recommended for Approval

RECOMMENDED ACTIONS:

1. Approve a sole-source contract award to the California Energy Commission in an amount not to exceed $3,000,000 to fund hydrogen infrastructure projects, using funds previously unallocated, as part of the approval of the FYs 2016-18 Work Program, as described in this letter;
2. Approve a sole-source contract award to the Regents of the University of California in an amount not to exceed $254,795 for electric vehicle infrastructure spatial planning analysis work, using funds previously unallocated, as part of the approval of the FYs 2016-18 Work Program, as described in this letter;
3. Approve a sole-source contract award in an amount not to exceed $2,000,000 to Southern California Association of Governments for a Southern California Future Communities Partnership Program, using funds previously unallocated, as part of the approval of the FYs 2016-18 AB 2766 Discretionary Fund Work Program, as described in this letter;

4. Exercise the option clause to extend Contract #MS16030 with The Better World Group for programmatic outreach services until December 31, 2019, in an amount not to exceed $125,903, as part of the approval of the FYs 2016-18 Work Program, as described in this letter;
5. Issue Invitation to Negotiate for the County Transportation Commission Partnership Program, as part of the approval of the FYs 2016-18 Work Program, with a targeted funding level of $8,000,000, as described in this letter and in the attached;
6. Authorize MSRC the authority to adjust contract awards up to five percent, as necessary and previously granted in prior work programs; and
7. Authorize the Chairman of the Board to execute new and modified contracts under the FYs 2016-18 Work Program, as described above and in this letter.

Greg Pettis,
Chair, MSRC

MMM:FM:CR

Background

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

At its November 16, 2017 meeting, the MSRC considered three recommended sole-source awards, as well as a recommended contract modification. The MSRC also considered the issuance of a solicitation for the County Transportation Commission Partnership Program. Details are provided below in the Proposals section.

Outreach

The County Transportation Commission Partnership Program solicitation will be both mailed and e-mailed to the four eligible applicants: Los Angeles County Metropolitan Transportation Authority, Orange County Transportation Authority, Riverside County Transportation Commission and San Bernardino County Transportation Authority.

Proposals

At its November 16, 2017 meeting, the MSRC considered recommendations from its MSRC-TAC and approved the following:

FYs 16-18 Hydrogen Infrastructure Partnership Program

The MSRC previously considered a proposed Infrastructure Program Concept, covering natural gas, electric, and hydrogen vehicle infrastructure. The targeted MSRC funding amount for hydrogen infrastructure is $3,000,000. The California Energy Commission (CEC) has offered to provide assistance in the selection and administration of the MSRC-funded hydrogen projects. Based on parameters specified by the MSRC, including but not limited to the prioritization of at least one project from within each of the four counties within SCAQMD, CEC would provide a list of potential hydrogen refueling station projects for MSRC consideration. Projects would initially be drawn from those previously proposed to CEC, but either not funded, or not fully funded; however, should there be a lack of projects meeting one or more of the MSRC's parameters, CEC would assist the MSRC in identifying other potential projects. The MSRC would determine the specific projects to be supported with MSRC funds. Day-to-day administration would be performed by CEC, with MSRC oversight, as CEC's co-funding contribution; all MSRC funds would be passed through to the projects. The MSRC considered this partnership opportunity and approved an award to CEC in an amount not to exceed $3,000,000 as an element of the FYs 16-18 AB 2766 Discretionary Fund Work Program.

FYs 16-18 Planning for Electric Vehicle Charging Infrastructure Investments

As mentioned in the previous item, the MSRC previously considered a proposed Infrastructure Program Concept, covering natural gas, electric and hydrogen vehicle infrastructure. The targeted MSRC funding amount for electric vehicle support equipment (EVSE) is $3,000,000. In order to minimize overlap with other incentive programs, and with an eye to fulfilling unmet needs, the Concept proposed that the MSRC focus upon two of the most challenging location types: workplaces and multi-unit dwellings (MUDs). The UCLA Luskin Center for Innovation has offered to perform planning analysis work to provide the MSRC with high-potential locations for workplace and MUD EVSE installations. For the workplace category, they would map plug-in vehicle commute trip densities, identify the traffic analysis zones in which there is a high demand for daytime charging, and overlay employer information to identify the highest potential candidate workplaces. For the MUD category, Luskin would inventory MUD housing stock, develop a model to predict MUD residents' propensity to purchase EVs, and use the model to identify by census tract the most likely MUDs resident characteristics for EV purchase. The MSRC considered this offer and approved an award to the Regents of the University of California in an amount not to exceed $254,795 as an element of the FYs 16-18 AB 2766 Discretionary Fund Work Program. Additional actions and allocations relative to MSRC funding for EVSE are anticipated in the coming months.

FYs 16-18 Southern California Future Communities Partnership Program

The Future Communities Program is envisioned as a partnership between the Southern California Association of Governments (SCAG) and the MSRC to support city and county agencies in implementing innovative pilot projects that reduce vehicle miles traveled (VMT) from local travel and municipal operations through the use of new technologies and enhanced data analytics. SCAG would fund an initial research phase to identify new and innovative pilot concepts, as well as investigate the potential for more traditional transportation demand management strategies to yield a greater return on investment. The findings of the research would support development of a Future Communities Call for Projects, to be primarily administered by SCAG. MSRC staff and/or members of the MSRC-TAC TCM Subcommittee would participate in the selection of projects. The $2,000,000 targeted MSRC funding amount would be allocated equally amongst the four counties within SCAQMD, with $500,000 set aside for each county. In the event that meritorious projects totaling at least $500,000 are not submitted from within a county, the unused county balance would be made available to projects in other counties. Day-to-day administration of the program would be performed by SCAG. The MSRC's contribution would be matched dollar for dollar, with half of the match coming from SCAG and the other half from the local project proponents. The MSRC considered this partnership opportunity and approved an award to SCAG in an amount not to exceed $2,000,000 as an element of the FYs 16-18 AB 2766 Discretionary Fund Work Program.

FYs 2016-18 Programmatic Outreach Services

The MSRC retains a contractor to continue and enhance public awareness of the MSRC by highlighting its mission, achievements, and the funding opportunities the MSRC has available. Following an open RFP process in 2015, the MSRC awarded $120,000 to The Better World Group for programmatic outreach services for two years, including an option for another two-year term to be executed at the MSRC's discretion, subject to funding approval by the SCAQMD Board. Contract #MS16030 was executed to effectuate the award. The MSRC evaluated The Better World Group's performance and approved exercising the option and adding an amount not to exceed $125,903 to fund services for an additional two years as part of the FYs 2016-18 Work Program.

FYs 2016-18 County Transportation Commission Partnership Program

The MSRC approved release of an Invitation to Negotiate ITN) for the County Transportation Commission (CTC) Partnership Program under the FYs 2016-18 Work Program. The ITN, with a targeted funding level of $8,000,000, seeks to stimulate the demonstration of innovative projects, as well as expand "tried and true" air quality improvement strategies. CTCs within SCAQMD are eligible to participate. Other public and private entities could participate as subcontractors to a CTC. Each CTC is eligible to receive a maximum of $2,000,000 on a sole-source contract award basis. Eligible project types include, but are not necessarily limited to: capital improvement projects, capital purchase projects including fleet vehicle purchases that meet, at a minimum, ARB's optional 0.02 g/bhp-hr NOx emissions standard, traffic signal coordination, ridesharing programs, active transportation programs including bicycle sharing projects, transit pass

incentive programs, freeway service patrols, first mile/last mile strategies, and information technology projects that focus on air quality improvement. The ITN includes an open application period commencing with its release on December 1, 2017, and closing June 29, 2018, and projects will be brought to the MSRC for consideration of awards throughout and immediately following the application period.

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

Sole Source Justifications

As an element of its FYs 2016-18 Work Program, the MSRC allocated $3,000,000 to partner with CEC on a Hydrogen Infrastructure Partnership Program. As discussed in Proposals above, this project will be implemented by initiating a sole-source contract with CEC pursuant to SCAQMD Procurement Policy section VIII(B)(2)(c). While the MSRC and SCAQMD strive to retain technical services on a competitive basis, the SCAQMD's Procurement Policy and Procedure recognizes that, at times, the required services are available from only one source, making the pursuit of a competitive procurement futile. The CEC has previously conducted multiple solicitations for hydrogen station projects, and conducted a thorough analysis of the resulting proposed projects. Due to funding limitations, there are many projects within the SCAQMD region which were deemed qualified, but which were not awarded funds. This puts the CEC in a unique position to advise the MSRC and administer the projects.

Also as an element of its FYs 2016-18 Work Program, the MSRC allocated $254,795 towards Planning for Electric Vehicle Charging Infrastructure Investments. As discussed in Proposals above, this project will be implemented by initiating a sole-source contract with the Luskin Center of the Regents of the University of California pursuant to SCAQMD Procurement Policy section VIII(B)(2)(c). While the MSRC and SCAQMD strive to retain technical services on a competitive basis, the SCAQMD's Procurement Policy and Procedure recognizes that, at times, the required services are available from only one source, making the pursuit of a competitive procurement futile. The Luskin Center has recently undertaken EVSE planning studies with special attention to the needs of workplace and MUDs for multiple public agencies in Southern California. Furthermore, by virtue of these recent studies, the Luskin Center already possesses almost all the input data necessary to perform the desired analysis. This puts the Luskin Center in a unique position to perform the work.

Also as an element of its FYs 2016-18 Work Program, the MSRC allocated $2,000,000 to partner with SCAG on a Southern California Future Communities Partnership Program. As discussed in Proposals above, this project will be implemented by initiating a sole-source contract with SCAG pursuant to SCAQMD Procurement Policy section VIII(B)(2)(c). While the MSRC and SCAQMD strive to retain technical services on a competitive basis, the SCAQMD's Procurement Policy and Procedure recognizes that, at times, the required services are available from only one source, making the pursuit of a competitive procurement futile. SCAG is the Municipal Planning Organization for the SCAQMD jurisdiction and is responsible for the development of the Regional Transportation Plan. SCAG's RTP responsibilities, and the fact that they would be providing matching co-funding, put them in a unique position to implement the program.

Resource Impacts

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

Attachment

Invitation to Negotiate – County Transportation Commission Partnership Program

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Announcing the MSRC's Clean Transportation Funding™

CTC Partnership Program

A Funding Opportunity to Enhance Mobility While Improving Air Quality in the South Coast Air Quality Management District

Invitation to Negotiate

December 1, 2017

I INTRODUCTION

Since the inception of the MSRC's Clean Transportation Program over 26 years ago, significant progress has been made in reducing emissions from motor vehicles, especially as it pertains to vehicle exhaust emissions. Emissions from motor vehicles, including light, medium, and heavy-duty vehicles, are on the order of 90% cleaner today as compared to 25 years ago, and zero and near-zero vehicle technologies are being introduced at an ever increasing rate. Overall, air quality has improved dramatically within the South Coast AQMD since the inception of the MSRC.

While measureable progress has been made in reducing vehicle emissions, the South Coast region still fails to meet federally-mandated air quality standards. These standards for smog-forming pollutants will become even stricter by year 2023 – *only six years away*. According to the South Coast AQMD, NOx air pollutant emissions must be reduced by an additional 45% in order to meet the 2023 federal ozone standard.

It is unlikely that automotive technology advancements alone will be able to achieve the required 45% reduction in air pollutant emissions, at least in the near term. Compounding the issue is the projected population growth, estimated by the Southern California Association of Governments at approximately 12.5% for the South Coast region between 2020 and 2035. This anticipated growth not only negatively impacts air quality, but roadway congestion as well. Thus, in order to meet this region's mandated clean air obligations, both cleaner vehicles and strategies that reduce vehicle trips and miles traveled must be vigorously pursued.

It should be recognized that South Coast transit agencies were the first in the nation to deploy near zero transit buses in significant numbers – vehicles that are 90% cleaner than the current standards and, amazingly, 99.5% cleaner than the urban transit bus NOx emission standard that was in place when the MSRC was created. Additionally, locally-manufactured zero emission transit buses are now commercially available, and great progress is being demonstrated as it relates to zero emission bus range, reliability, and cost reduction.

In addition to cleaner vehicles, numerous air quality improvement strategies have been demonstrated in an attempt to shift drivers out of their cars and into an alternative commute mode – public transit, ridesharing, or an active transportation mode such as walking and bicycling. While the goal of single occupant automobile trip reductions has remained constant, the methods of convincing drivers to opt out of solo-vehicle commuting have evolved in recent years, in part due to new communication and information technologies. As an example, alternative commute strategies such as car and bike sharing have really only become viable options with the proliferation of smart phones – these strategies can now help address the broader goal of increased use of public transportation by addressing the "First Mile, Last Mile" conundrum. Social media, a phenomenon that has only been available for the past several years, is reshaping how individuals evaluate ridesharing options. Thus, recent technology innovations have put a new spin on familiar trip reduction strategies. In turn, the need for short term air pollution reduction strategies is placing a renewed emphasis on the implementation of transportation demand strategies.

Traditional transportation demand management (TDM) and transportation control measure (TCM) strategies are also getting more attention due the inextricable link between traffic congestion and air quality. Increased emphasis is being placed on strategies that smooth traffic flow, such as the modernization of traffic control

systems to adaptively coordinate traffic signals in real-time and roving freeway service patrols to quickly remove non-recurrent traffic incidents.

The purpose of this Invitation to Negotiate is to partner with County Transportation Commissions (CTCs) that have historically taken the lead in implementing cleaner technology vehicles, enhanced transportation infrastructure, and TDM/TCM strategies, and provide a flexible funding opportunity to implement regionally significant projects. In offering funding to the CTCs, the MSRC hopes to stimulate the demonstration of innovative projects, as well as expand "tried and true" air quality improvement strategies, consistent with the South Coast AQMD's 2016 Air Quality Management Plan and SB375. The goal of the MSRC is to provide funds that can be used to match other sources of funding; it is hoped that the infusion of MSRC funds will allow CTC-sponsored projects to be implemented both sooner and on a broader scale.

The MSRC views the CTCs as strategic partners, as the CTCs typically solicit and co-fund the majority of transportation-related air quality improvement projects within their respective jurisdictions. Thus, the CTCs have the best overall perspective regarding the need for transportation improvements within their respective regions as well as knowledge of where funding can most effectively be applied.

It is understood that each CTC has ambitious plans for their region. Undoubtedly, the funding needs for each CTC jurisdiction greatly exceed the funding available from all sources. Because each CTC could easily expend any level of funding offered by the MSRC, and given that MSRC funding is limited, the CTC Partnership Program will offer each Transportation Commission an equal share of the available $8.0M; thus, each CTC is eligible for $2.0M in MSRC **Clean Transportation Funding™**. As stated above, the MSRC anticipates that this amount will be significantly leveraged with other funding sources.

The MSRC also understands that the burden for wisely investing MSRC funds, including project identification and selection, oversight, and reporting, largely rests with the CTCs. In recognition of the CTCs accepting these responsibilities, the MSRC will reciprocate by offering the CTCs a high degree of flexibility in implementing air quality improvement-oriented projects within their jurisdiction. This flexibility extends to project type and implementation schedule, as the MSRC is fully aware that each CTC has unique requirements from a timeline perspective.

The MSRC does require, however, that projects implemented with **Clean Transportation Funding™** focus on air quality improvements. Examples of eligible project categories are presented below; other project types may be eligible:

- Capital Improvement Projects, including but not necessarily limited to infrastructure construction and enhancement, transit center construction or expansion, etc.
- Capital Purchase Projects, including revenue fleet vehicle purchases that meet, at a minimum, the near-zero emissions standard of 0.02 g/bhp-hr for NOx
- Traffic Signal Coordination
- Ridesharing Programs
- Active Transportation Programs, including bicycle sharing projects
- Transit Pass Incentive Programs

- Freeway Service Patrols
- "First Mile, Last Mile" Transportation Strategies
- Information Technology Projects that focus on air quality improvement

The MSRC recognizes that the expertise for designing projects resides with the CTCs; thus, other project categories are potentially eligible if they offer the potential to result in meaningful air quality benefits. Please note the determination of project eligibility will remain the sole authority of the MSRC.

All CTCs are encouraged to submit a concise Proposal for MSRC funding consideration in accordance with the guidelines outlined in the following Sections. An approximately seven-month window has been established to accept proposals commencing on December 1, 2017 and ending June 29, 2018. Proposals may be submitted at any time during that period and will be considered for funding upon receipt. Additionally, a CTC may submit multiple proposals for MSRC funding consideration throughout the proposal acceptance period, up to the maximum funding request of $2,000,000.

II GENERAL REQUIREMENTS & CONDITIONS

The MSRC's CTC Partnership Program has been designed to offer maximum flexibility while ensuring conformance to all applicable SCAQMD regulations and MSRC policies. Thus, the following requirements and conditions apply to each CTC:

1. **Earliest Date for an MSRC Co-funded Project to Commence** – The release date of this Invitation to Negotiate, December 1, 2017, is the earliest date work on a project can commence and be potentially eligible for MSRC funding. *This only applies to project implementation costs for which MSRC funding is sought – previous coordination planning or other project components conducted using other funding sources is not subject to this requirement*.

   Please note that any expenditure made in anticipation of an award of MSRC funding prior to contract execution is solely at the applicant's risk. If no contract is executed, neither the MSRC nor SCAQMD is liable for payment of any funds expended in anticipation of a contract. Please note that in the event a contract is executed, reimbursement for any costs incurred by the proposer in anticipation of the contract is at the discretion of the MSRC and SCAQMD.

2. **Funding Availability** - The total amount of MSRC **Clean Transportation Funding™** allocated for the CTC Partnership Program is $8.0M. Each CTC within the SCAQMD is eligible to receive a maximum of $2.0M under the Partnership Program on a sole-source contract award basis.

3. **Eligibility Requirements** – Only County Transportation Commissions within the SCAQMD are eligible to submit a proposal under the Program. Other public and private entities, including but not limited to transit operators, local governments, public agencies, traffic engineering firms, urban planning firms, etc., are welcome to participate as a subcontractor to a County Transportation Commission.

4. **Project Completion Deadlines** – All projects should be designed such that they can be fully implemented within 60 months of contract execution.

5. **Reporting Requirements** – The reporting requirements established for the Program are intended to ensure adequate monitoring of the use of public funds, while avoiding the imposition of excessive reporting burdens on the funding recipients. Individual reporting requirements will be a function of the type of project proposed; however, reporting typically includes quarterly progress reports as well as a concise Final Report.

6. **Audit Requirements** – In accordance with state law, all projects funded with MSRC **Clean Transportation Funding™** are subject to audit. It is highly recommended that applicants employ standard government accounting practices when administering their MSRC co-funded project.

7. **Additional Requirements & Conditions on MSRC Program Funding**

   - Projects funded under the MSRC CTC Partnership Program are not eligible to receive additional MSRC funds under any other current or future MSRC Work Program solicitation;
   - Projects awarded MSRC funding under a previous Work Program are not eligible to receive additional MSRC funding under this Program;
   - MSRC funding over and above the original contract amount will not be available for any reason, including project cost overruns. CTCs must use funding sources other than MSRC funds to cover foreseen or unforeseen project cost increases;
   - Project management costs necessary to implement demonstration projects are allowable; however, the MSRC reserves the right to reduce or delete project management costs that appear excessive**;**
   - MSRC funds will be distributed on a reimbursement basis upon completion of the approved project milestone and submittal of all required reports and invoices;
   - Certificate of Insurance or Letter of Self Insurance - All CTCs that accept an MSRC funding award must provide a Certificate of Insurance or Letter of Self Insurance within 45 days of notification of a funding award.

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II PROPOSAL CONTENT

In an effort to reduce the paperwork burden, a concise proposal format has been adopted for the CTC Partnership Program. There are three (3) primary parts to be completed, as follows:

- **Work Plan** – This proposal element outlines the various projects or programs for which MSRC funding is sought. The information provided will be the primary source material for the development of a sole-source contract Statement of Work. The Work Plan should, to the extent feasible, include specific information as it pertains to each project(s) selected for demonstration or implementation.
- **Proposed Budget** – This proposal element delineates how the CTC proposes to invest their appropriation of MSRC **Clean Transportation Funding™**. As with the Work Plan, it is preferred that the CTC provide cost information at the "per project" level. However, under an anticipated Call for Projects scenario, definitized cost information may not be readily available. Thus, the CTC may provide a draft Budget, with the knowledge that additional specificity will be added through a subsequent submission. At a minimum, CTCs should specify what limit they would place on MSRC funding as a percentage of individual project costs. Please note that the goal of the MSRC is to significantly leverage **Clean**

Transportation Funding™; thus, CTCs are encouraged to maximize the use of other funding sources and limit the use of MSRC funds to cases where the availability of MSRC funding is a deciding factor in a project's viability.

- **Implementation Schedule** – This final proposal element requests the submittal of a schedule depicting key milestones, anticipated project completion dates, etc. There is a high level of flexibility associated with the 60 months of contract execution.

III PROPOSAL SUBMITTAL

Proposals can be submitted by a CTC anytime between the dates of December 1, 2017 and June 29, 2018. As this is a sole source solicitation, the MSRC reserves the right to modify the proposal acceptance period at their discretion, including granting additional proposal preparation time without penalty.

Proposals may be submitted in any manner, including e-mail, and should be addressed to Cynthia Ravenstein, MSRC Program Administrator:

Cynthia Ravenstein
21865 Copley Drive
Diamond Bar, CA 91765
Cravenstein@AQMD.gov
(909) 396-3269

IV PROPOSAL REVIEW

A Subcommittee of the MSRC Technical Advisory Committee (MSRC-TAC) will evaluate each proposal received for conformance to MSRC goals and Program requirements. The Subcommittee will make recommendations to the full MSRC-TAC, who will in turn advise the MSRC. Upon approval by the MSRC, a sole-source contract will be pursued between the SCAQMD on behalf of the MSRC and each CTC. Proposals will be evaluated as received.

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Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 17

REPORT: Legislative, Public Affairs and Media Report

SYNOPSIS: This report highlights the October 2017 outreach activities of the Legislative, Public Affairs and Media Office, which include: an Environmental Justice Update, Community Events/Public Meetings, Business Assistance, Media Relations and Outreach to Business and Federal, State, and Local Government.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

DJA:FW:MC:DM

BACKGROUND
This report summarizes the activities of the Legislative, Public Affairs and Media Office for October 2017. The report includes five major areas: Environmental Justice Update; Community Events/Public Meetings (including the Speakers Bureau/Visitor Services, Communications Center, and Public Information Center); Business Assistance; Media Relations; and Outreach to Business and Governments.

ENVIRONMENTAL JUSTICE UPDATE
The following are key environmental justice-related activities in which staff participated during October 2017. These events involve communities which suffer disproportionately from adverse air quality impacts.

October 4

- Staff participated in the TRAC (Taking Responsibility And Control) 91746 Neighborhood Watch meeting in La Puente. Staff explained the complaint process and the importance of filing timely air quality complaints. Staff also extended an invitation to the SCAQMD's upcoming 3rd Annual Environmental Justice conference.

October 18

- Staff attended the Riverside County Health Coalition's General Membership meeting in Moreno Valley. Staff networked with several community-based health organizations and the cities of Moreno Valley and Lake Elsinore to promote air quality related issues.
- Staff participated in the San Bernardino County Healthy Communities program in Yucaipa. Staff provided information on incentive programs for cleaner municipal fleets and Check Before You Burn.

October 19

- Staff provided an environmental justice update to the joint student-faculty Sustainability Committee at San Bernardino Valley College (SBVC). This was provided as a follow-up to last year's environmental justice workshop hosted by SCAQMD at SBVC. Presentations included information on environmental justice, air monitoring, legislation, enforcement, and accomplishments in the area. The update was well received by students and staff. Students expressed an interest in continuing a relationship with the SCAQMD.

October 25

- Staff attended the Coachella Valley Environmental Justice Taskforce meeting in Indio. The focus of the meeting was an update by CARB on the Salton Sea and a discussion on the IVAN (Identifying Violations Affecting Neighborhoods) community air monitoring system.

COMMUNITY EVENTS/PUBLIC MEETINGS

Each year SCAQMD staff engage with thousands of residents, providing valuable information about the agency, incentive programs and ways individuals can help reduce air pollution through events and meetings sponsored solely by SCAQMD or in partnership with others. Attendees typically receive the following information:

- Tips on reducing their exposure to smog and its health effects;
- Clean air technologies and their deployment;
- Invitations or notices of conferences, seminars, workshops and other public events;
- SCAQMD incentive programs;
- Ways to participate in SCAQMD's rule and policy development; and
- Assistance in resolving air pollution-related problems.

SCAQMD staff attended and/or provided information and updates at the following events:

October 6

- SCAQMD's 29th Annual Clean Air Awards, Los Angeles.

October 7

- 5th Annual Rendezvous Back to Route 66 Event, Downtown San Bernardino.

October 14

- 2017 Water Fest, San Gabriel Valley Municipal Water District, Los Angeles County Event.

October 21

- 12th Annual Taste of Soul Family Festival, Los Angeles.

October 27

- Ontario High School Career Fair Event, Ontario.

SPEAKERS BUREAU/VISITOR SERVICES

SCAQMD regularly receives requests for staff to speak on air quality-related issues from a wide variety of organizations, such as trade associations, chambers of commerce, community-based groups, schools, hospitals and health-based organizations. SCAQMD also hosts visitors from around the world who meet with staff on a wide range of air quality issues.

October 18

- Staff presented an overview on SCAQMD, air quality, and clean air technologies to 18 students and staff from California State University, Long Beach. Staff provided a tour of the SCAQMD laboratory, and a visit to the SCAQMD ambient Air Monitoring station in Riverside.

October 19

- Twenty students and staff from the Art Center College of Design, Pasadena visited SCAQMD. The visit included an overview of SCAQMD, air quality, clean alternative fuel vehicles, as well as a tour of the SCAQMD facility and laboratory.

October 20

- Forty-eight students and staff from the Civil Engineering Department, Cal Poly Pomona University visited SCAQMD. The visit included an overview of SCAQMD, air quality, clean alternative fuel vehicles, as well as tour of the SCAQMD facility and laboratory.

October 25

- Staff presented an overview of SCAQMD, air quality, and clean air technologies to 20 students and staff at the Los Angeles Unified School District's Valley Academy of Arts and Sciences School in Granada Hills.

October 26

- Twelve visitors from India (provided by the U.S. Department of State International Visitors Program) visited SCAQMD. The visit included an overview of SCAQMD, air quality, clean alternative fuel vehicles, as well as a tour of the SCAQMD facility and laboratory.

COMMUNICATION CENTER STATISTICS

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

Calls to SCAQMD's Main Line and 1-800-CUT-SMOG® Line	4,134
Calls to SCAQMD's Spanish-language Line	40
Total Calls	4,174

PUBLIC INFORMATION CENTER STATISTICS

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

Calls Received by PIC Staff	177
Calls to Automated System	852
Total Calls	1,029
Visitor Transactions	223
Email Advisories Sent	4,394

BUSINESS ASSISTANCE

SCAQMD notifies local businesses of proposed regulations so they can participate in the agency's rule development process. SCAQMD also works with other agencies and governments to identify efficient, cost-effective ways to reduce air pollution and shares that information broadly. Staff provides personalized assistance to small businesses both over the telephone and via on-site consultation. The information is summarized below:

- Provided permit application assistance to 226 companies.
- Issued 92 clearance letters.

Types of businesses assisted

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

MEDIA RELATIONS

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

Total Media Inquiries: 133
News Releases Issued: 1
Air Quality Advisories: 9

Major Media Topics for October

- **Refineries**
  - KPCC inquired regarding recent flaring events at the Torrance Refining Company (TRC). Also of interest was the TRC's reported exceedance of its SOx flaring emissions target and potential resulting mitigation fees due to SCAQMD.
  - Center for Public Integrity continued their inquiry into refinery practices and enforcement procedures.
  - The Daily Breeze asked for SCAQMD's comments on the three bills signed by Governor Brown regarding refinery regulation.
- **Wildfires:** KNX, KPCC, OC Register, ABC7, KCBS, Patch.com and the Weather Channel requested interviews on local wildfires and health effects of wildfire smoke. Phone interviews and in-person interviews were conducted with ABC7, the Weather Channel, KPCC, and KNX. Interviews were also conducted with student reporters at Chapman University on the health effects of wildfire smoke.
- **Smog Season:** Inland News Radio requested, and staff provided, the number of exceedance days and peak ozone levels for January 1, 2017 – September 30, 2017, along with an explanation of how hotter-than-normal temperatures in 2016 and 2017 contributed to a higher number of exceedance days. The L.A. Times requested an interview regarding the higher ozone levels and increased number of days exceeding ozone standards for the second year in a row. Staff also received questions from CBS/KCAL 9 regarding the trend in "bad smog days" in California. Reporters were interested in SCAQMD's data and its implications in relation to a Lancet story on global pollution.

- **Catenary Press Event:** Siemens and SCAQMD continue to collaborate on a joint media event unveiling the new catenary truck demonstration in Carson. Staff and management have discussed alternate means of outreach and promotion and are arranging a media-only demonstration to accommodate news crews' needs within the limited space available.
- **Public Records Request:** The L.A. Times submitted a public records request to inspect and/or obtain records related to the electric school bus funds that were awarded at the June 2, 2017 Governing Board meeting (#PA2017-01).
- **Huntington Beach Odors:** OC Register submitted questions regarding odors in Huntington Beach. Stories on the odors appeared in the L.A. Times and the Daily Breeze. Staff also conducted an interview with KNX on the topic.
- **Air Monitoring***:* KPCC requested information on two air monitors in Costa Mesa. The inquiry is a follow-up to the Making Sense of Sensors conference, which the reporter attended.
- **Aliso Canyon:** HBO's Vice News contacted staff for follow-up on the Aliso Canyon well leak incident, two years later. Staff continues to work with the reporter on the story.
- **Rule 415 / Rendering Plants:** ABC7, CBS2, and KVEA (Telemundo) attended a town hall meeting at Resurrection Church in Boyle Heights on October 23rd regarding odors from nearby rendering plants. Staff participated in two live interviews, one on camera and one recorded for radio. Additional follow-up was received from CBS2 via phone after the meeting.

Media Campaigns

- **Google Ad Campaign:**The Right to Breathe Google Ad Word campaign garnered 11,483 clicks, 12.63 million impressions, and 1.9 million views.
- **Check Before You Burn:**
    - Completed approximately 400 surveys by phone and Internet during the first two weeks of October. Survey results are under review.
        - Post appeared on "DIY Restored" social media feed.
    - Received 157 pledges and 149 Air Alerts signups this month from events such as "IE Taco Festival" and "Placentia Heritage Festival."
    - The 30-second, 15-second, 6-second and Spanish-language videos have been completed.
    - Launched new Check Before You Burn webpages in English and Spanish, and refreshed "Air Alerts" main page.
    - Presented this year's campaign and outreach materials to EJAG committee members.
- **Signature Film update:** The director has submitted a rough cut of the audio file for review.

News Releases & Media Advisories Issued

- SCAQMD to Honor Clean Air Heroes at Annual Clean Air Awards Luncheon, October 6, 2017.

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

Field visits and/or communications were conducted with elected officials or staff from the following cities:

Alhambra
Arcadia
Azusa
Baldwin Park
Canyon Lake
Carson
Claremont
Coachella
Compton
Corona
Costa Mesa
Covina
Culver City
Diamond Bar
Duarte
Eastvale
El Monte
Fountain Valley
Garden Grove
Glendale
Glendora
Huntington Beach
Industry
Irwindale
Indio
La Cañada Flintridge
La Puente
La Verne
Lake Elsinore
Lawndale
Long Beach
Los Angeles
Malibu
Monrovia
Moreno Valley
Monterey Park
Norco
Paramount
Pasadena
Pomona
Rialto
Riverside
Rosemead
San Dimas
San Gabriel
San Marino
Seal Beach
Sierra Madre
Signal Hill
South El Monte
South Pasadena
Temple City
Torrance
Walnut
West Covina

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

- U.S. Senator Dianne Feinstein
- U.S. Senator Kamala Harris
- U.S. Congressman Pete Aguilar
- U.S. Congressman Ken Calvert
- U.S. Congressman Lou Correa
- U.S. Congresswoman Judy Chu
- U.S. Congressman Ted Lieu
- U.S. Congressman Raul Ruiz
- U.S. Congressman Mark Takano
- State Senator Ed Hernandez
- State Senator Ricardo Lara
- State Senator Anthony Portantino
- State Senator Richard Roth
- State Senator Jeff Stone
- Assembly Member Raul Bocanagra
- Assembly Member Sabrina Cervantes
- Assembly Member Ed Chau
- Assembly Member Chris Holden
- Assembly Member Jose Medina
- Assembly Member Al Muratsuchi
- Assembly Member Sharon Quirk-Silva
- Assembly Member Phil Ting

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

California Air Resources Board
Desert Valley Builders Association
Greater Coachella Valley Chamber of Commerce
Greater Palm Springs Visitors Bureau
Inland Action Inc., San Bernardino
Laguna Beach Chamber of Commerce
Los Angeles Area Chamber of Commerce
League of California Cities, Los Angeles County Division
Moreno Valley Chamber of Commerce
Mountain Communities Chamber of Commerce
Redlands Chamber of Commerce
Riverside County Agricultural Commission
Riverside County Transportation Commission
Riverside Transit Agency (RTA)
Santa Ana Chamber of Commerce
San Bernardino Council of Governments
San Bernardino County Transportation Authority (SBCTA)
San Gabriel Valley Council of Governments
San Gabriel Valley City Managers Association
San Gabriel Valley Economic Partnership
South Bay Cities Council of Governments
South Bay Association of Chambers of Commerce
South Pasadena Chamber of Commerce
Southern California Association of Governments (SCAG)
Tustin Chamber of Commerce
Valley Industry & Commerce Association
Vietnamese American Chamber of Commerce of Orange County
Western Riverside Council of Governments (WRCOG)
Western Riverside Transportation NOW (RTA), Greater Riverside Chapter
Western Riverside Transportation NOW (RTA), Northwest Chapter
Yucaipa Chamber of Commerce
Upland Chamber of Commerce
United States Chamber of Commerce, Washington D.C.
U.S. Environmental Protection Agency

Staff represented SCAQMD and/or provided updates or a presentation to the following community and educational groups and organizations:

Cal Poly Pomona
Cabazon Band of Mission Indians
Corona-Norco Unified School District
Coachella Valley Environmental Justice Enforcement Task Force
Inland Empire Health Partners (IEHP)
Identifying Violations Affecting Neighborhoods (IVAN)
Inland Empire Health Plan, Rancho Cucamonga
TRAC 91746 Neighborhood Watch Group, La Puente
Ocean View School District, Huntington Beach
Ontario High School
Pasadena Arts Center
Porter Ranch Neighborhood Council
Riverside County Health Coalition
San Bernardino County Health Communities Group
San Bernardino Valley College
Temescal Valley Municipal Advisory Council
University of California, Riverside
University of California, Riverside Health Systems

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 18

REPORT: Hearing Board Report

SYNOPSIS: This reports the actions taken by the Hearing Board during the period of October 1 through October 31, 2017.

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file this report.

Julie Prussack
Chairman of Hearing Board

DG

Two summaries are attached: **October 2017 Hearing Board Cases** and **Rules From Which Variances and Orders for Abatement Were Requested in 2017**. An Index of District Rules is also attached.

The total number of appeals filed during the period October 1 to October 31, 2017 is 0; and total number of appeals filed during the period of January 1 to October 31, 2017 is 3.

Report of October 2017 Hearing Board Cases

Case Name and Case No. (SCAQMD Attorney)	Rules	Reason for Petition/Hearing	District Position/ Hearing Board Action	Type and Length of Variance or Order	Excess Emissions
1. Chevron Products Company Case No. 831-388 (S. Pruitt & N. Sanchez)	203(b) 2004(f)(1) 3002(c)(1)	Replacement of carbon units in carbon absorption system.	Not Opposed/Granted	RV granted commencing 10/26/2017 and continuing through 8/4/2018.	None
2. Orange County Sheriff's Department Case No. 6091-1 (N. Feldman)	203(b)	Petitioner has exceeded 200 hours on back-up generator.	Opposed/Granted	Ex Parte EV granted commencing 10/6/17 and continuing for 30 days or until the SV hearing currently scheduled for 10/25/17, whichever comes first.	ROG, NOx, and CO TBD by 10/25/17
3. Orange County Sheriff's Department Case No. 6091-1 (B. Tomasovic)	203(b)	Petitioner has exceeded 200 hours on back-up generator.	Not Opposed/Granted	SV granted commencing 10/25/17 and continuing through 1/3/18.	ROG: 1.5 lbs/day NOx: 1.5 lbs/day CO: 2.0 lbs/day
4. SCAQMD vs. Carlton Forge Works Case No. 6086-1 (N. Feldman)	N/A	Status Report/Modification	Stipulated/Modified	Mod. O/A issued 10/18/17.	N/A
5. SCAQMD vs. Rainbow Transfer/Recycling, Inc. Case No. 4394-2 (K. Manwaring)	N/A	Status Report/Modification	Stipulated/Modified	Mod. O/A extended through 5/31/18.	N/A
6. SCAQMD vs. Security Paving Co., Inc. Recycled Base Materials, Inc. Case No. 6073-1 (N. Feldman)	N/A	Status Report	No Action	Status hearing held.	N/A

Acronyms
CO: Carbon Monoxide
EV: Emergency Variance
Mod. O/A: Modification Order for Abatement
NOx: Oxides of Nitrogen
N/A: Not Applicable
ROG: Reactive Organic Gases
RV: Regular Variance
SV: Short Variance
TBD: To be determined

Rules from which Variances and Orders for Abatement were Requested in 2017

2017	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Actions
# of HB Actions Involving Rules													
202(a)		1	1	1		1							4
203(a)	1	1	1	2									5
203(b)	6	4	6	3	3	5	4	3	1	3			38
401(b)(1)								1					1
402	2	2	3	1	1		1	1					11
403(d)(1)				1									1
403(d)(2)				1									1
403(d)(3)				1									1
442		2											2
461(e)(2)					1								1
461(e)(1)						1							1
461(e)(3)		1											1
1110.2							1	1					2
1110.2(d)(1)(B), Table II	1					1	1	1					4
1110.2(d)(1)(L)						1							1
1110.2(d)(2)(A)(ii)							1						1
1146						1							1
1147	1												1
1147(c)		1	1			1							1
1153.1(c)(3)					1								1
1153.1(c)(6)					1								1
1176(f)(3)	1												1
1470(c)(3)(C)(iii)		1											1
1703							1	1					2
2004(f)(1)	6	1	3	2	1		2	2		1			18
2011(c)(2)		1											1
2012(c)(2)(A)			1										1
2012(c)(3)(A)			1										1
3002						1							1
3002(a)		1											1
3002(c)(1)	3	4	4	2	1	1	4	2	1	1			23
H&S 41700	2	2	3	1	1		1	1					11

DISTRICT RULES AND REGULATIONS INDEX
FOR 2017 HEARING BOARD CASES AS OF OCTOBER 31, 2017

REGULATION II – PERMITS

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 442	Usage of Solvents
Rule 461	Gasoline Transfer and Dispensing

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1110.2	Emissions from Gaseous- and Liquid-Fueled Internal Combustion Engines
Rule 1146	Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters
Rule 1147	NOx Reductions from Miscellaneous Sources
Rule 1153	Commercial Bakery Ovens
Rule 1176	Sumps and Wastewater Separators

REGULATION XIV – TOXICS

Rule 1470	Requirements for Stationary Diesel-Fueled Internal Combustion and Other Ignition Engines

REGULATION XVII - PREVENTION OF SIGNIFICANT DETERIORATION (PSD)

Rule 1703	PSD Analysis

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	Requirements
Rule 2011	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SOx) Emissions
Rule 2012	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NOx) Emissions

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements

CALIFORNIA HEALTH AND SAFETY CODE

§41700	Prohibited Discharges
§41701	Restricted Discharges

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 19

REPORT: Civil Filings and Civil Penalties Report

SYNOPSIS: This reports the monthly penalties from October 1 through October 31, 2017, and legal actions filed by the General Counsel's Office from October 1 through October 31, 2017. An Index of District Rules is attached with the penalty report.

COMMITTEE: Stationary Source, November 17, 2017, Reviewed

RECOMMENDED ACTION:
Receive and file this report.

Kurt R. Wiese
General Counsel

KRW:lc

There are no Civil Filings for October 2017.

Attachments
October 2017 Penalty Report
Index of District Rules and Regulations

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
General Counsel's Office

October 2017 Settlement Penalty Report

Total Penalties

Civil Settlements:	$323,149.00
MSPAP Settlements:	$55,365.00
Total Cash Settlements:	$378,514.00
Total SEP Value:	$0.00
Fiscal Year through 10 / 2017 Cash Total:	$2,597,389.97
Fiscal Year through 10 / 2017 SEP Value Only Total:	$1,120,000.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
Civil Settlements						
800181	CALIFORNIA PORTLAND CEMENT CO	2004 2004	10/10/2017	NSF	P59283 P60580	$11,000.00
139445	CHILLED WATER PLANT, LLC	203 (b)	10/6/2017	BST	P62488	$3,200.00
147808	CHOOSE MANUFACTURING	203(b)	10/24/2017	SMP	P63857	$4,000.00
800091	EXXONMOBIL OIL CORP	463, 3002	10/18/2017	DH	P37238	$25,000.00
24812	FARMER BROS CO	1147	10/6/2017	BST	P60717	$75,000.00
38286	JEFF'S SHELL SERVICE	461(c), 461(c)(2)(B)	10/24/2017	WBW	P65003	$500.00
137961	LAMILL INC	1147	10/5/2017	NSF	P64116	$1,000.00
157216	MK'S FAIRVIEW 76 Small Claims Case No. 30-2017-00941542-sc-sc-cjc	203(a), 461, 461 (e) (2) 203 (a) 461, 461(c), 41960.2	10/27/2017	BST	P61972 P63003 P64329	$1,000.00
7427	OWENS-BROCKWAY GLASS CONTAINER INC	2004	10/19/2017	BST	P62080	$9,000.00
94272	RGF ENTERPRISES INC	3002, 3003	10/12/2017	BST	P62752	$2,250.00
800026	ULTRAMAR INC	1176(e)(1) 1176(e)(1), 3002(c)(1) 201, 2004, 2011, 2012	10/17/2017 10/10/2017	NAS	P60355 P60356 P61020	$84,500.00
158685	VALSPAR CORP.	314	10/12/2017	MJR	P50629	$99,999.00
159801	VEXCON CHEMICALS INC./POLYSAT INC.	314	10/20/2017	BST	P64820	$500.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
2846	VISTA PAINT CORP	3002(c)(1)	10/4/2017	WBW	P60679	$5,000.00

Total Civil Settlements: $321,949.00

MSPAP Settlements

149101	A + CLEANER	201, 1421	10/4/2017	JS	P64078	$550.00
165227	AIRPORT COURTHOUSE, JCC/AOC	1146.2	10/10/2017	JS	P63678	$3,600.00
222	ARCHITECTURAL WOODWORKING CO	3002, 3003	10/27/2017	JS	P64133	$770.00
182732	B & J TREE SERVICE	403(d)(1)	10/4/2017	JS	P56742	$3,640.00
12129	BEVERLY HOSPITAL	203(b), 1146	10/10/2017	JS	P64132	$4,620.00
182058	BM EXTRUSION	203 (a)	10/5/2017	JS	P64164	$2,200.00
109461	BURLINGTON NORTHERN/SANTA FE RAILWAY CO	201, 203 (a)	10/5/2017	JS	P64134	$1,100.00
115488	CARDLOCK FUELS SYSTEM, INC.	461	10/18/2017	JS	P65712	$1,800.00
177755	CHEVRON EXTRA MILE	461 (e) (1), 461(e)(2)	10/4/2017	JS	P65455	$1,600.00
175492	CITY OF BEAUMONT - POLICE DEPARTMENT	1470	10/18/2017	JS	P64365	$770.00
142874	CITY OF ONTARIO, POLICE DEPT,	203 (b)	10/5/2017	TF	P65362	$375.00
119665	CONDON JOHNSON & ASSOCIATES INC	Title 13	10/10/2017	JS	P65254	$850.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
108802	D & H SUPER SERVICE	203 (b), 461 461(c)(2)(B), 41960.2	10/4/2017	GC	P65005	$300.00
174205	DION AND SONS	201, 203(a)	10/18/2017	GC	P64016	$600.00
184450	EASTERN MUNICIPAL WATER DISTRICT	403, 403(d)(1) 403(d)(2)	10/5/2017	JS	P59694	$7,425.00
182165	EXPRESS TANK LINES, INC.	461	10/5/2017	GC	P64337	$400.00
146890	GALAXY OIL CO	461	10/4/2017	GC	P64343	$150.00
158390	H&S ENERGY, LLC. H&S 21	203 (b)	10/5/2017	GC	P64958	$640.00
92642	HF & SJ INC, HUNTINGTON BEACH ARCO	461, 41960.2	10/5/2017	GC	P64342	$300.00
132187	HOME DEPOT USA, INC., 3 E COMPANY	203 (b)	10/20/2017	GC	P64067	$3,200.00
800003	HONEYWELL INTERNATIONAL INC	3002(c)(1)	10/10/2017	GC	P64461	$425.00
62862	IMPERIAL IRRIGATION DISTRICT/ COACHELLA	3002(c)(1)	10/27/2017	GC	P56048	$400.00
96025	ISLAND MARINE FUEL	461(E)(2)(A) 461(e)(2)(C)	10/4/2017	GC	P63604	$1,100.00
112655	LONG BEACH POLICE, WEST STATION	461	10/5/2017	TF	P64222	$150.00
172542	LONG BEACH UNIFIED SCHOOL DISTRICT	222, 1415	10/19/2017	TF	P64227	$1,500.00
184917	MA (MARIANO AVILA)	203 (a)	10/18/2017	TF	P63864	$300.00
134211	MONTAGE RESORTS & SPA	1146.1	10/18/2017	TF	P64076	$2,200.00

Fac ID	Company Name	Rule Number	Settled Date	Init	Notice Nbr	Total Settlement
173522	NAMSA	1146.2	10/5/2017	TF	P63611	$1,100.00
63951	NORDSTROM	203 (b)	10/5/2017	TF	P64075	$375.00
109105	OAKLEY INC.	203 (b)	10/5/2017	TF	P64074	$50.00
114608	ONE HOUR CLEANERS, JAE C RYU, DBA	1421	10/18/2017	TF	P63716	$450.00
164601	PHIL'S CONCRETE PUMPING, INC.	203 (a)	10/18/2017	TF	P59690	$300.00
177498	POTENTIA FUEL, INC.	461, 41960	10/20/2017	TF	P64914	$550.00
142375	RALPH'S STORE #45	203	10/20/2017	TF	P63133	$1,000.00
185156	RYKO PRODUCTS, INC	203 (a)	10/4/2017	TF	P65364	$2,750.00
173381	SO. CALIFORNIA HOSPITAL AT CULVER CITY	1146.1	10/27/2017	GV	P63675	$2,000.00
158430	STATE OF CALIF, DEPT OF VETERANS AFFAIRS	203, 1146	10/5/2017	JS	P63685	$3,375.00
145733	UNITED RENTAL	461	10/5/2017	GV	P64208	$850.00
145733	UNITED RENTAL	461	10/4/2017	GV	P64220	$800.00
184743	WOOD OIL COMPANY	461(c)(1)(B)	10/4/2017	GV	P65360	$800.00

Total MSPAP Settlements: $55,365.00

DISTRICT RULES AND REGULATIONS INDEX
FOR OCTOBER 2017 PENALTY REPORT

REGULATION II – PERMITS

Rule 201 Permit to Construct *(Amended 1/5/90)*
Rule 203 Permit to Operate *(Amended 1/5/90)*
Rule 222 Filing Requirements for Specific Emission Sources Not Requiring a Written permit Pursuant to Regulation II

REGULATION III - FEES

Rule 314 Fees for Architectural Coatings

REGULATION IV - PROHIBITIONS

Rule 403 Fugitive Dust
Rule 461 Gasoline Transfer and Dispensing *(Amended 6/15/01)*
Rule 463 Storage of Organic Liquids *(Amended 3/11/94)*

REGULATION XI - SOURCE SPECIFIC STANDARDS

Rule 1146 Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters *(Amended 11/17/00)*
Rule 1146.1 Emissions of Oxides of Nitrogen from Small Industrial, Institutional, and Commercial Boilers, Steam Generators, and
Rule 1146.2 Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers *(Adopted 1/9/98)*
Rule 1147 Nox Reductions From Miscellaneous Sources (9/08)
Rule 1176 Sumps and Wastewater Separators *(Amended 9/13/96)*

REGULATION XIV – TOXICS

Rule 1415 Reduction of Refrigerant Emissions from Stationary Refrigeration and Air Conditioning Systems
Rule 1421 Control of Perchloroethylene Emissions from Dry Cleaning Operations *(Amended 6/13/97)*
Rule 1470 Requirements for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines

REGULATION XX - REGIONAL CLEAN AIR INCENTIVES MARKET (RECLAIM)

Rule 2004	Requirements *(Amended 5/11/01)*
Rule 2011	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Sulfur (SO_X) Emissions *(Amended*
Rule 2012	Requirements for Monitoring, Reporting, and Recordkeeping for Oxides of Nitrogen (NO_X) Emissions *(Amended 5/11/01)*

REGULATION XXX - TITLE V PERMITS

Rule 3002	Requirements *(Amended 11/14/97)*
Rule 3003	Applications (Amended 3/16/01)

CALIFORNIA HEALTH AND SAFETY CODE § 41700

41960.2	Gasoline Vapor Recovery

CALIFORNIA CODE OF REGULATIONS

Title 13	Mobile Sources and Fuels

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 21

REPORT: Rule and Control Measure Forecast

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

COMMITTEE: No Committee Review

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

PMF:SN:AF:RM

The SCAQMD is required by state law to publish a list of all rules potentially scheduled for consideration during the coming year. The Rule and Control Measure Forecast is expanded for this purpose.

Attached is a list of rulemaking activity scheduled for 2018, with a detailed description of the proposed rule adoption or amendment. A third column identifies the type of rule (i.e. AQMP, Toxics, or Other). Projected emission reductions will be determined during rulemaking. The 2018 Rule Forecast Report includes a number of rulemaking efforts to transition RECLAIM facilities to a command and control regulatory program. New and amended rules that are associated with this transition are indicated with a #, symbol.

2018 MASTER CALENDAR

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.

January	Title and Description	Type of Rulemaking
2001 2002#*	**RECLAIM** Rules 2001 and 2002 will be amended to initiate the transition of NOx RECLAIM to command and control and revise provisions for entering SOx RECLAIM. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
February		
1111+	**Reduction of NOx Emissions from Natural Gas Fired, Fan-Type Central Furnaces** Rule 1111 will be amended to increase the mitigation fee to encourage manufacturers to commercialize compliant units and add a rebate program to encourage consumers to purchase compliant units. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1469*	**Hexavalent Chromium Emissions from Chromium Electroplating and Chromic Acid Anodizing Operations** Proposed Amended Rule 1469 will further reduce hexavalent chromium emissions by establishing new requirements for certain hexavalent chromium tanks that are currently not regulated and further address potential fugitive emissions from hexavalent chromium electroplating and chromic acid anodizing operations. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
March		
120	**Credible Evidence Rule** Proposed Rule 120 will establish that any credible evidence may be used for the purpose of establishing that a person has violated or is in violation of any approved plan or SCAQMD rule. This rule will provide standards for compliance determinations. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR

March (continued)	Title and Description	Type of Rulemaking
408	**Circumvention** Proposed Amended Rule 408 will clarify that only nuisance odors that do not cause or have a natural tendency to cause injury, or impact the health or safety of any person, are exempt from the rule. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1178+	**Further Reductions of VOC Emissions from Storage Tanks at Petroleum Facilities** Proposed Amended Rule 1178 will incorporate provisions to allow use of a flexible enclosure option allowed under the U.S. EPA Storage Tank Emission Reduction Partnership Program for floating roof storage tanks equipped with a slotted guide pole. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
April		
1146 1146.1 1146.2*+#	**Emissions of Oxides of Nitrogen from Industrial, Institutional and Commercial Boilers, Steam Generators, and Process Heaters** **Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters** Amendments to Rules 1146, 1146.1, and 1146.2 will incorporate requirements for facilities that are in RECLAIM that are required to meet BARCT emission control levels.	Other
2001*+#	**RECLAIM - Applicability** Amendments to Rule 2001 are needed to reflect the transition of RECLAIM facilities to command and control.	
1100*+#	**Implementation Schedule for NOx Facilities** Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command and control. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
May		
Reg. III	**Fees** Amendments to Regulation III will incorporate the CPI adjustment to keep pace with inflation, pursuant to Rule 320, and proposed amendments may also make any other needed adjustments. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR

May (continued)	Title and Description	Type of Rulemaking
Reg. XIII*#	**New Source Review** Amendments to Regulation XIII are needed to address New Source Review provisions for facilities that exit RECLAIM. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
June		
1118.1*+#	**Control of Emissions from Non-Refinery Flares** Proposed Rule 1118.1 will seek to reduce emissions from flaring at non-refinery facilities, including alternate uses of gases. The rule would require use of flares that meet Best Available Control Technology at sources such as landfills, wastewater treatment plants, and oil and gas production facilities. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1100*+#	**Implementation Schedule for NOx facilities** Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command and control. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
1403	**Asbestos Emissions from Demolition/Renovation Activities** Amendments to Rule 1403 will include specific requirements when conducting asbestos-emitting demolition/renovation activities at schools, daycares, and possibly establishments that have sensitive populations. Amendments may include other provisions to improve the implementation of the rule. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
July		
1110.2*+#	**Emissions from Stationary Internal Combustion Engines** Rule 1110.2 will be amended to incorporate provisions for facilities that are transitioning from NOx RECLAIM to command and control.	AQMP
1100*+#	**Implementation Schedule for NOx Facilities** Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command and control. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	

2018 MASTER CALENDAR

July (continued)	Title and Description	Type of Rulemaking
1410*	**Hydrogen Fluoride Use at Refineries** Proposed Rule 1410 will establish requirements for use of hydrogen fluoride at refineries. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
September		
1407* 1407.1*	**Control of Emissions of Arsenic, Cadmium and Nickel from Non- Ferrous Metal Operations** Proposed Rule 1407 will establish additional requirements to minimize air toxics from metal operations. Staff is analyzing sources subject to Rule 1407 and may develop a separate Rule 1407.1 for the largest sources subject to Rule 1407 and expand the applicability to address ferrous metal operations and hexavalent chromium emissions. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
1480*	**Toxics Monitoring** Proposed Rule 1480 will establish provisions for when ambient monitoring is required and the toxic air contaminants that will be monitored. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
October		
Reg. IX Reg. X	**Standards of Performance for New Stationary Sources (NSPS)** **National Emission Standards for Hazardous Air Pollutants (NESHAPS)** Amendments to Regulations IX and X are periodically made to incorporate by reference new or amended federal standards that have been enacted by U.S. EPA for stationary sources. Regulations IX and X provide stationary sources with a single point of reference for determining which federal and local requirements apply to their specific operations. *Carol Gomez 909.396.3264 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1134*+# 1100*+#	**Emissions of Oxides of Nitrogen from Stationary Gas Turbines** Proposed Amended Rule 1134 will update the emission standard to incorporate Best Available Retrofit Control Technology and incorporate an implementation schedule for NOx facilities that are exiting RECLAIM. **Implementation Schedule for NOx Facilities** Rule 1100 will establish the implementation schedule for other NOx RECLAIM facilities that are transitioning to command and control. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP

2018 MASTER CALENDAR

October (continued)	Title and Description	Type of Rulemaking
Reg. XVI	**Mobile Source Offset Programs** Amendments to various Regulation XVI rules will be proposed to provide greater opportunity to reduce mobile source emissions and to obtain credit in the State Implementation Plan for these reductions where possible, including addressing the recent U.S. EPA proposed disapproval of Rule 1610. *Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
November		
1135*+#	**Emissions of Oxides of Nitrogen from Electric Power Generating Facilities** Proposed Amended Rule 1135 will incorporate requirements for electric power generating facilities that are to transition from NOx RECLAIM to command and control. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1100*+#	**Implementation Schedule for NOx Facilities** Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command and control. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
1435*	**Control of Emissions from Metal Heat Treating Processes** Proposed Rule 1435 would establish requirements to reduce hexavalent chromium emissions from heat treating processes. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
December		
1109.1*+#	**Refinery Equipment** Proposed Rule 1109.1 will establish requirements for refineries that are transitioning from RECLAIM to command and control. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1100*+#	**Implementation Schedule for NOx Facilities** Rule 1100 will establish the implementation schedule for specific NOx RECLAIM facilities that are transitioning to command and control. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
2202	**On-Road Motor Vehicle Mitigation Options** Proposed amendments to Rule 2202 would enhance emission reductions obtained from the Employee Commute Reduction Program (ECRP) rule option. *Carol Gomez 909.396.3264 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR
2018 To-Be-Determined

To-Be-Determined	Title and Description	Type of Rulemaking
102	**Definition of Terms** Staff may propose amendments to Rule 102 to add or revise definitions in order to support amendments to other Regulation XI rules. *Carol Gomez 909.396.3264 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
113*#	**Monitoring, Reporting, and Recordkeeping (MRR) Requirements for NOx and SOx Sources** Proposed Rule 113 will establish MRR requirements for facilities exiting RECLAIM and transitioning to a command and control regulatory structure. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
218	**Continuous Emission Monitoring** Amendments to Rule 218 may be needed for facilities exiting RECLAIM and transitioning to a command and control regulatory structure. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
218.1	**Continuous Emission Monitoring Performance Specificiations** Amendments to Rule 218.1 may be needed for facilities exiting RECLAIM and transitioning to a command and control regulatory structure. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
219	**Equipment Not Requiring a Written Permit Pursuant to Regulation II** It is periodically necessary to amend Rule 219 to remove or add certain exemptions for low emission processes or equipment. This rule may be amended to address these specific situations as they arise. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
223+	**Emission Reduction Permits for Large Confined Animal Facilities** Proposed Amended Rule 223 will seek additional emission reductions from large confined animal facilities by lowering the applicability threshold. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
224+	**Incentives for Super-Compliant Technologies** Proposed Rule 224 will outline strategies and requirements to incentivize the development, establishment and use of super-compliant technologies. It may be considered as a part of Rule 219 amendments or proposed as a separate incentive rule. *Zorik Pirveysian 909.396.3421 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
416*	**Odors from Kitchen Grease Processing** Proposed Rule 416 will reduce ambient odors created during kitchen grease processing operations. The proposed rule will establish best management practices, and examine enclosure requirements for wastewater treatment operations and filter cake storage. The proposed rule may also contain requirements for an Odor Mitigation Plan. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
429*+#	**Start-Up and Shutdown Exemption Provisions for Oxides of Nitrogen** It may be necessary to amend Rule 429 to address start-up/shutdown provisions related to the transition of NOx RECLAIM to a command and control regulatory program and if U.S. EPA requires updates to such provisions. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
430*	**Breakdown Provisions** This rule will be amended or replaced to address specific issues raised by U.S. EPA regarding start-ups or shutdowns associated with breakdowns. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1106 1106.1*+	**Marine Coating Operations** **Pleasure Craft Coating Operations** Rule 1106.1 is proposed to be rescinded; Rule 1106 would subsume the requirements of Rule 1106.1, revise VOC content limits for several categories in order to align limits with U.S. EPA Control Techniques Guidelines and other California air districts, and add new categories for several categories. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1107+	**Coating of Metal Parts and Products** Potential amendments to Rule 1107 would further reduce VOC emissions and improve rule clarity and enforceability. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1109*+#	**Emissions of Oxides of Nitrogen from Boilers and Process Heaters in Petroleum Refineries** Amendments to Rule 1109 may be needed to establish BARCT emission limits for refineries that are exiting RECLAIM and subject to command and control rules. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1111.1+	**Reduction of NOx Emissions from Natural Gas Fired Commercial Furnaces** Proposed Rule 1111.1 will establish equipment-specific NOx emission limits and other requirements for the operation of commercial space heaters. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1113+	**Architectural Coatings** Depending on the final recommendations from the Scientific Review Panel for the Office of Environmental Health Hazard Assessment (OEHHA), staff may propose amendments to the tBAc exemption. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	
1117*+#	**Glass Melting Furnaces** Proposed amendments will control NOx emissions from glass melting furnaces. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1123*+	**Refinery Process Turnarounds** Proposed amendments will establish procedures that better quantify emission impacts from start-up, shutdown or turnaround activities. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1136*+	**Wood Products Coatings** Amendments may be proposed to existing rule limits and other provisions.	AQMP
1450*	**Control of Methylene Chloride Emissions** The proposed rule would reduce exposure to methylene chloride from furniture stripping, remove potential regulatory loopholes, achieve emission reductions where possible and cost effective, include reporting requirements, and clarify the rule language to improve consistency with other SCAQMD VOC rules. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
1142*	**Marine Tank Vessel Operations** Proposed revisions to Rule 1142 would address VOC emissions from marine tank vessel operations and provide clarifications. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1147.1*+#	**Large Miscellaneous Combustion** Rule 1147.1 will include large miscellaneous combustion sources currently at RECLAIM facilities. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1147.2*+#	**Metal Melting and Heat Treating Furnaces** Proposed Rule 1147.2 will reduce NOx emissions from metal melting and heat treating furnaces. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1147.3*+#	**Emission Reductions for Equipment at Aggregate Facilities** Proposed Rule 1147.3 will reduce NOx emissions from aggregate operations. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1148.1 1148.2	**Oil and Gas Production Wells** **Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers** Amendments to Rule 1148.2 may be needed to address community notification procedures, the inclusion of water injection wells, and potentially other measures based on an evaluation of information collected since the last rule adoption. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1148.3*	**Requirements for Natural Gas Underground Storage Facilities** Proposed Rule 1148.3 will establish requirements to address public nuisance and VOC emissions from underground natural gas storage facilities. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1150.1	**Control of Gaseous Emissions from Municipal Solid Waste Landfills** Proposed amendments will address U.S. EPA revisions to the New Source Performance Standards for Municipal Solid Waste Landfills and Existing Guidelines and Compliance Timelines for Municipal Solid Waste Landfills, as well as CARB GHG requirements. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1151*+	**Motor Vehicle and Mobile Equipment Non-Assembly Line Coating Operations** Depending on the final recommendations from the Scientific Review Panel for the Office of Environmental Health Hazard Assessment (OEHHA), staff may propose amendments to the tBAc exemption. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1153.1*+	**Emissions of Oxides of Nitrogen from Commercial Food Ovens** Rule 1153.1 was adopted in November 2014 and established NOx emission limits for various types of existing commercial food ovens on a specified compliance schedule. Amendments may be necessary to address applicability and technological feasibility of low-NOx burner technologies for new commercial food ovens. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1159.1*+#	**Nitric Acid Units - Oxides of Nitrogen** Proposed Rule 1159.1 will address NOx emissions from processes using nitric acid and is needed as part of the transition of RECLAIM to command and control. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
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. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1177+	**Liquefied Petroleum Gas Transfer and Dispensing** Potential amendments may be proposed to include additional sources of emissions from the dispensing and transfer of LPG. *Michael Krause 909.396.2706 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1188+	**VOC Reductions from Vacuum Trucks** The proposed rule will establish VOC emission standards and other requirements associated with the operation of vacuum trucks not covered by Rule 1149 – Storage Tank and Pipeline Cleaning and Degassing. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
1190, 1191, 1192, 1193, 1194,1195, 1196, & 1186.1*+	**Fleet Vehicle Requirements** Amendments to fleet rules may be necessary to improve rule implementation. In addition, the current fleet rules may be expanded to achieve additional air quality and air toxic emission reductions. *Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1304.2* 1304.3*	**California Public Utilities Commission Regulated Electrical Local Publicly Owned Electrical Utility Fee for Use of SOx, PM10 and NOx Offsets** **Local Publicly Owned Electrical Generating Facility Fee for Use of SOx, PM10 and NOx Offsets** Proposed Rules 1304.2 and 1304.3 would allow new greenfield facilities and additions to existing electricity generating facilities (EGFs) conditional access to SCAQMD internal offset accounts for a fee, for subsequent funding of qualifying improvement projects consistent with the AQMP. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1415 1415.1	**Reduction of Refrigerant Emissions from Stationary Air Conditioning Systems, and Reduction of Refrigerant Emissions from Stationary Refrigeration Systems** Amendments will align with proposed CARB Refrigerant Management Program and U.S. EPA's Significant New Alternatives Policy Rule provisions relative to prohibitions on specific hydrofluorocarbons (HFCs). *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1426*	**Emissions from Metal Finishing Operations** Proposed amendments to Rule 1426 will establish requirements to reduce nickel, cadmium and other air toxics from plating operations. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
1430	**Control of Emissions from Metal Grinding Operations at Metal Forging Facilities** Proposed amendments to Rule 1430 may be needed to reducing emissions from metal forging operations. *Jillian Wong 909.396.3176 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
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. *David De Boer 909.396.2329 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
1469.1*	**Spraying Operations Using Coatings Containing Chromium** Proposed Amended Rule 1469.1 would establish additional requirements for facilities that are conducting spraying using chromium coatings to further reduce hexavalent chromium emissions. *Jillian Wong 909.396.31 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
1470*	**Requirement for Stationary Diesel-Fueled Internal Combustion and Other Compression Ignition Engines at Sensitive Receptors** The proposal would address new and existing small (≤ 50 brake horsepower) diesel engines located near sensitive receptors such as schools, preschools, daycare centers and health care facilities. Staff is also considering amendments to minimize use of stationary diesel back-up engines that may include use of alternative power sources that are less polluting. *Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Toxics
1902	**Transportation Conformity** Amendments to Rule 1902 may be necessary to bring the SCAQMD's Transportation Conformity rule in line with current U.S. EPA requirements. *Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
1905	**Pollution Controls for Automotive Tunnel Vents** This proposed rule would address emissions from proposed roadway tunnel projects that could have air quality impacts. *Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
Reg. XVII	**Prevention of Significant Deterioration (PSD)** Proposed amendments to Regulation XVII will align the SCAQMD's Prevention of Significant Deterioration program with federal requirements. *Carol Gomez 909.396.3264 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other
Reg. XX*+#	**RECLAIM** Amendments to rules within Regulation XX will be needed as facilities transition from RECLAIM to a command and control regulatory structure. *Tracy Goss 909.396.3106 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
Reg. XXIII	**Facility Based Mobile Sources** Regulation XXIII would contain rules related to reducing emissions from mobile sources that visit certain types of facilities. Facility types could include commercial airports, marine ports, rail yards, warehouses, and new and development projects. Regulation XXIII may include other sources as provided in the Final 2016 AQMP. *Ian MacMillan 909.396.3244 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
Reg. XXV	**Intercredit Trading** Regulation XXV will contain rules to allow generation of criteria pollutant Mobile Source Emission Reduction Credits (MSERCs) from various on-road and off-road sources, such as on-road heavy-duty trucks, off-road equipment, locomotives, and marine vessels. Credits will be generated by retrofitting existing engines or replacing the engines with new lower- emitting or zero-emission engines. The 2016 AQMP includes two measures that seek to accelerate early deployment of near-zero and zero emission on-road heavy-duty trucks and off-road equipment, through generation of MSERCs that could be used for purposes of recognizing mobile source emission reductions at facilities covered in the AQMP Facility-Based Measures. *Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	AQMP
Reg. XXVII	**Climate Change** Changes may be needed to Regulation XXVII to add or update protocols for GHG reductions, and other changes. *Zorik Pirveysian 909.396.2431 CEQA: Michael Krause 909.396.2706 and Socio: Jillian Wong 909.396.3176*	Other

2018 MASTER CALENDAR
2018 To-Be-Determined (continued)

To-Be-Determined	Title and Description	Type of Rulemaking
Reg. II, IV, XI, XIII, XIV, XXX and XXXV, XVI XXIV*+#	Various rule amendments may be needed to meet the requirements of state and federal laws, implement OEHHA's 2015 revised risk assessment guidance, address variance issues/ technology-forcing limits, to abate a substantial endangerment to public health or welfare, address odor nuisance issues, air toxics, or to seek additional reductions to meet the SIP short-term measure commitment. The associated rule development or amendments include, but are not limited to, SCAQMD existing rules, and new or amended rules to implement the 2012 or 2016 AQMP measures. This includes measures in the 2010 Clean Communities Plan (CCP) or 2016 AQMP to reduce toxic air contaminants or reduce exposure to air toxics from stationary, mobile, and area sources. Rule amendments may include updates to provide consistency with CARB Statewide Air Toxic Control Measures or U.S. EPA's National Emission Standards for Hazardous Air Pollutants. Rule amendments, proposed new source-specific, or industry-specific rules within Regulation XI may be needed to meet the requirements of AB 617 and the 2016 AQMP commitment to transition of the RECLAIM program to a command and control regulatory structure. Amendments to Regulation XIV may be needed for implementation of AB 617.	Other/AQMP

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 22

REPORT: Status Report on Major Ongoing and Upcoming Projects for Information Management

SYNOPSIS: Information Management is responsible for data systems management services in support of all SCAQMD operations. This action is to provide the monthly status report on major automation contracts and planned projects.

COMMITTEE: Administrative, November 9, 2017; Reviewed

RECOMMENDED ACTION:
Receive and file.

Wayne Nastri
Executive Officer

RMM:MAH:OSM:agg

Background
Information Management (IM) provides a wide range of information systems and services in support of all SCAQMD operations. IM's primary goal is to provide automated tools and systems to implement Board-approved rules and regulations, and to improve internal efficiencies. The annual Budget specifies projects planned during the fiscal year to develop, acquire, enhance, or maintain mission-critical information systems.

Summary of Report
The attached report identifies each of the major projects/contracts or purchases that are ongoing or expected to be initiated within the next six months. Information provided for each project includes a brief project description and the schedule associated with known major milestones (issue RFP/RFQ, execute contract, etc.).

Attachment
Information Management Status Report on Major Ongoing and Upcoming Projects During the Next Six Months

ATTACHMENT
December 1, 2017 Board Meeting
Information Management Status Report on Major Ongoing and Upcoming Projects During the Next Six Months

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Website Evaluation & Improvements	Conduct a detailed review of the SCAQMD website to identify improvements/ enhancements that can further site usability and implement items approved by Administrative Committee; improvements include new custom Calendar and changes to navigation and content organization	$117,475	• Developed new Calendar • Developed new Home Page • Developed master pages and widgets • Set up beta site on SCAQMD server • Applied Calendar fixes to improve load time • Completed content migration and QA checking • Applied design updates • Completed final user acceptance checking • Deployment of new website	• Three months of site maintenance
Implementation of Enterprise Geographic Information System (EGIS)	Support accomplishment of the agency's mission through the effective and cost-efficient implementation of EGIS and related technologies	$173,255	• Board approved purchase of recommended hardware and software • Formed SCAQMD EGIS Governance/Working Group • Created EGIS Governance/Working Group Charter • Created agency-wide catalog of GIS software and staff resources • Developed prioritized project list and schedule • Attended EGIS project planning meeting September 13, 2017	• Continue implementation of the nine prioritized EGIS projects

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Implementation of Enterprise Geographic Information System (EGIS) *(continued)*			• Completed three of the nine prioritized EGIS projects: o EGIS Program Management o System Installation, Configuration and Phasing Plan o ESRI Software Installation, Configuration, Testing and Training	
Permitting System Automation	• New Web application to automate 400A Form Filing and internal automated workflow	$685,000	• Phase 1 core filing system development work completed, deployed and in production • Enhancements to integrate Facility ID creation module completed and testing in progress • Board letter for Phase 2 funding work to automate remaining E-Form Filing and internal application workflow completed	• Phase 1 end of limited live E&P supported application submission • General publication of application link scheduled for 1st week of December 2017 • Phase 2 project start to be scheduled upon final deployment of Gas Station and Spray Booth modules
	• New Web application to automate processing of Dry Cleaner, Gas Station (GS) and Automotive Spray Booth (ASB) applications	$575,000	• Phase 1 Dry Cleaner permit processing module deployed and in production • Phase 1 GS and ASB development completed and acceptance testing in progress	• Phase 1 end of limited live E&P supported Dry Cleaner application submission • General publication of application link scheduled for 1st week of December 2017

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Permitting System Automation *(continued)*			• Proposal for Phase 1 enhancements to implement new Rule 1401 requirements to GS and ASB modules reviewed and approved and enhancement work in progress • Board letter for Phase 2 funding work to automate Soil Vapor Recovery IC Engines and R222 Form Filing completed	• Phase 1 deployment of enhanced GSand ASBmodules scheduled for February 2018 • Phase 2 project start to be scheduled upon final deployment of GS and ASBmodules
Information Technology Review	RFP for Information Technology Review to help determine opportunities for hardware, system, and software modernization	$75,000	• Contract awarded to Focal Point – work began in September 2017 • Initial internal strategy planning sessions completed • Kickoff meeting with Focal Point held September 19, 2017 • Requested documentation provided to Focal Point in early October 2017 • Interviews with subject matter experts held October 10-12, 2017	• Submission of preliminary draft report
Permit Application Status and Dashboard Statistics	New Web application to allow engineers to update intermediate status of applications; create dashboard display of status summary with link to FIND for external user review	$100,000	• Vision and scope work complete, task order issued, proposal evaluated and awarded • Board letter to approve project and secure funding completed	• Contract amendment for software development scheduled for December Board approval

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Agenda Tracking System Replacement	Replace aging custom agenda tracking system with state-of-the-art, cost-effective Enterprise Content Management (ECM) system, which is fully integrated with OnBase, SCAQMD's agency-wide ECM system	$86,600	• Released RFP December 4, 2015 • Awarded contract April 1, 2016	• Continue parallel testing • Final acceptance to follow successful testing and training
Replace Your Ride	New Web Application to allow residents to apply for incentives to purchase newer, less-polluting vehicles	$211,820	• Initial Acceptance testing for Phase 2 Finance and Administration module work completed and acceptance testing continues • Proposal for End User change request completed and submitted for user review and approval	• User acceptance testing in progress for initial Phase 1 and multiple subsequent releases for minor enhancements • End User review of proposal for requested enhancement work
Emission Reporting System	Upgrade outdated modem-based emission reporting system to allow internet-based reporting with up-to-date tools and methodology	$242,000	• Detailed planning and architecture sessions completed • Approved by Board March 3, 2017	• Modify scope of work pending RECLAIM program discussions
Air Quality Index Rewrite and Migration	Develop new Web Service and/or Web API to migrate Air Quality Index function from FORTRAN computer to STA's data management system	$65,000	• AQI Calculation Web Service and Hourly Update development work completed, staged and ready for deployment	• Deployment pending final user buyoff

Project	Brief Description	Budget	Completed Actions	Upcoming Milestones
Fiber Cable Network Infrastructure Upgrade	Replace the existing fiber network cable infrastructure to support core computer networking (interconnect) in the agency; the Fiber Network Cable System will support higher bandwidth (min 10 Gbps) from current (1 Gbps) to support increasing computing demands	$250,000	• Released RFP November 3, 2017	• Award contract January 5, 2018 • Install fiber cable April, 2018
Prequalify Vendor List for PCs, Network Hardware, etc.	Establish list of prequalified vendors to provide customer, network, and printer hardware and software, and to purchase desktop computer hardware upgrades	$300,000	• Released RFQQ November 3, 2017	• Approve Vendors List February 3, 2018
Renewal of HP Server Maintenance & Support	Purchase of maintenance and support services for servers and storage devices	$110,000		• Request Board approval February 2, 2018 • Execute contract April 6, 2018

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 25A

REPORT: Administrative Committee

SYNOPSIS: The Administrative Committee held a meeting on Thursday, November 9, 2017. 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 Judith Mitchell (videoconference), and Dr. Clark E. Parker, Sr. (videoconference)

Absent: Mayor Pro Tem Ben Benoit/Vice Chair

Call to Order
Chair Burke called the meeting to order at 10:00 a.m.

Dr. Burke congratulated Council Member Judith Mitchell on her reelection to the Governing Board for a new four-year term.

DISCUSSION ITEMS:

1. **Board Members' Concerns:** None to report.

2. **Chairman's Report of Approved Travel:** As noted on the travel report, Dr. Parker attended the California Fuel Cell Partnership Executive Board meeting as Chairman in Sacramento, October 17, 2017. Council Member Mitchell attended the CAPCOA Fall Membership Conference as a panel member in Monterey, October 23-24, 2017. Council Member Mitchell will attend the CARB Board meeting as the SCAQMD representative in Sacramento, November 15-16, 2017.

3. **Report of Approved Out-of-Country Travel**: None to report.

4. **Review November 3, 2017 Governing Board Agenda**: None to report.

5. **Status Report on Major Ongoing and Upcoming Projects for Information Management**: Chief Administrative Officer Michael O'Kelly presented the status report on Information Management projects. Mr. O'Kelly reported that final testing for the website improvement project is scheduled for next week and will be in production following final testing.

   Mr. O'Kelly reported that the e-GIS project is moving forward with a commitment of nine of the 15 projects to be completed during this Fiscal Year, with three completed this year. The online permit application module is currently available for dry cleaners and the gas stations and spray booth application module will soon be available. The Information Technology (IT) Review has been completed and a report is being compiled and should be available in 30-45 days. Dr. Burke commented that the updated website is a large improvement over the former website. (No motion required.)

6. **Approval of Compensation for Board Member Assistant(s)/Consultant(s):** No new Board Assistants/Consultants added. (No motion required.)

7. **Annual Audited Financial Statements for FY Ended June 30, 2017:** Mr. O'Kelly reported that annual financial statements are mandated by state law and prepared in accordance with accounting principles. In addition, the Federal government requires that an audit be done of federal grant funds that are expended by the SCAQMD. BCA Watson Rice LLP auditors, Michael DiCastro (managing partner) and Helen Chu (auditing partner) have completed their audit. The auditors reported on the financial statements and single audit results (federal funds that SCAQMD receives) for FY 2017, ending June 30, 2017. The results produced an unmodified/clean opinion on the basic financial statements. The opinion was provided on five governmental activities. The auditors found no material weaknesses and no significant deficiencies. Dr. Parker inquired with regard to the PowerPoint slide which indicated no significant expenses for 2017; should it be assumed as Years 2015-16. Mr. DiCastro responded it is actually Years 2016-17. Dr. Parker asked why the Board did not receive a management letter. Mr. DiCastro responded a management letter is issued only if the auditors identify improvements that can be made on internal controls and processes that are identified during the audit; therefore, the reason behind having no management letter issued was due to no improvements being identified. Dr. Parker commented that he is accustomed to receiving management letters that state both the negative and the positive. Mr. DiCastro responded they will issue a management letter that indicates that no improvements or suggestions were found during the audit. Dr. Burke commented that in the future the actual auditor should conduct the

presentation. Council Member Mitchell inquired about pension liability. Mr. O'Kelly responded that the pension liability is at $199 million, an increase of $50 million from the previous year. It is not unexpected as the pension plan recognizes losses from prior years. The retirement plan is funded at approximately 82 percent. The pension liability is continuing to grow, but should start to level off in the next year or two, based on the pension plan's performance last year and the performance in the current year. The SCAQMD's assets are in the $700 million range. Council Member Mitchell commented that it would be helpful for the Board to receive a report on how pension liability will get resolved or get paid down. (No motion required.)

ACTION ITEMS:

8. **Transfer and Appropriate Funds and Amend Contracts to Provide Short- and Long-Term Systems Development, Maintenance and Support Services:** Mr. O'Kelly reported that staff is requesting to appropriate $740,000 for additional systems development and workflow processes for upcoming phases of the online permit application process. As part of this year's General Fund budget, the Board set a designation of an additional $2 million to help pay for this continuing online permit application automation. The contractors are prequalified through a competitive process and the specific funding allocation is a result of competition among those prequalified vendors. Dr. Parker inquired when the contractors were first approved, was a higher cost anticipated and since there is no competitive bid, is this a sole source contract or is the approved original contract being continued. . Mr. O'Kelly responded it is considered a competitive bid; a list of prequalified vendors is developed and is used to bid on the rate already approved, with funding allocated based on their strengths and abilities.

   Moved by Mitchell; seconded by Parker, unanimously approved.

   Ayes: Burke, Mitchell, Parker
   Noes: None
   Absent: Benoit

9. **Amend Provisions of SCAQMD's Salary Resolution and Labor Contracts with Teamsters Local 911 and SCPEA Relating to Vacation Leave:** Mr. O'Kelly reported that currently, the SCAQMD employee MOUs and Salary Resolutions require that there be caps to vacation-hour balances in order to prevent employees from accumulating excessive vacation hours on the books, which could result in a large sellback at retirement. Over the last 18-24 months, there have been time and labor requirements related to permit backlog reduction, air toxics monitoring and other unexpected events where it has been more difficult to approve vacation time. As a result, approximately 100 employees are over the 360-hour cap. As requested last year, staff requests temporarily removing the cap for this year. Council Member Mitchell inquired if this issue is expected to be

resolved in the next year by either hiring additional staff or whether a lighter workload is anticipated. Executive Officer Wayne Nastri responded that the Engineering Division is taking a close look on how the workload can be better allocated, as well as bringing in additional personnel to address the increased workload. Dr. Parker asked if staff are required to work overtime. Chief Operating Officer Jill Whynot responded that staff are doing voluntary overtime, one day a week or one day every other week and overall, the amount of overtime has been lower than expected for the permit backlog reduction.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Burke, Mitchell, Parker
Noes: None
Absent: Benoit

10. **Recognize Revenue and Appropriate Funds for 2017 Sensor Conference:** Assistant Deputy Executive Officer/Science & Technology Advancement Dr. Jason Low reported that SCAQMD hosted the Making Sense of Sensors Conference in September, providing information and opportunity for dialogue on low-cost portable sensors. The conference included opening remarks by Dr. Burke; the conference featured over 40 speakers, including Dr. Lyou, 22 exhibitors, 27 technical posters and special tours of SCAQMD's AQ-SPEC chamber testing system. This action is to recognize revenue of up $32,000 from the co-sponsors which included Bay Area Air Quality Management District (BAAQMD), and the California Air Pollution Control Officers Association (CAPCOA) (directly reimbursing speakers and attendees at the conference). The remaining balance will be used to offset the cost. Dr. Burke asked how much was spent on the conference. Dr. Low responded that the direct cost was approximately $18,000. This recommendation will offset staff costs. Dr. Burke commented on the high quality of the conference.

Moved by Parker; seconded by Mitchell, unanimously approved.

Ayes: Burke, Mitchell, Parker
Noes: None
Absent: Benoit

11. **Issue Request for Proposals for Emissions Reduction Projects Using Incentive Funding from SCAQMD Special Funds, Allocate Funds, and Issue Contracts:** Deputy Executive Officer/Planning, Rule Development & Area Sources Dr. Philip Fine reported that staff recommends that this item be delayed to the December Administrative Committee.

12. **Recognize Revenue, Appropriate Funds and Execute Contract to Evaluate Potential Nationwide Economic Impacts of Federal Clean Air Investment Fund:** Dr. Fine reported that a considerable amount of time was spent in Washington, D.C. to build support for the concept of additional incentives or a Clean Air Fund concept to help turn over the national fleet of heavy-duty equipment to cleaner equipment. As part of the campaign in D.C. and meeting with legislators, the executive branch and U.S. EPA, it was realized that background data on economic benefits of those types of clean technology investments was needed. This item is to embark upon that economic study working with ICF, a consulting company that does this type of work for many types of clients across the country. The total contract cost is $230,000, but the BAAQMD has agreed to contribute $100,000 of that cost, and SCAQMD is continuing to work with other districts and other entities to help offset the total cost. This would be a sole source contract with ICF to conduct that economic study. Council Member Mitchell asked if San Joaquin Valley Air Pollution Control District (SJVAPCD) has been asked to contribute. Mr. Nastri responded that Mr. Seyed Sadredin, Executive Director/SJVAPCD, has agreed to fund up to $30,000, but he is planning to go to his Board to seek additional funding commensurate with the Bay Area AQMD and SCAQMD contributions. The three largest air districts in California are working together to fund this project as a strategy to help secure additional funding through Congress and the executive branch, and also to help support U.S. EPA as it moves forward in the rulemaking process for the heavy-duty ultralow NOx program. Council Member Mitchell asked if other states will join in this effort. Mr. Nastri responded that NESCAUM (Northeast States for Coordinated Air Use Management) has expressed some interest. SCAQMD is receiving additional in-kind contributions. The concern with some of the engine manufacturers is the perception that if they contribute towards funding, that industry could be seen as 'buying' this study; if it is kept to the states, it will be perceived as a more objective study and it will help increase the sense of validity and seriousness.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes:	Burke, Mitchell, Parker
Noes:	None
Absent:	Benoit

13. **Amend Governing Board Meeting Procedures:** General Counsel Kurt Wiese reported that it was directed that he work on three areas of the Board procedures with Council Member Mitchell. The first area was the deadline for submitting speaker cards and the issue was whether the deadline should be: a) before the Board takes up an item or b) prior to the close of public comment. The recommendation is to place the deadline at the time before the Board takes up an item, but to provide that the Chairman has discretion to allow late submission of

cards for good cause. The second issue concerns public comment by group spokespersons. The committee asked that the language in the procedures clarify that group spokespersons are given additional time to speak in lieu of having individual speakers in the group take less time to speak. The third issue was that the Committee asked that language be added to the provision concerning disruptions to clarify that disobeying a lawful directive of the Chair constituted a disruption. All the issues raised by the Board Members and the public have been addressed. Council Member Mitchell made a motion to approve the staff recommendation and adopt these changes.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Burke, Mitchell, Parker
Noes: None
Absent: Benoit

14. **Appropriate Funds and Authorize Amending Contracts with Outside Counsel and Specialized Legal Counsel and Services:** Mr. Wiese reported that money is needed to approve an additional $350,000 to pay for outside counsel for services related to environmental litigation for Exide, Tesoro and RECLAIM court cases.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes: Burke, Mitchell, Parker
Noes: None
Absent: Benoit

15. **Transfer and Appropriate Funds, Issue Purchase Orders for Field Equipment and Approve the Surrender of Fixed Assets:** Deputy Executive Officer/Enforcement & Compliance Bay Gilchrist reported that staff is recommending that this item be pulled and brought back to the December Administrative Committee.

16. **Execute Contract(s) for Legislative Representation in Sacramento, California:** Deputy Executive Officer/Legislative & Public Affairs & Media Office Derrick Alatorre reported that the current contract with State Legislative representation in Sacramento expires at the end of the year. Earlier this year, the Board approved release of an RFP for Legislative representation in Sacramento. Two proposals were received and they are both from the current Sacramento representatives: Gonzalez, Quintana & Hunter, LLC, and Joe A. Gonsalves & Son. Based on their years of prior good service for SCAQMD, both firms were referred to the Administrative Committee for consideration. Both firms have played a pivotal role in a very successful year in Sacramento, primarily securing passage of SCAQMD's sponsored bills, AB 32 (Garcia) and AB 1274

(O'Donnell). The firms have facilitated access to over $100 million in funding for the South Coast region, as well as potentially hundreds of millions more in competitive grant monies. Dr. Burke commented that he was very impressed and pleased with the firms' performance last year.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes:	Burke, Mitchell, Parker
Noes:	None
Absent:	Benoit

WRITTEN REPORT:

17. **Local Government & Small Business Assistance Advisory Group Minutes for the July 14, 2017 Meeting:** Mr. Alatorre reported that this item is a written report.

OTHER MATTERS:

18. **Other Business**
Dr. Fine introduced Dr. Sarah Rees, the new Assistant Deputy Executive Officer in Planning, Rule Development & Area Sources. Her background includes serving as Director, Office of Regulatory Policy and Management, at U.S. EPA's Office of Policy.

19. **Public Comment Period**
There were no public comments.

20. **Next Meeting Date**
The next regular Administrative Committee meeting is scheduled for December 8, 2017 at 10:00 a.m.

Adjournment
The meeting adjourned at 10:45 a.m.

Attachment
Local Government & Small Business Assistance Advisory Group Minutes for the September 8, 2017 Meeting

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

LOCAL GOVERNMENT &
SMALL BUSINESS ASSISTANCE ADVISORY GROUP
FRIDAY SEPTEMBER 8, 2017
MEETING MINUTES

MEMBERS PRESENT:
Ben Benoit, Mayor Pro Tem, City of Wildomar and LGSBA Vice Chairman
Paul Avila, P.B.A. & Associates
Geoffrey Blake, Metal Finishers of Southern California/All Metals
John DeWitt, JE DeWitt, Inc.
Bill LaMarr, California Small Business Alliance
Rita Loof, RadTech International
Eddie Marquez, Paramount Petroleum
David Rothbart, Los Angeles County Sanitation District

MEMBERS ABSENT:
Janice Rutherford, Supervisor, Second District, San Bernardino County
Felipe Aguirre
Rachelle Arizmendi, Mayor Pro Tempore, City of Sierra Madre
Todd Campbell, Clean Energy
LaVaughn Daniel, DancoEN
Maria Elena Kennedy, Kennedy Communications
Cynthia Moran, Council Member, City of Chino Hills

OTHERS PRESENT:
Mark Abramowitz, Board Member Consultant *(Lyou)*
David Czmanske, Board Member Consultant *(Caccioti)*
Andrew Silva, Board Member Consultant *(Rutherford*)
Ruthanne Taylor-Berger, Board Member Consultant *(Benoit)*

SCAQMD STAFF:
Nancy Feldman, Principal Deputy District Counsel
Jo Kay Ghosh, Ph.D., Health Effects Officer
Ian MacMillan, Planning & Rules Manager
Lisa Tanaka O'Malley, Community Relations Manager
Van Doan, AQ Inspector II
Elaine-Joy Hills, AQ Inspector II
Lori Langrell, Secretary

Agenda Item #1 - Call to Order/Opening Remarks
Chair Ben Benoit called the meeting to order at 11:30 a.m.

Agenda Item #2 – Approval of July 14, 2017 Meeting Minutes/Review of Follow-Up/Action Items
Chair Benoit called for approval of the July 14, 2017 meeting minutes. The minutes were approved unanimously.

Agenda Item #3 – Follow Up/Action Items
Ms. Lisa Tanaka O'Malley responded to the July 14, 2017 meeting action items. Ms. O'Malley indicated that a presentation on Rule 219 would be agendized for a future meeting, and a Cap-and-Trade presentation will be agendized for the October meeting along with the Legislative Update.

Ms. Rita Loof provided comment on Rules 219 and 1168. She has concerns about the additional recordkeeping requirements in Rule 1168 that is pending Governing Board approval in October. The forms that will be required have not been provided to the adhesive industry.

Mr. Bill LaMarr indicated he generally supports Radtech's comments on Rules 219 and 1168, and is aware that with an increased workload resulting from the passage of AB 617, it is challenging to provide information to all groups, but this should be accomplished as soon as possible.

Agenda Item #4 – Summary of Recent Studies of Air Pollution & Health Effects
Dr. Jo Kay Ghosh presented a summary of some key recent research studies of air pollution and health effects.

Mr. Paul Avila asked, in the sample study, how many people were studied? Dr. Ghosh replied it depends on the specific study, the range can be from a couple thousand, to a few thousand, to a million.

Mr. Avila inquired about the 60 million or so Medicare recipients, if the studies take into account effects of smoking, cooking, or other contributing factors, as opposed to workers exposed to diesel emissions. Dr. Ghosh indicated many other factors contribute to premature mortality. In epidemiologic studies, many factors are considered, which could be correlated to people in other areas.

Mr. LaMarr asked if other factors were accounted for. Dr. Ghosh replied yes, they were accounted for simultaneously.

Mr. Avila indicated that the high level of $PM_{2.5}$ in the agricultural San Joaquin Valley area is understandable, but the high level of $PM_{2.5}$ in the non-agricultural Calexico desert area is not. Dr. Ghosh replied the $PM_{2.5}$ levels might not be driven by agricultural impacts. In our region, it is driven by mobile sources and some stationary sources.

Mr. John DeWitt asked if there is a difference between $PM_{2.5}$ in the agricultural-laden Central Valley versus the San Gabriel Valley and how the health impacts are measured. Dr. Ghosh replied there are two things to ask: what are the $PM_{2.5}$ levels and what is the population being affected? We have a more densely populated area compared to the San Joaquin Valley, although its $PM_{2.5}$ level is also very high. The most impacted area would have a high $PM_{2.5}$ level and a large population. Mr. DeWitt further asked if there is a difference between dust from agricultural sources versus $PM_{2.5}$ from diesel combustion sources. Dr. Ghosh replied dust from earth sources tend to be coarse, like PM_{10}. For example, the Coachella valley, which is considered a more agricultural area than the rest of the District, has a high PM_{10} level, but not $PM_{2.5}$, which is primarily from combustion sources.

Mr. David Rothbart inquired regarding the excess death conclusion from the author, how can death be assessed for these types of parameters, as the only way you can absolutely attribute a death is to have exactly the same situation in different people. Dr. Ghosh replied there are a lot of nuances when it comes to this type of modeling. The general process is to take estimates of the association by looking at a concentration-response function, which is how much of the exposure would cause what percentage

change in risk. The association may be different for various studies. Heterogeneity gives a wider estimate of impact. Mr. Rothbart further asked if the author has come up with some type of quantification for the confidence intervals to show how accurate the data is based on the assumptions made. Dr. Ghosh replied the confidence intervals are often published. It may be in the form of a sensitivity analysis showing how changes affect the final results.

Mr. Avila asked what heterogeneity meant. Dr. Ghosh replied it meant the results differ from study to study. Mr. Avila inquired if it would be a valid study to look at hospital visits made by people over 65 years old versus under 65 years old. Dr. Ghosh responded it is a potential framework for a study. However, when designing a study, you have to look at many factors, such as the population, the quality of the data available and its limitations, and the study question.

Mr. Avila inquired if the results vary between studies based on the sponsors. Dr. Ghosh responded as a government agency, we do expect transparency in science and reproducibility in results. The mechanism of science and the structure of the study including peer review, sharing of data, reproducing results, and looking at multiple studies and regions, etc. are part of the process by which we try to eliminate biases that may occur.

Mr. Avila asked how the effect of past occupational exposure is differentiated from environmental exposure. Dr. Ghosh replied it is difficult to look at past exposures. For well-designed studies, detailed questions can be asked to survey all the participants and available databases can be reviewed for more information on the participants.

Mr. Rothbart asked, when reviewing papers from other researchers, do you look for other papers that contradict each other and what do you look for to validate the conclusions? Dr. Ghosh replied to validate their conclusions, we don't draw our conclusions from one study. Even though we are looking at key findings in the studies being presented, it doesn't mean we draw conclusions from one study during the review of papers. As far as evaluating the quality of the study, if done in a systematic way, either using quantitative or qualitative analysis, very specific criteria are outlined before the final review. There is a grading system with markers of quality of the studies.

Mr. LaMarr indicated, in addition to Mr. Rothbart's question, in every study you have multiple opinions or views as far as causal factors. Mr. LaMarr asked if the objective in the final analysis is to write a rule or regulation and reduce emissions. Since there are multiple studies with a number of causal factors involved, how does the District or the Office of Environmental Health Hazard Assessment (OEHHA) decide to accept one study over others, is it based on the pursuit of the District's objective, and does the District consider other unregulated factors? Dr. Ghosh replied, regarding standard setting, the Environmental Protection Agency (EPA) is tasked with setting and reviewing the standards for criteria pollutants and the SCAQMD is not. In regards with toxics, OEHHA is tasked with reviewing the science and making the determination of what to include on the air toxics lists. OEHHA also establishes guidelines for risk assessment, which the SCAQMD adopts.

Agenda Item #5 – Update on SCAQMD-Funded Warehouse Truck Trip Study

Mr. Ian MacMillan presented a summary of the results of the study that was finalized in October 2016.

Ms. Loof asked if the SCAQMD has looked into why there is an increase in warehouses. Mr. MacMillan replied yes, it is due to the growth in the trade volume. After China joined the World Trade Organization (WTO) in the 2000's, there was a very rapid growth at the ports, which led to an explosion

of warehousing in the Inland Empire, where land is cheaper. Ms. Loof provided comment on the California Environmental Quality Act (CEQA) analysis and Rule 1168.

Mr. LaMarr asked if a truck trip is a round trip. Mr. MacMillan replied it is a one-way trip; one trip in and one trip out would be two trips.

Mr. Avila asked if a warehouse is located near a railroad, conducts minimal trucking activities, and has air purifiers and efficient air conditioning, would SCAQMD testing of inside air quality be needed. Mr. MacMillan replied when looking at nitrogen oxides (NOx) in the context of CEQA, the concern isn't the direct impact on workers inside the building. Although there are concerns relating to the localized impacts and cancer risks from diesel particulate matter (PM). Most air filters would address PM, not ozone. Ozone is the biggest problem in the Inland Empire, so the indoor ozone level is expected to be similar to the outdoor ozone level. The high ozone level is not the direct result of the emissions from the trucks outside the warehouse, but is due to all the trucks and all other sources of NOx in the basin.

Mr. Avila asked if there will be any additional refrigerated warehouses. Mr. MacMillan replied there are some, but not many.

Mr. Rothbart inquired regarding emissions reductions for AQMP matters, what percentage of the inventory does that account for? Mr. MacMillan indicated we are working on it, how much to assign to a supermarket, to the port, etc.

Mr. Avila asked what percentage of warehousing is manufacturing. Mr. MacMillan replied for our study, only warehousing were considered, not manufacturing. In Southern California, that's approximately one billion square feet of warehousing.

Agenda Item #6 – Summary of Recent Amendment to Rule 1401 – New Source Review of Toxic Air Contaminants
This agenda item was tabled to the October 13, 2017 meeting.

Agenda Item #7 –Monthly Report on Small Business Assistance Activities
No comments.

Agenda Item #8 - Other Business
Mr. DeWitt requested that a presentation on permit streamlining and backlog be agendized, in order to see where the current status of outstanding permits is.

Action Item: *Agendize a presentation regarding permit streamlining.*

Agenda Item #9 - Public Comment
No comments.

Adjournment
The meeting adjourned at 12:53 p.m.

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 25B

REPORT: Special Administrative Committee

SYNOPSIS: The Administrative Committee held a Special Meeting on Monday, November 20, 2017. 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), Mayor Pro Tem Ben Benoit/Vice Chair (videoconference), Council Member Judith Mitchell (videoconference), and Dr. Clark E. Parker, Sr. (videoconference)

Absent: None

Call to Order
Chair Burke called the meeting to order at 1:30 p.m.

ACTION ITEMS:

1. **Adopt Resolution Recognizing Funds and Accepting Terms and Conditions for Funds Appropriated Under AB 134:** Assistant Deputy Executive Officer/Science and Technology Advancement Fred Minassian reported that in September, 2017, the Governor approved AB 134 to amend the Budget Act of 2017. Under Schedule 3 of this amendment, $250 million was appropriated for projects under the Carl Moyer Program to be distributed by the California Air Resources Board (CARB) to air districts as follows: SCAQMD 43%, San Joaquin 32%, Bay Area 20% and 5% for the remaining air districts within the state. In order to do that, the SCAQMD's portion of the $107.5 million has to be recognized and placed in the SCAQMD's Carl Moyer Program Fund 32 with

acceptance of terms and conditions of the program with the Resolution attached to the Board letter. Council Member Mitchell indicated that she does not have a Conflict of Interest and has no financial interest in this matter, but disclosed she is a member of the CARB Board which is involved in this matter.

Moved by Parker; seconded by Mitchell, unanimously approved.

Ayes:	Benoit, Burke, Mitchell, Parker
Noes:	None
Absent:	None

2. **Execute Contracts for Strategic Consulting Services and for Legislative Representation in Sacramento, California:** Dr. Burke reported that although a contract was approved for the Gonzalez, Quintana and Hunter, LLC at the November 9, 2017 Administrative Committee, SCAQMD was subsequently notified that the consulting group would be bifurcated into two entities, effective January 2018. Based upon SCAQMD's legal recommendation, staff is recommending contract approval with The Quintana Company in an amount not to exceed $103,500, and with the California Advisors, LLC, in an amount not to exceed $103,500. The staff recommendation was also to approve a contract with Joe A. Gonsalves & Son in an amount not to exceed $143,000.

Moved by Mitchell; seconded by Parker, unanimously approved.

Ayes:	Benoit, Burke, Mitchell, Parker
Noes:	None
Absent:	None

OTHER MATTERS:

3. **Public Comment Period**
There were no public comments.

4. **Next Meeting Date**
The next regular Administrative Committee meeting is scheduled for December 8, 2017 at 10:00 a.m.

Adjournment
The meeting adjourned at 1:35 p.m.

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 26

REPORT: Investment Oversight Committee

SYNOPSIS: The Investment Oversight Committee held a meeting on Friday, November 17, 2017. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file this report.

Michael A. Cacciotti, Chair
Investment Oversight Committee

MBO:av

Committee Members
Present: Mayor Michael Cacciotti/Chair (teleconference), Richard Dixon, Brent Mason and Supervisor Shawn Nelson

Absent: Dr. William Burke/Vice Chair, Dr. Joseph K. Lyou and Gary Burton.

INFORMATIONAL ITEMS:

1. **Quarterly Report of Investments:** The Committee reviewed the quarterly investment report that was provided to the Board. For the month of September 2017, the SCAQMD's weighted average yield on total investments of $671,721,309 from all sources was 1.42%. The allocation by investment type was 86.68% in the Los Angeles County Pooled Surplus Investment Fund (PSI) and 13.32% in the State of California Local Agency Investment Fund (LAIF) and Special Purpose Investments (SPI). The one-year Treasury Bill rate as of September 30, 2017 was 1.31%.

2. **Cash Flow Forecast:** Michael O'Kelly, Chief Administrative Officer, reported on the cash flows for the current year and projected for the next three years. SCAQMD Investment Policy limits its Special Purpose Investments to 75% of the minimum amount of funds available for investment during the Cash Flow Horizon. That limit, which includes all funds (General, MSRC, Clean Fuels) is $187.8 million. Current Special Purpose Investments are well below the maximum limit. Staff is looking at the current increase in interest rates and opportunities for additional interest yield.

3. **Financial Market Update:** Richard Babbe from PFM Asset Management provided the Committee with information on current investment markets, economic conditions, and the overall outlook. He presented market information on strong momentum in U.S. equities, recent increased Treasury yields, flattening of the Treasury yield curve, lower corporate yield spreads, and wide spreads between commercial paper/CDs and Treasuries. Economic indicators were also presented showing increased third-quarter economic growth, hurricane disruption, consumer confidence to a seven-year high, growth in the labor market, national unemployment rate of 4.2 percent, declined inflation pressure, low recession risk, and strong market expectations for a Federal Funds Target Rate hike.

ACTION ITEM:

4. **Approve Committee Meeting Dates for Calendar Year 2018:** For CY 2018, quarterly Investment Oversight Committee meeting dates are Friday, February 16; Friday, May 18; and Friday, November 16. The August quarterly meeting has been cancelled in conjunction with the cancellation of all SCAQMD Board and Committee meetings during the month of August 2018.

Moved by Nelson; seconded by Dixon; unanimously approved.
Absent: Burke, Lyou, Burton

OTHER MATTERS

5. **Other Business:**
   There was no other business.

6. **Public Comment Period**
   There were no public comments.

7. **Next Meeting Date**
   The next regular Investment Oversight Committee meeting is scheduled for Friday, February 16, 2018 at 12:00 noon.

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 29

REPORT: Mobile Source Air Pollution Reduction Review Committee

SYNOPSIS: Below is a summary of key issues addressed at the MSRC's meeting on November 16, 2017. The next meeting is scheduled for Thursday, December 21, 2017, at 2:00 p.m., in Conference Room CC8.

RECOMMENDED ACTION:
Receive and file.

Fred Minassian
SCAQMD Liaison to MSRC

MMM:FM:psc

Meeting Minutes Approved

The MSRC unanimously approved the minutes of the September 21, 2017 meeting. Those approved minutes are attached for your information *(Attachment 1)*.

Adoption of 2018 Meeting Schedule

The MSRC adopted its 2018 meeting schedule *(Attachment 2)*. The MSRC will continue to meet on the third Thursday of every month at 2:00 p.m. Its Technical Advisory Committee will continue to meet on the first Thursday of every month at 1:30 p.m., except for the months of January and December which have been moved to the second Thursday because of holiday conflicts. Both meetings are usually conducted in Room CC8.

FYs 2016-18 Programmatic Outreach Services

The MSRC retains a contractor to continue and enhance public awareness of the MSRC by highlighting its mission, achievements, and the funding opportunities the MSRC has available. Following an open RFP process in 2015, the MSRC awarded $120,000 to The Better World Group for programmatic outreach services for two years, including an option for another two-year term to be executed at the MSRC's discretion, subject to funding approval by the SCAQMD Board. Contract #MS16030 was executed to effectuate the award. The MSRC evaluated The Better World Group's performance and

approved exercising the option and adding an amount not to exceed $125,903 to fund services for an additional two years as part of the FYs 2016-18 Work Program. This contract modification will be considered by the SCAQMD Board at its December 1, 2017 meeting.

FYs 16-18 Hydrogen Infrastructure Partnership Program

The MSRC previously considered a proposed Infrastructure Program Concept, covering natural gas, electric, and hydrogen vehicle infrastructure. The targeted MSRC funding amount for hydrogen infrastructure is $3,000,000. The California Energy Commission (CEC) has offered to provide assistance in the selection and administration of the MSRC-funded hydrogen projects. Based on parameters specified by the MSRC, including but not limited to the prioritization of at least one project from within each of the four counties within SCAQMD, CEC would provide a list of potential hydrogen refueling station projects for MSRC consideration. Projects would initially be drawn from those previously proposed to CEC, but either not funded, or not fully funded; however, should there be a lack of projects meeting one or more of the MSRC's parameters, CEC would assist the MSRC in identifying other potential projects. The MSRC would determine the specific projects to be supported with MSRC funds. Day-to-day administration would be performed by CEC, with MSRC oversight, as CEC's co-funding contribution; all MSRC funds would be passed through to the projects. The MSRC considered this partnership opportunity and approved an award to CEC in an amount not to exceed $3,000,000 as an element of the FYs 16-18 AB 2766 Discretionary Fund Work Program. This contract award will be considered by the SCAQMD Board at its December 1, 2017 meeting.

FYs 16-18 Planning for Electric Vehicle Charging Infrastructure Investments

As mentioned in the previous item, the MSRC previously considered a proposed Infrastructure Program Concept, covering natural gas, electric and hydrogen vehicle infrastructure. The targeted MSRC funding amount for electric vehicle support equipment (EVSE) is $3,000,000. In order to minimize overlap with other incentive programs, and with an eye to fulfilling unmet needs, the Concept proposed that the MSRC focus upon two of the most challenging location types: workplaces and multi-unit dwellings (MUDs). The UCLA Luskin Center for Innovation has offered to perform planning analysis work to provide the MSRC with high-potential locations for workplace and MUD EVSE installations. For the workplace category, they would map plug-in vehicle commute trip densities, identify the traffic analysis zones in which there is a high demand for daytime charging, and overlay employer information to identify the highest potential candidate workplaces. For the MUD category, Luskin would inventory MUD housing stock, develop a model to predict MUD residents' propensity to purchase EVs, and use the model to identify by census tract the most likely MUDs resident characteristics for EV purchase. The MSRC considered this offer and approved an award to the Regents of the University of California in an amount not to exceed $254,795 as an element of the FYs 16-18 AB 2766 Discretionary Fund Work Program.

Additional actions and allocations relative to MSRC funding for EVSE are anticipated in the coming months. This contract award will be considered by the SCAQMD Board at its December 1, 2017 meeting.

FYs 16-18 Southern California Future Communities Partnership Program

The Future Communities Program is envisioned as a partnership between the Southern California Association of Governments (SCAG) and the MSRC to support city and county agencies in implementing innovative pilot projects that reduce vehicle miles traveled (VMT) from local travel and municipal operations through the use of new technologies and enhanced data analytics. SCAG would fund an initial research phase to identify new and innovative pilot concepts, as well as investigate the potential for more traditional transportation demand management strategies to yield a greater return on investment. The findings of the research would support development of a Future Communities Call for Projects, to be primarily administered by SCAG. MSRC staff and/or members of the MSRC-TAC TCM Subcommittee would participate in the selection of projects. The $2,000,000 targeted MSRC funding amount would be allocated equally amongst the four counties within SCAQMD, with $500,000 set aside for each county. In the event that meritorious projects totaling at least $500,000 are not submitted from within a county, the unused county balance would be made available to projects in other counties. Day-to-day administration of the program would be performed by SCAG. The MSRC's contribution would be matched dollar for dollar, with half of the match coming from SCAG and the other half from the local project proponents. The MSRC considered this partnership opportunity and approved an award to SCAG in an amount not to exceed $2,000,000 as an element of the FYs 16-18 AB 2766 Discretionary Fund Work Program. This contract award will be considered by the SCAQMD Board at its December 1, 2017 meeting.

FYs 2016-18 County Transportation Commission Partnership Program

The MSRC approved release of an Invitation to Negotiate for the County Transportation Commission (CTC) Partnership Program under the FYs 2016-18 Work Program. The ITN, with a targeted funding level of $8,000,000, seeks to stimulate the demonstration of innovative projects, as well as expand "tried and true" air quality improvement strategies. CTCs within SCAQMD are eligible to participate. Other public and private entities could participate as subcontractors to a CTC. Each CTC is eligible to receive a maximum of $2,000,000 on a sole-source contract award basis. Eligible project types include, but are not necessarily limited to: capital improvement projects, capital purchase projects including fleet vehicle purchases that meet, at a minimum, ARB's optional 0.02 g/bhp-hr NOx emissions standard, traffic signal coordination, ridesharing programs, active transportation programs including bicycle sharing projects, transit pass incentive programs, freeway service patrols, first mile/last mile strategies, and information technology projects that focus on air quality improvement. The ITN includes an open application period commencing with its release on December 1, 2017, and closing June 29, 2018, and projects will be brought to the MSRC for consideration

of awards throughout and immediately following the application period. This item will be considered by the SCAQMD Board at its December 1, 2017 meeting.

Contracts Administrator's Report

The MSRC's AB 2766 Contracts Administrator provides a written status report on all open contracts from FY 2004-05 through the present. The Contracts Administrator's Report for August 31 through October 25, 2017 is attached (Attachment 3) for your information.

Attachments

Attachment 1 – Approved September 21, 2017 Meeting Minutes
Attachment 2 – Adopted 2018 Meeting Schedule
Attachment 3 – August 31 through October 25, 2017 Contracts Administrator's Report

MOBILE SOURCE AIR POLLUTION REDUCTION REVIEW COMMITTEE
THURSDAY, SEPTEMBER 21, 2017 MEETING MINUTES
21865 Copley Drive, Diamond, Bar, CA 91765- Conference Room CC-8

MEMBERS PRESENT:

(Chair) Greg Pettis, representing RCTC
Michele Martinez, representing SCAG
Dolores Roybal Saltarelli, representing Regional Rideshare Agency (via v/c)
Steve Veres, representing LA County MTA
Greg Winterbottom, representing OCTA
Mark Yamarone (Alt.), representing Los Angeles County MTA (via v/c)

MEMBERS ABSENT:

Ben Benoit, representing SCAQMD
Jack Kitowski, representing California Air Resources Board
(Vice-Chair) Larry McCallon, representing SBCTA

MSRC-TAC MEMBERS PRESENT:

John Kato, CEC

OTHERS PRESENT:

Lauren Dunlap, SoCalGas

SCAQMD STAFF & CONTRACTORS

Leah Alfaro, MSRC Contracts Assistant
Kevin Cao, Senior Information Technology Specialist
Penny Shaw Cedillo, MSRC Administrative Liaison
Ray Gorski, MSRC Technical Advisor-Contractor
John Kampa, Financial Analyst
Megan Lorenz, Principal Deputy District Counsel
Matt MacKenzie, MSRC Contracts Assistant
Fred Minassian, Asst. Deputy Executive Officer
Cynthia Ravenstein, MSRC Contracts Administrator

CALL TO ORDER

- Call to Order

  MSRC Chair Greg Pettis called to order at 2:02 p.m.

  Roll call was taken at the start of the meeting. The following members and alternates were present: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES ,WINTERBOTTOM, YAMARONE.

- Opening Comments

  There were no opening comments.

STATUS REPORT

Copies of the Clean Transportation Policy Update were distributed at the meeting.

Cynthia Ravenstein, MSRC Contracts Administrators reported that at the July 27th Air Resources Board meeting, the first 30-month Zero Emission Vehicle Incentive Investment Plan for $200M for the VW settlement was approved. $120M will go to charging stations, for a total of 2,000 to 3,000 chargers. $44M will go towards building the first Green City in Sacramento, $20M for public education, and $16M to operate Electrify America. Under the Low Carbon Transportation Program there was a passage of AB 134 on September 16th, as an urgency bill that added $140M to the Clean Vehicle Rebate project. This is one of the funding sources that we listed in the updates that are posted on the MSRC website under Other Funding Programs as part of the support for your Local Government Partnership Program, to allow the cities and counties to see what other opportunities might be out there. This was part of a larger set of allocations that were approved as part of that package. The more extensive list is included on page 13. On October 4th the Air Resources Board is going to hold a workshop to discuss their Fiscal Year 2017-18 Funding Plan for Clean Transportation Incentives. One of these things is a new Zero/Near-Zero Emission Warehouse Program.

MSRC Chair Greg Pettis asked for the VW settlement, how did they determine the highway network fast chargers didn't include San Bernardino, Santa Ana or Riverside? Fred Minassian, Assistant DEO/Science and Technology Advancement replied for the charging station part of the solicitation, South Coast, San Joaquin and Bay Area have jointly submitted the proposal for charging stations including fast charging that covers the entire jurisdiction of the three air districts for $150M. We haven't heard back on who gets the award but that's a comprehensive proposal we have submitted. Ray Gorski, MSRC Technical Advisor, added the South Coast Air Quality Management District has approached your staff regarding that opportunity and specifically with locations for fast chargers which are in San Bernardino and Riverside counties. Mr. Pettis added Santa Ana is the 11th largest city in the state, Riverside is 12th, certainly they are higher than Sacramento or Fresno in population.

CONSENT CALENDAR (Items 1 through 6)
Receive and Approve Items

Agenda Item #1 – Minutes for the June 15 and August 17, 2017 MSRC Meetings

The minutes of the June 15, 2017meeting were included in your packet. The August 17, 2017 MSRC meeting minutes were distributed at the meeting.

ON MOTION BY MSRC MEMBER GREG WINTRBOTTOM AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, UNDER OF APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, THE MSRC UNANIMOUSLY APPROVED THE JUNE 15 AND AUGUST 17, 2017 MSRC MEETING MINUTES.
AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: Staff will include the June 15 and August 17, 2017 meeting minutes in the MSRC Committee Report for the October 6, 2017 SCAQMD Board meeting and will place copies on the MSRC's website.

Information Only - Receive and File
Agenda Item #2 – MSRC Contracts Administrator's Report

The MSRC AB 2766 Contracts Administrator's Report for July 27 through August 30, 2017 was included in the agenda package.

ON MOTION BY ON MOTION BY MSRC MEMBER GREG WINTRBOTTOM AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #9, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE CONTRACTS ADMINISTRATOR'S REPORT FOR JULY 27 THROUGH AUGUST 30, 2017.
AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: Staff will include the MSRC Contracts Administrator's Report in the MSRC Committee Report for the October 6, 2017 SCAQMD Board meeting.

Agenda Item #3 – Financial Report on AB 2766 Discretionary Fund

A financial report on the AB 2766 Discretionary Fund for the August 2017 was included in the agenda package.

ON MOTION BY MSRC MEMBER GREG WINTRBOTTOM AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, UNDER

APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, THE MSRC UNANIMOUSLY VOTED TO RECEIVE AND FILE THE FINANCIAL REPORT FOR THE PERIOD ENDING AUGUST 2017.
AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: No further action is required.

For Approval – As Recommended

Agenda Item #4 – Consider 7-Month Term Extension to the City of Newport Beach, Contract #ML11045 ($30,000 – Purchase One Heavy-Duty Natural Gas Vehicle)

The City requests a 7-month term extension due to delays associated with plan and specification issues. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, MSRC UNANIMOUSLY VOTED TO APPROVE A 7-MONTH TERM EXTENSION TO CITY OF NEWPORT BEACH, CONTRACT #ML11045
AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

[MSRC Member Steve Veres arrived at the meeting, via videoconference at 2:06 p.m.]

Agenda Item #5 – Consider 5-Month Term Extension to the City of Corona, Contract #ML14019 ($178,263 – Install Electric Vehicle Charging and Bicycle Infrastructure)

The City requests a 5-month term extension due to Americans with Disabilities Act requirements and longer than anticipated time for setting of meter pedestals. The MSRC-TAC unanimously recommends approval.

ON MOTION BY MSRC MEMBER GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #9, MSRC UNANIMOUSLY VOTED TO APPROVE A 5-MONTH TERM EXTENSION TO CITY OF CORONA, CONTRACT #ML16019.
AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

Agenda Item #6 – Consider Modified Statement of Work and 17-Month Term Extension by City of Duarte, Contract #ML14067 ($60,000 – Purchase Two Heavy- Duty Natural Gas Vehicles)

The City requests to substitute the purchase of electric buses for the natural gas buses specified in the contract. In order to accommodate this change, they also request a 17-month term extension. The MSRC-TAC unanimously recommends approval.

> ON MOTION BY MSRC MEMBER GREG WINTERBOTTOM AND SECONDED BY MSRC MEMBER MICHELE MARTINEZ, UNDER APPROVAL OF CONSENT CALENDAR ITEMS #1 THROUGH #6, MSRC UNANIMOUSLY VOTED TO APPROVE A MODIFIED SCOPE AND 17-MONTH TERM EXTENSION TO CITY OF DUARTE, CONTRACT #ML14067.
> AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

ACTION CALENDAR

FYs 2014-16 WORK PROGRAM

Agenda Item #7 – Consider 24-Month Term Extension by City of Moreno Valley, Contract #ML16041 ($20,000 – Install Electric Vehicle Charging)

The City requests a 24-month term extension to allow them time to assess likely demand for the infrastructure. The MSRC-TAC unanimously recommends approval of a 12-month term extension.

> ON MOTION BY MSRC MEMBER MICHELE MARTINEZ AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM, UNDER APPROVAL OF 24-MONTH TERM EXTENSION TO CITY OF MORENO VALLEY, CONTRACT #ML16041.
> AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: MSRC Staff will amend the above contract accordingly.

FYs 2016-18 WORK PROGRAM

Agenda Item #8 – Consider Funding for Application Received under the Natural Gas Infrastructure Program

As an element of their FYs 2016-18 Work Program, the MSRC allocated $4 million to fund new and expanded CNG and LNG refueling stations, as well as modifications to vehicle maintenance facilities and technician training. A Program Announcement was released on June 2, 2017. The MSRC has previously funded one application for $82,500. The MSRC has received an additional application requesting $36,000 for installation of a slow-fill fueling station. The MSRC-TAC unanimously recommends approval of an award of $36,000 to the City of Hermosa Beach.

MSRC Chair Greg Pettis asked how much have we given out on this? Cynthia Ravenstein, MSRC Contracts Administrator replied previously $82,500. Mr. Pettis questioned if that went to a couple of others. Ms. Ravenstein replied that was for Penske, this has not seen a lot of action so far.

> ON MOTION BY MSRC MEMBER MICHELE MARTINEZ AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM THE MSRC UNANIMOUSLY VOTED TO APPROVE AN AWARD TO THE CITY OF HERMOSA BEACH FOR $36,000.
> AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its meeting on October 6, 2017 meeting.

Mr. Pettis questioned how much is left in that? Ms. Ravenstein replied $3.85M. Ric Teano, OCTA, asked how long is it open. Ms. Ravenstein replied until the end of June next year. MSRC Member Greg Winterbottom asked is that a District distribution? Ms. Ravenstein replied it's basically a first come, first served. There is a small geographic minimum but we have not approached that point where that is coming into play. The questions were raised at the TAC also about the relative lackluster response and one of the discussions was with the gasoline prices falling, the demand for natural gas tends to follow along with it. Mr. Gorski added what we are seeing is kind of a conversion. The MSRC, along with other entities including the South Coast Air Quality Management District, has been funding natural gas infrastructure now for about a quarter century. A lot of the need has been met. I'm sure there are still school districts or other entities that might be looking to transitioning their fleet, but in all honesty heavy-duty is the best segment for natural gas. The lighter duty technologies are moving much more rapidly toward the hybrid vehicles and the zero-emission vehicles. As you notice where the investments are being placed by agencies such as the Air Resources Board, it's really looking at the zero-emission vehicles and then the near zero, which is targeted towards the heavy-duty segment of the natural gas vehicle population. The manufacturers have ceased production on the majority of light- and medium-duty natural gas vehicles over the last couple years and they have put their technology investments into those which are zero-emission or hybrid.

MSRC Member Michele Martinez asked have we mapped out some of the school districts that are trying to transition and/or any other government entities that we can outreach to. As things are changing toward more different technologies, how can we reprogram these dollars? Not in the way that Northern California or other folks are doing, but what meets the needs of this region. I think that should be a conversation we should have because obviously with electric vehicles and other vehicles low income people can't afford that. They are on the market, and you see Ford and all these other big companies moving in that direction, but again who can afford those vehicles. We need to figure out ways based on the population we serve here, what makes the most sense. Mr. Gorski replied we will certainly keep the MSRC apprised on a monthly basis as to what the monthly draw down is on this account. We are seeing some increase relative to the expansion of existing infrastructure. Since the MSRC and its partner districts have been doing this for a long time, we are seeing some of this equipment reaching the end of its useful life. The MSRC has had as a past practice, the desire not to fund replacement of equipment once it has reached the end of its useful life. The reason is, it's thought that replacement cost should be borne mostly by the people that accepted the original incentive. Ms. Martinez added why should we give money to folks that cannot sustain the life of the system? That is something else we need to consider, if they are unable to why do we give them those funds or are we willing to be flexible.

Mr. Winterbottom asked can we actually do a chart to show a visual. Mr. Gorski replied the South Coast AQMD currently has a chart with maps of all the school districts and other accessible infrastructure that has been in place within the South Coast Air Basin over the last several years. We can absolutely make a concise presentation on what the state of the state is on that. Mr. Winterbottom asked if we have about $3.5M until next June? Mr. Gorski replied yes. And of course as staff, we do not like to tie up your financial resources that can be better invested in other areas where there is more demand. Mr. Pettis commented that I would think some of our transit agencies like OCTA and Sunline would have demand since we are looking at expansion at this point because their network is expanding. Mr. Gorski added we have had recent discussions with the OCTA as well as Sunline, in looking at what their more immediate infrastructure needs are. What we have been asked to consider is electrification, and also expansion of hydrogen refueling especially in the area of Coachella Valley served by Sunline Transit. We will probably be having a staff presentation within the next couple of months on an opportunity for partnership with the California Energy Commission.

Ms. Martinez asked about some of the new vehicle shuttles and buses that are coming out. With respect to the vehicles being driverless, do we know the technology that they're actually using? Mr. Gorski replied there are so many competing companies right now, it's probably one of the areas in which everyone is trying to get on board, including the major automakers which have specifically acquired small technology companies to assist them. It is emerging very rapidly. Right now the federal government has given the green light to continue demonstrations. California has been wanting to take a little bit of a slower pace because of some safety concerns, but I think within the not too distant future, staff will be presenting cases in which vehicles will be either autonomous, or at least have a higher level of autonomous operations, especially transit vehicles. Ms. Martinez added we need to start having that conversation now as it will eventually come and we can start looking at certain policies and what are we going to approve and not approve. It's better to do so now instead of wait and not be able to get in front of it. Mr. Gorski

added I always tell people the next car you buy is going to have autonomous driving capabilities to some extent. If you have seen the most recent press release Nissan has introduced their new generation Leaf and it is a pretty drastic redesign of their previous vehicle, it includes self-driving capabilities which are on par with those currently available in the Tesla S model. It's really advancing rapidly in prices coming down. We will all have the opportunity in the near future to purchase a vehicle that has at least some capabilities to assist the driver.

Agenda Item #9 – Consider Funding for Applications Received under the Major Event Center Transportation Program

Ray Gorski, MSRC Technical Advisor, presented this item. There are two items for your consideration today. Both are programs that would be implemented by the Southern California Regional Rail Authority (SCRRA), the Joint Powers Authority (JPA) that operates the Metrolink service.

The first is to have special train service to the 2017 Festival of Lights held in downtown Riverside. The special train service would commence with the November 24 lighting ceremony, and then run on weekends, ending on Saturday, December 16th. I would like to note there is one incorrect item on the agenda. In the synopsis, there's an incorrect amount for the award for the SCRRA Festival of Lights service. The correct amount is $239,565; that is matched in an amount greater than by the project cofunding. That includes SCRRA as well as RCTC. This special train service will help alleviate congestion and also provide another mode for the hundreds of thousands of people who are going to attend the Festival of Lights.

The second is special train service in support of professional football played at the Los Angeles Memorial Coliseum. This is for the 2017-18 and 2018-19 football seasons. This request is for $351,186. This would be supporting home games which are played by the Los Angeles Rams at the Coliseum on Sundays. This did go to the TAC, both of these programs were recommended for funding consideration. It was noted in the staff report that the SCRRA will be able to utilize Tier 4 locomotive for this service. However the MSRC-TAC does recommend an award in the event the Tier 4 locomotives are not available and the service is provided by Tier 2 locomotives or some portion thereof.

MSRC Member Greg Winterbottom noted for Agenda Item #9, that he has no financial interest however, he is a member of the Board of Directors for the SCRRA and needs to disclose that for public record.

Ms. Martinez questioned the Metrolink service for Antelope Valley and Orange County for the football games at the Coliseum, we are doing eight the first season and eight the second year? Mr. Gorski replied the exact number of dates in the second year is still to be determined. Ms. Martinez questioned what is the anticipation of the actual amount of people that would be using this and when would we be promoting it? This is exciting but how will we get the message out? Mr. Gorski replied that is an excellent point. There has been a lot of discussion at the staff level as well as at the MSRC-TAC. SCRRA is the primary entity that is promoting the service. Relative to professional football, it is a little unfortunate that the National Football League and

the Los Angeles Rams have not allowed their names to be utilized due to licensing issues. This is the second year that the service has been offered. It was offered last year for the initial year of Rams football; at that time they were an agreeable to having their trademark license name utilized on promotional materials. This year however, they have asked that they not be utilized, so we do not even use the word Rams in the staff report. The vast majority of people who are inclined to utilize this service are aware that it is the Rams if it's going on a Sunday at the Coliseum. We don't see that as being too much of a downside other than it does help the football teams. Ms. Martinez questioned can we use the Coliseum name? Mr. Gorski replied the LA Coliseum has directly provided a letter that says they are happy to utilize their name on any promotional materials. To answer your question regarding the ridership, this did begin last year, it's one of those things where some of the trains were standing room only and some were not as fully utilized. It shows where additional marketing needs to be placed and we are hoping this year that they will surpass the ridership from their previous year. There are examples under the Event Center Program, specifically the OCTA's Orange County Fair, were something starts out at one level then over the years, it dramatically increases in ridership. We are hopeful that will be the same progression that both the Festival of Lights and the Rams football experience relative to the Event Center Program.

> ON MOTION BY MSRC MEMBER MICHELE MARTINEZ AND SECONDED BY MSRC MEMBER GREG WINTERBOTTOM THE MSRC UNANIMOUSLY VOTED TO APPROVE AWARDS OF $351,186 FOR THE FESTIVAL OF LIGHTS SERVICE AND $239,565 FOR PROFESSSTIONAL FOOTBALL SERVICE TO METROLINK.
> AYES: MARTINEZ, PETTIS, ROYBAL SALTARELLI, VERES, WINTERBOTTOM.
> NOES: NONE.

ACTION: This item will be considered by the SCAQMD Board at its meeting on October 6, 2017 meeting.

OTHER BUSINESS

- Ray Gorski, MSRC Technical Advisor gave a very brief update. We are moving towards the two-year work program, it will officially end on June 30, 2018. I wanted to make sure that the membership was aware that all of the money which was identified for this year's work program will be utilized and there are currently on-going deliberations at your MSRC-TAC relative to which programs they would bring forth for your consideration. We do anticipate that some programs will be brought forth for consideration in October and then additional programs in November. It is our belief that prior to the end of this calendar year, 100% of your available funds will be fully encumbered.

- MSRC Chair Greg Pettis commented I'd asked Ray if the various entities that have vacancies and their alternates have been notified, he said that they had. I did notice that RCTC is still listing Adam Rush and he is no longer the alternate. RCTC will be naming an alternate this week. Cynthia Ravenstein added it will be corrected.

PUBLICCOMMENTPERIOD

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.

NEXTMEETING

Thursday, October 19, 2017 at 2:00 p.m., Room CC8.

[Prepared by Penny Shaw Cedillo]

Clean Transportation
Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

ADOPTED
2018 MEETING SCHEDULE

TAC Meeting Dates	MSRC Meeting Dates
Thursday, January 11 *(second Thursday)*	Thursday, January 18
Thursday, February 1	Thursday, February 15
Thursday, March 8 *(at 2:30 p.m., followed by MSRC-TAC Dinner)*	Thursday, March 15
Thursday, April 5	Thursday, April 19
Thursday, May 3	Thursday, May 17
Thursday, June 7	Thursday, June 21
Thursday, July 5	Thursday, July 19
Thursday, August 2	Thursday, August 16
Thursday, September 6	Thursday, September 20
Thursday, October 4	Thursday, October 18
Thursday, November 1	Thursday, November 15
Thursday, December 13 *(second Thursday)*	Thursday, December 20

All regularly scheduled MSRC-TAC meetings are held on the first Thursday of every month at 1:30 p.m. in Conference Room CC8, unless otherwise noted. All regularly scheduled MSRC meetings are held on the third Thursday of every month at 2:00 p.m. in Conference Room CC8, unless otherwise noted.

Meeting agendas can be viewed on the MSRC's website at http://www.cleantransportationfunding.org/.

Clean Transportation
Funding from the MSRC
Mobile Source Air Pollution Reduction Review Committee

MSRC Agenda Item No. 3

DATE:	November 16, 2017
FROM:	Cynthia Ravenstein
SUBJECT:	AB 2766 Contracts Administrator's Report
SYNOPSIS:	This report covers key issues addressed by MSRC staff, status of open contracts, and administrative scope changes from August 31 to October 25, 2017.
RECOMMENDATION:	Receive and file report
WORK PROGRAM IMPACT:	None

Contract Execution Status

2016-18 Work Program

On July 8, 2016, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is 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 with the prospective contractor for signature or executed.

On January 6, 2017, the SCAQMD Governing Board approved an award for development, hosting and maintenance of a new MSRC website. This contract is executed.

On April 7, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is executed.

On June 2, 2017, the SCAQMD Governing Board approved an award under the Event Center Transportation Program. This contract is with the prospective contractor for signature.

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 undergoing internal review.

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 under development or undergoing internal review.

2014-16 Work Program

On December 5, 2014, the SCAQMD Governing Board approved an award under the AB118 Enhanced Fleet Maintenance Program. This contract is executed.

On June 5, 2015, the SCAQMD Governing Board approved two awards under the Event Center Transportation Program and one award to provide low-emission transportation services to the Special Olympics World Games. These contracts are executed.

On September 4, 2015, the SCAQMD Governing Board approved 25 awards under the Local Government Match Program and one award under the Transportation Control Measure Partnership Program. These contracts are with the prospective contractor for signature or executed.

On October 2, 2015, the SCAQMD Governing Board approved 11 awards under the Local Government Match Program and one award under the Alternative Fuel Infrastructure Program. These contracts are executed.

On November 6, 2015, the SCAQMD Governing Board approved 37 awards under the Local Government Match Program. These contracts are with the prospective contractor for signature or executed.

On December 4, 2015, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program, one award under the Alternative Fuel Infrastructure Program, and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On January 8, 2016, the SCAQMD Governing Board approved two awards under the Major Event Center Transportation Program, one award under the Local Government Match Program, and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On March 4, 2016, the SCAQMD Governing Board approved two awards under the Alternative Fuel Infrastructure Program. These contracts are executed.

On April 1, 2016, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program and five awards under the Transportation Control Measure Partnership Program. These contracts are executed.

On May 6, 2016, the SCAQMD Governing Board approved one award under the Major Event Center Transportation Program and one award under the Transportation Control Measure Partnership Program. These contracts are executed.

On June 3, 2016, the SCAQMD Governing Board approved one award under the Alternative Fuel Infrastructure Program. This contract is executed.

On October 7, 2016, the SCAQMD Governing Board approved ten awards under the Alternative Fuel Infrastructure Program and five awards under the Near-Zero Natural Gas Engine Incentives Program. These contracts are under development, with the prospective contractor for signature, or executed.

On January 6, 2017, the SCAQMD Governing Board approved an award under the Alternative Fuel Infrastructure Program and an award under the Near-Zero Natural Gas Engine Incentives Program. These contracts are executed.

Work Program Status

Contract Status Reports for work program years with open (including "Open/Complete") and/or pending contracts are attached.

FY 2004-05 Work Program Contracts
One contract from this work program year is open.

FY 2004-05 Invoices Paid
No invoices were paid during this period.

FY 2006-07 Work Program Contracts
No contracts from this work program year are open; and one is in "Open/Complete" status. One contract closed during this period: City of Los Angeles, Department of Transportation – Purchase 95 Transit Buses.

FY 2006-07 Invoices Paid
No invoices were paid during this period.

FY 2007-08 Work Program Contracts
4 contracts from this work program year are open; and 4 are in "Open/Complete" status.

FY 2007-08 Invoices Paid
No invoices were paid during this period.

FY 2008-09 Work Program Contracts
2 contracts from this work program year are open; and 8 are in "Open/Complete" status. One contract closed during this period: City of Los Angeles, Bureau of Sanitation, Contract #ML09041 – Purchase 35 Heavy-Duty Natural Gas Vehicles.

FY 2008-09 Invoices Paid
No invoices were paid during this period.

FY 2010-11 Work Program Contracts
9 contracts from this work program year are open; and 35 are in "Open/Complete" status. One contract moved into "Open/Complete" status during this period: City of Riverside, Contract #ML11036 – Install New CNG Station & Purchase 9 Heavy-Duty Natural Gas Vehicles.

FY 2010-11 Invoices Paid
One invoice in the amount of $670,000.00 was paid during this period.

FY 2011-12 Work Program Contracts
15 contracts from this work program year are open, and 33 are in "Open/Complete" status. Four contracts moved into "Open/Complete" status during this period: Southern California Gas Company, Contract #MS12011 – Construct New Public Access CNG Station in Pico Rivera; Mike Diamond/Phace Management, Contract #MS12033 – Purchase 20 Medium-Heavy-Duty Vehicles (modification to reduce to 8 vehicles is in progress); Ware Disposal Company, Contract #MS12034 – Purchase 8 Medium-Heavy-Duty Vehicles; and CR&R Incorporated, Contract #MS12075 – Expansion of Existing CNG Infrastructure.

FY 2011-12 Invoices Paid
3 invoices totaling $120,195.26 were paid during this period.

FYs 2012-14 Work Program Contracts
40 contracts from this work program year are open, and 22 are in "Open/Complete" status. 4 contracts moved into "Open/Complete" status during this period: City of Los Angeles, Bureau of Sanitation, Contract #ML14013 – Purchase 14 Heavy-Duty Natural Gas Vehicles; Upland Unified School District, Contract #MS14053 – Expansion of Existing CNG Infrastructure; CR&R Incorporated, Contract #MS14080 – Expansion of Existing CNG Infrastructure and Maintenance Facility Modifications in Perris; and CR&R Incorporated, Contract #MS14081 - Expansion of Existing CNG Infrastructure and Maintenance Facility Modifications in Garden Grove.

FYs 2012-14 Invoices Paid
3 invoices totaling $560,887.16 were paid during this period.

FYs 2014-16 Work Program Contracts
82 contracts from this work program year are open, and 13 are in "Open/Complete" status. 2 contracts moved into "Open/Complete" status during this period: City of Westminster, Contract #ML16050 – Install Electric Vehicle Charging Infrastructure; and City of Colton, Contract #ML16062 – Install Electric Vehicle Charging Infrastructure.

FYs 2014-16 Invoices Paid
13 invoices totaling $1,856,097.96 were paid during this period.

FYs 2016-18 Work Program Contracts
4 contracts from this work program year are open.

FYs 2016-18 Invoices Paid
One invoice in the amount of $28,500.00 was paid during this period.

Administrative Scope Changes
6 administrative scope changes were initiated during the period of August 31 through October 25, 2017:

- Mike Diamond/Phace Management, Contract #MS12033 (Purchase 20 Medium-Heavy-Duty Vehicles) – Reduced number of vehicles to 8, with corresponding $351,100 value reduction.
- City of Pomona, Contract #ML16020 (Install Bicycle Detection Systems) – Six-month no-cost term extension

- City of Moreno Valley, Contract #ML16078 (Install Bicycle Infrastructure & Implement Bicycle Education) – Six-month no-cost term extension
- Orange County Transportation Authority, Contract #MS16093 (Implement a Mobile Ticketing System) – Six-month no-cost term extension
- City of Fountain Valley, Contract #ML16009 (Install EV Charging Stations) – One-year no-cost term extension
- The Better World Group, Contract #MS16030 (Programmatic Outreach Services) – Reallocate $5,000 between tasks

Attachments

- FY 2004-05 through FYs 2016-18 (except FY 2005-06 and FY 2009-10) Contract Status Reports

MSRC Database
Mobile Source Air Pollution Reduction Review Committee

AB2766 Discretionary Fund Program Invoices

August 31, 2017 to October 25, 2017

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
2010-2011 Work Program							
8/31/2017	8/31/2017	8/31/2017	9/5/2017	ML11036	City of Riverside	FINAL	$670,000.00
Total: $670,000.00							
2011-2012 Work Program							
8/31/2017				MS12089	Riverside County Transportation Commission	01083-Final	$5,305.26
8/31/2017	8/31/2017	8/31/2017	9/5/2017	MS12033	Mike Diamond/Phace Management Services LL	Final	$14,890.00
8/31/2017	8/31/2017	8/31/2017	9/5/2017	MS12075	CR&R Incorporated	1-Final	$100,000.00
Total: $120,195.26							
2012-2014 Work Program							
10/17/2017	10/26/2017	10/27/2017	10/31/2017	MS14001	Los Angeles County MTA	)0067623-Fin	$33,937.16
10/19/2017	10/26/2017	10/27/2017	10/31/2017	ML14028	City of Fullerton	1-FINAL	$126,950.00
9/26/2017	10/10/2017	10/11/2017	10/13/2017	ML14013	City of Los Angeles, Bureau of Sanitation	1-FINAL	$400,000.00
Total: $560,887.16							
2014-2016 Work Program							
10/3/2017	10/10/2017	10/11/2017	10/13/2017	MS16001	Los Angeles County MTA	800067644	$1,026,250.00
9/15/2017	9/21/2017	9/21/2017	9/28/2017	ML16050	City of Westminster	4517-Final	$93,925.19
9/19/2017	9/21/2017	9/21/2017	9/28/2017	MS16084	Transit Systems Unlimited, Inc.	30, 60033, 60	$140,895.00
10/3/2017	10/10/2017	10/11/2017	10/13/2017	MS16001	Los Angeles County MTA	800067643	$15,789.84
9/21/2017	9/21/2017	9/21/2017	9/28/2017	ML16015	City of Yorba Linda	1-Final	$85,000.00
9/26/2017	10/10/2017	10/11/2017	10/13/2017	MS16030	The Better World Group	1614	$14,063.50
9/13/2017	9/21/2017	9/21/2017	9/28/2017	ML16017	City of Long Beach	17-005	$40,000.00
10/3/2017	10/10/2017	10/11/2017	10/13/2017	MS16004	Mineral LLC	103148	$300.00
10/3/2017	10/10/2017	10/11/2017	10/13/2017	MS16100	Southern California Regional Rail Authority (Metr	004140-FINA	$66,169.43
10/17/2017	10/26/2017	10/27/2017	10/31/2017	MS16117	Omnitrans	1	$166,250.00
10/17/2017	10/26/2017	10/27/2017	10/31/2017	MS16118	Omnitrans	1	$166,250.00
9/6/2017	9/21/2017	9/21/2017	9/28/2017	MS16004	Mineral LLC	103131	$300.00
9/26/2017	10/10/2017	10/11/2017	10/13/2017	MS16084	Transit Systems Unlimited, Inc.	60455	$40,905.00
Total: $1,856,097.96							

Contract Admin.	MSRC Chair	MSRC Liaison	Finance	Contract #	Contractor	Invoice #	Amount
2016-2018 Work Program							
9/14/2017	9/21/2017	9/21/2017	9/28/2017	MS18003	Geographics	17-20406	$28,500.00

Total: $28,500.00

Total This Period: $3,235,680.38

MSRC Database
Mobile Source Air Pollution Reduction Review Committee

FYs 2004-05 Through 2014-16 AB2766 Contract Status Report

11/9/2017

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2004-2005 Contracts									
Open Contracts									
ML05014	Los Angeles County Department of P	5/21/2007	11/20/2008	3/20/2018	$204,221.00	$0.00	Traffic Signal Synchronization	$204,221.00	No
Total: 1									
Declined/Cancelled Contracts									
ML05005	City of Highland				$20,000.00	$0.00	2 Medium Duty CNG Vehicles	$20,000.00	No
ML05008	Los Angeles County Department of P				$140,000.00	$0.00	7 Heavy Duty LPG Street Sweepers	$140,000.00	No
ML05010	Los Angeles County Department of P				$20,000.00	$0.00	1 Heavy Duty CNG Bus	$20,000.00	No
MS05030	City of Inglewood				$31,662.00	$0.00	2 CNG Street Sweepers	$31,662.00	No
MS05032	H&C Disposal				$34,068.00	$0.00	2 CNG Waste Haulers	$34,068.00	No
MS05044	City of Colton				$78,720.00	$0.00	CNG Station Upgrade	$78,720.00	No
Total: 6									
Closed Contracts									
ML05006	City of Colton Public Works	7/27/2005	7/26/2006		$30,000.00	$30,000.00	3 Medium Duty CNG Vehicles	$0.00	Yes
ML05011	Los Angeles County Department of P	8/10/2006	12/9/2007	6/9/2008	$52,409.00	$51,048.46	3 Heavy Duty LPG Shuttle Vans	$1,360.54	Yes
ML05013	Los Angeles County Department of P	1/5/2007	7/4/2008	1/4/2013	$313,000.00	$313,000.00	Traffic Signal Synchronization	$0.00	Yes
ML05015	City of Lawndale	7/27/2005	7/26/2006		$10,000.00	$10,000.00	1 Medium Duty CNG Vehicle	$0.00	Yes
ML05016	City of Santa Monica	9/23/2005	9/22/2006	9/22/2007	$350,000.00	$350,000.00	6 MD CNG Vehicles, 1 LPG Sweep, 13 CNG	$0.00	Yes
ML05017	City of Signal Hill	1/16/2006	7/15/2007		$126,000.00	$126,000.00	Traffic Signal Synchronization	$0.00	Yes
ML05018	City of San Bernardino	4/19/2005	4/18/2006		$40,000.00	$40,000.00	4 M.D. CNG Vehicles	$0.00	Yes
ML05019	City of Lakewood	5/6/2005	5/5/2006		$10,000.00	$10,000.00	1 M.D. CNG Vehicle	$0.00	Yes
ML05020	City of Pomona	6/24/2005	6/23/2006		$10,000.00	$10,000.00	1 M.D. CNG Vehicle	$0.00	Yes
ML05021	City of Whittier	7/7/2005	7/6/2006	4/6/2008	$100,000.00	$80,000.00	Sweeper, Aerial Truck, & 3 Refuse Trucks	$20,000.00	Yes
ML05022	City of Claremont	9/23/2005	9/22/2006		$20,000.00	$20,000.00	2 M.D. CNG Vehicles	$0.00	Yes
ML05024	City of Cerritos	4/18/2005	3/17/2006		$10,000.00	$10,000.00	1 M.D. CNG Vehicle	$0.00	Yes
ML05025	City of Malibu	5/6/2005	3/5/2006		$10,000.00	$10,000.00	1 Medium-Duty CNG Vehicle	$0.00	Yes
ML05026	City of Inglewood	1/6/2006	1/5/2007	2/5/2009	$60,000.00	$60,000.00	2 CNG Transit Buses, 1 CNG Pothole Patch	$0.00	Yes
ML05027	City of Beaumont	2/23/2006	4/22/2007	6/22/2010	$20,000.00	$20,000.00	1 H.D. CNG Bus	$0.00	Yes
ML05028	City of Anaheim	9/8/2006	9/7/2007	5/7/2008	$85,331.00	$85,331.00	Traffic signal coordination & synchronization	$0.00	Yes
ML05029	Los Angeles World Airports	5/5/2006	9/4/2007		$140,000.00	$140,000.00	Seven CNG Buses	$0.00	Yes
ML05071	City of La Canada Flintridge	1/30/2009	1/29/2011		$20,000.00	$20,000.00	1 CNG Bus	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML05072	Los Angeles County Department of P	8/24/2009	5/23/2010	1/23/2011	$349,000.00	$349,000.00	Traffic Signal Synchronization (LADOT)	$0.00	Yes
MS05001	A-Z Bus Sales, Inc.	2/4/2005	12/31/2005	12/31/2006	$1,385,000.00	$1,385,000.00	CNG School Bus Buydown	$0.00	Yes
MS05002	California Bus Sales	2/4/2005	12/31/2005	12/31/2006	$1,800,000.00	$1,800,000.00	CNG School Bus Buydown	$0.00	Yes
MS05003	BusWest	1/28/2005	12/31/2005	12/31/2006	$2,100,000.00	$1,620,000.00	CNG School Bus Buydown	$480,000.00	Yes
MS05004	Johnson/Ukropina Creative Marketin	11/27/2004	1/18/2006	4/18/2006	$1,000,000.00	$994,612.56	Implement "Rideshare Thursday" Campaign	$5,387.44	Yes
MS05031	City of Ontario, Housing & Municipal	7/22/2005	3/21/2007		$191,268.00	$191,268.00	11 CNG Waste Haulers	$0.00	Yes
MS05033	Waste Management of the Desert	9/26/2005	5/25/2007		$202,900.00	$202,900.00	10 CNG Waste Haulers	$0.00	Yes
MS05034	Sukut Equipment, Inc.	9/9/2005	5/8/2007		$1,151,136.00	$1,151,136.00	Repower 12 Scrapers	$0.00	Yes
MS05035	Varner Construction Inc.	11/28/2005	4/27/2007	2/27/2008	$334,624.00	$334,624.00	Repower 5 Off-Road H.D. Vehicles	$0.00	Yes
MS05036	Camarillo Engineering	8/18/2005	1/17/2007		$1,167,276.00	$1,167,276.00	Repower 12 Scrapers	$0.00	Yes
MS05037	Road Builders, Inc.	11/21/2005	4/20/2007	6/20/2008	$229,302.00	$229,302.00	Repower 2 Scrapers	$0.00	Yes
MS05038	SunLine Transit Agency	3/30/2006	9/29/2007		$135,000.00	$135,000.00	15 CNG Buses	$0.00	Yes
MS05039	Los Angeles County MTA	4/28/2006	4/27/2008		$405,000.00	$405,000.00	75 CNG Buses	$0.00	Yes
MS05040	Orange County Transportation Autho	3/23/2006	12/22/2007	6/22/2008	$200,000.00	$200,000.00	25 CNG Buses	$0.00	Yes
MS05041	The Regents of the University of Cali	9/5/2006	8/4/2007	9/4/2008	$15,921.00	$15,921.00	CNG Station Upgrade	$0.00	Yes
MS05042	City of Ontario, Housing & Municipal	11/21/2005	9/20/2006	7/20/2007	$117,832.00	$74,531.27	CNG Station Upgrade	$43,300.73	Yes
MS05043	Whittier Union High School District	9/23/2005	7/22/2006		$15,921.00	$15,921.00	CNG Station Upgrade	$0.00	Yes
MS05045	City of Covina	9/9/2005	7/8/2006		$10,000.00	$7,435.61	CNG Station Upgrade	$2,564.39	Yes
MS05046	City of Inglewood	1/6/2006	5/5/2007		$139,150.00	$56,150.27	CNG Station Upgrade	$82,999.73	Yes
MS05047	Orange County Transportation Autho	10/20/2005	10/19/2006	1/19/2007	$75,563.00	$75,563.00	CNG Station Upgrade	$0.00	Yes
MS05048	City of Santa Monica	7/24/2006	11/23/2007		$150,000.00	$150,000.00	CNG Station Upgrade	$0.00	Yes
MS05049	Omnitrans	9/23/2005	2/22/2007		$25,000.00	$7,250.00	CNG Station Upgrade	$17,750.00	Yes
MS05050	Gateway Cities Council of Governme	12/21/2005	4/20/2010		$1,464,839.00	$1,464,838.12	Truck Fleet Modernization Program	$0.88	Yes
MS05051	Jagur Tractor	1/16/2006	4/15/2007	10/15/2007	$660,928.00	$660,928.00	Repower 6 Scrapers	$0.00	Yes
MS05052	Caufield Equipment, Inc.	8/3/2005	1/2/2007		$478,000.00	$478,000.00	Repower 4 Scrapers	$0.00	Yes
MS05070	Haaland Internet Productions (HIP D	6/24/2005	5/31/2007	11/30/2011	$100,715.00	$92,458.24	Design, Host & Maintain MSRC Website	$8,256.76	Yes
Total: 44									
Closed/Incomplete Contracts									
ML05007	Los Angeles County Dept of Beache	6/23/2006	6/22/2007	12/22/2007	$50,000.00	$0.00	5 Medium Duty CNG Vehicles	$50,000.00	No
ML05009	Los Angeles County Department of P	6/22/2006	12/21/2007	9/30/2011	$56,666.00	$0.00	2 Propane Refueling Stations	$56,666.00	No
ML05012	Los Angeles County Department of P	11/10/2006	5/9/2008	1/9/2009	$349,000.00	$0.00	Traffic Signal Synchronization (LADOT)	$349,000.00	No
ML05023	City of La Canada Flintridge	3/30/2005	2/28/2006	8/28/2008	$20,000.00	$0.00	1 CNG Bus	$20,000.00	No
Total: 4									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2006-2007 Contracts									
Declined/Cancelled Contracts									
ML07031	City of Santa Monica				$180,000.00	$0.00	Upgrade N.G. Station to Add Hythane	$180,000.00	No
ML07032	City of Huntington Beach Public Wor				$25,000.00	$0.00	One H.D. CNG Vehicle	$25,000.00	No
ML07035	City of Los Angeles, General Service				$350,000.00	$0.00	New CNG Refueling Station/Southeast Yard	$350,000.00	No
ML07038	City of Palos Verdes Estates				$25,000.00	$0.00	One H.D. LPG Vehicle	$25,000.00	No
MS07010	Palos Verdes Peninsula Transit Auth				$80,000.00	$0.00	Repower 4 Transit Buses	$80,000.00	No
MS07014	Clean Energy Fuels Corp.				$350,000.00	$0.00	New L/CNG Station - SERRF	$350,000.00	No
MS07015	Baldwin Park Unified School District				$57,500.00	$0.00	New CNG Station	$57,500.00	No
MS07016	County of Riverside Fleet Services D				$36,359.00	$0.00	New CNG Station - Rubidoux	$36,359.00	No
MS07017	County of Riverside Fleet Services D				$33,829.00	$0.00	New CNG Station - Indio	$33,829.00	No
MS07018	City of Cathedral City				$350,000.00	$0.00	New CNG Station	$350,000.00	No
MS07021	City of Riverside				$350,000.00	$0.00	New CNG Station	$350,000.00	No
MS07050	Southern California Disposal Co.				$320,000.00	$0.00	Ten Nat. Gas Refuse Trucks	$320,000.00	No
MS07062	Caltrans Division of Equipment				$1,081,818.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$1,081,818.00	No
MS07065	ECCO Equipment Corp.				$174,525.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$174,525.00	No
MS07067	Recycled Materials Company of Calif				$99,900.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$99,900.00	No
MS07069	City of Burbank	5/9/2008	3/8/2010	9/8/2011	$8,895.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$8,895.00	No
MS07074	Albert W. Davies, Inc.	1/25/2008	11/24/2009		$39,200.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$39,200.00	No
MS07081	Clean Diesel Technologies, Inc.				$240,347.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$240,347.00	No
MS07082	DCL International, Inc.				$153,010.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$153,010.00	No
MS07083	Dinex Exhausts, Inc.				$52,381.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$52,381.00	No
MS07084	Donaldson Company, Inc.				$42,416.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$42,416.00	No
MS07085	Engine Control Systems Limited				$155,746.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$155,746.00	No
MS07086	Huss, LLC				$84,871.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$84,871.00	No
MS07087	Mann+Hummel GmbH				$189,361.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$189,361.00	No
MS07088	Nett Technologies, Inc.				$118,760.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$118,760.00	No
MS07089	Rypos, Inc.				$68,055.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$68,055.00	No
MS07090	Sud-Chemie				$27,345.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$27,345.00	No
Total: 27									
Closed Contracts									
ML07023	City of Riverside	6/20/2008	10/19/2014	7/19/2016	$462,500.00	$461,476.42	CNG Station Expansion/Purch. 14 H.D. Vehi	$1,023.58	Yes
ML07024	City of Garden Grove	3/7/2008	9/6/2014	7/6/2016	$75,000.00	$75,000.00	Three H.D. CNG Vehicles	$0.00	Yes
ML07025	City of San Bernardino	8/12/2008	7/11/2010		$350,000.00	$350,000.00	Maintenance Facility Modifications	$0.00	Yes
ML07026	City of South Pasadena	6/13/2008	6/12/2014		$25,000.00	$25,000.00	One H.D. CNG Vehicle	$0.00	Yes
ML07027	Los Angeles World Airports	6/3/2008	7/2/2014		$25,000.00	$25,000.00	One H.D. LNG Vehicle	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML07028	City of Los Angeles, General Service	3/13/2009	3/12/2014		$350,000.00	$350,000.00	New CNG Refueling Station/Hollywood Yard	$0.00	Yes
ML07029	City of Los Angeles, General Service	3/13/2009	3/12/2014		$350,000.00	$350,000.00	New CNG Refueling Station/Venice Yard	$0.00	Yes
ML07030	County of San Bernardino Public Wo	7/11/2008	9/10/2015		$200,000.00	$200,000.00	8 Natural Gas H.D. Vehicles	$0.00	Yes
ML07033	City of La Habra	5/21/2008	6/20/2014	11/30/2013	$25,000.00	$25,000.00	One H.D. Nat Gas Vehicle	$0.00	Yes
ML07034	City of Los Angeles, General Service	3/13/2009	3/12/2014		$350,000.00	$350,000.00	New CNG Refueling Station/Van Nuys Yard	$0.00	Yes
ML07036	City of Alhambra	1/23/2009	2/22/2015		$50,000.00	$50,000.00	2 H.D. CNG Vehicles	$0.00	Yes
ML07037	City of Los Angeles, General Service	10/8/2008	10/7/2015		$255,222.00	$255,222.00	Upgrade LNG/LCNG Station/East Valley Yar	$0.00	Yes
ML07039	City of Baldwin Park	6/6/2008	6/5/2014	8/5/2015	$50,000.00	$50,000.00	Two N.G. H.D. Vehicles	$0.00	Yes
ML07040	City of Moreno Valley	6/3/2008	9/2/2014		$25,000.00	$25,000.00	One Heavy-Duty CNG Vehicle	$0.00	Yes
ML07041	City of La Quinta	6/6/2008	6/5/2014		$25,000.00	$25,000.00	One CNG Street Sweeper	$0.00	Yes
ML07042	City of La Quinta	8/15/2008	9/14/2010		$100,000.00	$100,000.00	Street Sweeping Operations	$0.00	Yes
ML07043	City of Redondo Beach	9/28/2008	7/27/2014	10/27/2016	$125,000.00	$125,000.00	Five H.D. CNG Transit Vehicles	$0.00	Yes
ML07044	City of Santa Monica	9/8/2008	3/7/2015	3/7/2017	$600,000.00	$600,000.00	24 H.D. Nat. Gas Vehicles	$0.00	Yes
ML07046	City of Culver City Transportation De	5/2/2008	5/1/2014		$25,000.00	$25,000.00	One H.D. Nat. Gas Vehicle	$0.00	Yes
ML07047	City of Cathedral City	6/16/2008	9/15/2014	3/15/2015	$225,000.00	$225,000.00	Two H.D. Nat. Gas Vehicles/New CNG Fueli	$0.00	Yes
ML07048	City of Cathedral City	9/19/2008	10/18/2010		$100,000.00	$84,972.45	Street Sweeping Operations	$15,027.55	Yes
MS07001	A-Z Bus Sales, Inc.	12/28/2006	12/31/2007	2/29/2008	$1,920,000.00	$1,380,000.00	CNG School Bus Buydown	$540,000.00	Yes
MS07002	BusWest	1/19/2007	12/31/2007	3/31/2008	$840,000.00	$840,000.00	CNG School Bus Buydown	$0.00	Yes
MS07003	Westport Fuel Systems, Inc.	11/2/2007	12/31/2011	6/30/2013	$1,500,000.00	$1,499,990.00	Advanced Nat. Gas Engine Incentive Progra	$10.00	Yes
MS07005	S-W Compressors	3/17/2008	3/16/2010		$60,000.00	$7,500.00	Mountain CNG School Bus Demo Program-	$52,500.00	Yes
MS07006	Coachella Valley Association of Gov	2/28/2008	10/27/2008		$400,000.00	$400,000.00	Coachella Valley PM10 Reduction Street Sw	$0.00	Yes
MS07007	Los Angeles World Airports	5/2/2008	11/1/2014		$420,000.00	$420,000.00	Purchase CNG 21 Transit Buses	$0.00	Yes
MS07008	City of Los Angeles, Department of T	9/18/2009	5/17/2020	9/17/2017	$1,900,000.00	$1,900,000.00	Purchase 95 Transit Buses	$0.00	Yes
MS07009	Orange County Transportation Autho	5/14/2008	4/13/2016		$800,000.00	$800,000.00	Purchase 40 Transit Buses	$0.00	Yes
MS07011	L A Service Authority for Freeway E	3/12/2010	5/31/2011	9/30/2011	$700,000.00	$700,000.00	"511" Commuter Services Campaign	$0.00	Yes
MS07012	City of Los Angeles, General Service	6/13/2008	6/12/2009	6/12/2010	$50,000.00	$50,000.00	Maintenance Facility Modifications	$0.00	Yes
MS07013	Rainbow Disposal Company, Inc.	1/25/2008	3/24/2014	9/24/2014	$350,000.00	$350,000.00	New High-Volume CNG Station	$0.00	Yes
MS07019	City of Cathedral City	1/9/2009	6/8/2010		$32,500.00	$32,500.00	Maintenance Facility Modifications	$0.00	Yes
MS07020	Avery Petroleum	5/20/2009	7/19/2015		$250,000.00	$250,000.00	New CNG Station	$0.00	Yes
MS07049	Palm Springs Disposal Services	10/23/2008	11/22/2014	9/22/2016	$96,000.00	$96,000.00	Three Nat. Gas Refuse Trucks	$0.00	Yes
MS07051	City of San Bernardino	8/12/2008	12/11/2014		$480,000.00	$480,000.00	15 Nat. Gas Refuse Trucks	$0.00	Yes
MS07052	City of Redlands	7/30/2008	11/29/2014		$160,000.00	$160,000.00	Five Nat. Gas Refuse Trucks	$0.00	Yes
MS07053	City of Claremont	7/31/2008	12/30/2014		$96,000.00	$96,000.00	Three Nat. Gas Refuse Trucks	$0.00	Yes
MS07054	Republic Services, Inc.	3/7/2008	9/6/2014	9/6/2016	$1,280,000.00	$1,280,000.00	40 Nat. Gas Refuse Trucks	$0.00	Yes
MS07055	City of Culver City Transportation De	7/8/2008	9/7/2014		$192,000.00	$192,000.00	Six Nat. Gas Refuse Trucks	$0.00	Yes
MS07056	City of Whittier	9/5/2008	3/4/2015		$32,000.00	$32,000.00	One Nat. Gas Refuse Trucks	$0.00	Yes
MS07057	CR&R, Inc.	7/31/2008	8/30/2014	6/30/2015	$896,000.00	$896,000.00	28 Nat. Gas Refuse Trucks	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS07058	The Better World Group	11/17/2007	11/16/2009	11/16/2011	$247,690.00	$201,946.21	MSRC Programmatic Outreach Services	$45,743.79	Yes
MS07059	County Sanitation Districts of L.A. Co	9/5/2008	9/4/2010	7/14/2012	$231,500.00	$231,500.00	Off-Road Diesel Equipment Retrofit Program	$0.00	Yes
MS07060	Community Recycling & Resource R	3/7/2008	1/6/2010	7/6/2011	$177,460.00	$98,471.00	Off-Road Diesel Equipment Retrofit Program	$78,989.00	Yes
MS07061	City of Los Angeles, Department of	10/31/2008	8/30/2010	2/28/2013	$40,626.00	$40,626.00	Off-Road Diesel Equipment Retrofit Program	$0.00	Yes
MS07063	Shimmick Construction Company, In	4/26/2008	2/25/2010	8/25/2011	$80,800.00	$11,956.37	Off-Road Diesel Equipment Retrofit Program	$68,843.63	Yes
MS07064	Altfillisch Contractors, Inc.	9/19/2008	7/18/2010	1/18/2011	$160,000.00	$155,667.14	Off-Road Diesel Equipment Retrofit Program	$4,332.86	Yes
MS07068	Sukut Equipment Inc.	1/23/2009	11/22/2010	5/22/2012	$26,900.00	$26,900.00	Off-Road Diesel Equipment Retrofit Program	$0.00	Yes
MS07070	Griffith Company	4/30/2008	2/28/2010	8/28/2012	$168,434.00	$125,504.00	Off-Road Diesel Equipment Retrofit Program	$42,930.00	Yes
MS07071	Tiger 4 Equipment Leasing	9/19/2008	7/18/2010	1/18/2013	$210,937.00	$108,808.97	Off-Road Diesel Equipment Retrofit Program	$102,128.03	Yes
MS07072	City of Culver City Transportation De	4/4/2008	2/3/2010	8/3/2011	$72,865.00	$72,865.00	Off-Road Diesel Equipment Retrofit Program	$0.00	Yes
MS07075	Dan Copp Crushing	9/17/2008	7/16/2010	1/16/2012	$73,600.00	$40,200.00	Off-Road Diesel Equipment Retrofit Program	$33,400.00	Yes
MS07076	Reed Thomas Company, Inc.	8/15/2008	6/14/2010	3/14/2012	$339,073.00	$100,540.00	Off-Road Diesel Equipment Retrofit Program	$238,533.00	Yes
MS07077	USA Waste of California, Inc.	5/1/2009	12/31/2014		$160,000.00	$160,000.00	Five Nat. Gas Refuse Trucks (Santa Ana)	$0.00	Yes
MS07078	USA Waste of California, Inc.	5/1/2009	12/31/2014	12/31/2015	$256,000.00	$256,000.00	Eight Nat. Gas Refuse Trucks (Dewey's)	$0.00	Yes
MS07079	Riverside County Transportation Co	1/30/2009	7/29/2013	12/31/2011	$20,000.00	$15,165.45	BikeMetro Website Migration	$4,834.55	Yes
MS07080	City of Los Angeles, Bureau of Sanit	10/31/2008	8/30/2010	8/28/2016	$63,192.00	$62,692.00	Off-Road Diesel Equipment Retrofit Program	$500.00	No
MS07091	BusWest	10/16/2009	3/15/2010		$33,660.00	$33,660.00	Provide Lease for 2 CNG School Buses	$0.00	Yes
MS07092	Riverside County Transportation Co	9/1/2010	10/31/2011		$350,000.00	$350,000.00	"511" Commuter Services Campaign	$0.00	Yes
Total: 60									
Closed/Incomplete Contracts									
ML07045	City of Inglewood	2/6/2009	4/5/2015		$75,000.00	$25,000.00	3 H.D. Nat. Gas Vehicles	$50,000.00	No
MS07004	BusWest	7/2/2007	7/1/2009		$90,928.00	$68,196.00	Provide Lease for 2 CNG School Buses	$22,732.00	No
MS07066	Skanska USA Civil West California D	6/28/2008	4/27/2010	10/27/2010	$111,700.00	$36,128.19	Off-Road Diesel Equipment Retrofit Program	$75,571.81	No
MS07073	PEED Equipment Co.	10/31/2008	8/30/2010		$11,600.00	$0.00	Off-Road Diesel Equipment Retrofit Program	$11,600.00	No
Total: 4									
Open/Complete Contracts									
MS07022	CSULA Hydrogen Station and Resea	10/30/2009	12/29/2015	10/29/2019	$250,000.00	$250,000.00	New Hydrogen Fueling Station	$0.00	Yes
Total: 1									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2007-2008 Contracts									
Open Contracts									
ML08028	City of Santa Monica	9/11/2009	9/10/2016	5/10/2019	$600,000.00	$0.00	24 CNG Heavy-Duty Vehicles	$600,000.00	No
MS08007	United Parcel Service West Region	12/10/2008	10/9/2014	4/9/2019	$300,000.00	$270,000.00	10 H.D. Nat. Gas Vehicles	$30,000.00	Yes
MS08013	United Parcel Service West Region	12/10/2008	10/9/2014	3/9/2019	$480,000.00	$432,000.00	12 H.D. Nat. Gas Yard Tractors	$48,000.00	No
MS08068	Regents of the University of Californi	11/5/2010	11/4/2017	11/4/2019	$400,000.00	$0.00	Hydrogen Station	$400,000.00	No
Total: 4									
Declined/Cancelled Contracts									
ML08032	City of Irvine	5/1/2009	8/31/2010		$9,000.00	$0.00	36 Vehicles (Diagnostic)	$9,000.00	No
ML08041	City of Los Angeles, Dept of Transpo	8/6/2010	7/5/2011	12/5/2011	$8,800.00	$0.00	73 Vehicles (Diagnostic)	$8,800.00	No
ML08049	City of Cerritos	3/20/2009	1/19/2015	2/19/2017	$25,000.00	$0.00	1 CNG Heavy-Duty Vehicle	$25,000.00	No
ML08051	City of Colton				$75,000.00	$0.00	3 CNG Heavy-Duty Vehicles	$75,000.00	No
ML08080	City of Irvine	5/1/2009	5/31/2015		$50,000.00	$0.00	Two Heavy-Duty Nat. Gas Vehicles	$50,000.00	No
MS08002	Orange County Transportation Autho				$1,500,000.00	$0.00	Big Rig Freeway Service Patrol	$1,500,000.00	No
MS08008	Diversified Truck Rental & Leasing				$300,000.00	$0.00	10 H.D. Nat. Gas Vehicles	$300,000.00	No
MS08010	Orange County Transportation Autho				$10,000.00	$0.00	20 H.D. Nat. Gas Vehicles	$10,000.00	No
MS08011	Green Fleet Systems, LLC				$10,000.00	$0.00	30 H.D. Nat. Gas Vehicles	$10,000.00	No
MS08052	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014	11/23/2015	$100,000.00	$0.00	New CNG Station - Fontana	$100,000.00	No
MS08054	Clean Energy Fuels Corp.				$400,000.00	$0.00	New LNG Station - Fontana	$400,000.00	No
MS08055	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	$400,000.00	$0.00	New LNG Station - Long Beach-Pier S	$400,000.00	No
MS08059	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014		$100,000.00	$0.00	New CNG Station - San Bernardino	$100,000.00	No
MS08060	Burrtec Waste Industries, Inc.	12/24/2008	11/23/2014		$100,000.00	$0.00	New CNG Station - Azusa	$100,000.00	No
MS08062	Go Natural Gas	9/25/2009	1/24/2016	1/24/2017	$400,000.00	$0.00	New CNG Station - Rialto	$400,000.00	No
MS08074	Fontana Unified School District	11/14/2008	12/13/2014		$200,000.00	$0.00	Expansion of Existing CNG station	$200,000.00	No
MS08077	Hythane Company, LLC				$144,000.00	$0.00	Upgrade Station to Hythane	$144,000.00	No
Total: 17									
Closed Contracts									
ML08023	City of Villa Park	11/7/2008	10/6/2012		$6,500.00	$5,102.50	Upgrade of Existing Refueling Facility	$1,397.50	Yes
ML08026	Los Angeles County Department of P	7/20/2009	7/19/2016		$250,000.00	$250,000.00	10 LPG Heavy-Duty Vehicles	$0.00	Yes
ML08027	Los Angeles County Department of P	7/20/2009	1/19/2011	1/19/2012	$6,901.00	$5,124.00	34 Vehicles (Diagnostic)	$1,777.00	Yes
ML08029	City of Gardena	3/19/2009	1/18/2015		$25,000.00	$25,000.00	1 Propane Heavy-Duty Vehicle	$0.00	Yes
ML08030	City of Azusa	5/14/2010	3/13/2016		$25,000.00	$25,000.00	1 CNG Heavy-Duty Vehicle	$0.00	No
ML08031	City of Claremont	3/27/2009	3/26/2013	3/26/2015	$97,500.00	$97,500.00	Upgrade of Existing CNG Station, Purchase	$0.00	Yes
ML08033	County of San Bernardino Public Wo	4/3/2009	2/2/2010		$14,875.00	$14,875.00	70 Vehicles (Diagnostic)	$0.00	Yes
ML08034	County of San Bernardino Public Wo	3/27/2009	7/26/2015		$150,000.00	$150,000.00	8 CNG Heavy-Duty Vehicles	$0.00	Yes
ML08035	City of La Verne	3/6/2009	11/5/2009		$11,925.00	$11,925.00	53 Vehicles (Diagnostic)	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML08036	City of South Pasadena	5/12/2009	7/11/2013		$169,421.00	$169,421.00	New CNG Station	$0.00	Yes
ML08037	City of Glendale	5/20/2009	5/19/2015		$325,000.00	$325,000.00	13 CNG Heavy-Duty Vehicles	$0.00	Yes
ML08038	Los Angeles Department of Water an	7/16/2010	7/15/2017		$1,050,000.00	$1,050,000.00	42 CNG Heavy-Duty Vehicles	$0.00	Yes
ML08039	City of Rancho Palos Verdes	6/5/2009	8/4/2015		$50,000.00	$50,000.00	2 LPG Transit Buses	$0.00	Yes
ML08042	City of Ontario, Housing & Municipal	5/1/2009	1/31/2016		$175,000.00	$175,000.00	7 CNG Heavy-Duty Vehicles	$0.00	Yes
ML08044	City of Chino	3/19/2009	3/18/2015		$25,000.00	$25,000.00	1 CNG Heavy-Duty Vehicle	$0.00	Yes
ML08045	City of Santa Clarita	2/20/2009	6/19/2010		$3,213.00	$3,150.00	14 Vehicles (Diagnostic)	$63.00	Yes
ML08046	City of Paramount	2/20/2009	2/19/2015		$25,000.00	$25,000.00	1 CNG Heavy-Duty Vehicle	$0.00	Yes
ML08047	City of Culver City Transportation De	5/12/2009	8/11/2015		$150,000.00	$150,000.00	6 CNG Heavy-Duty Vehicles	$0.00	Yes
ML08048	City of Santa Clarita	2/20/2009	6/19/2015		$25,000.00	$25,000.00	1 CNG Heavy-Duty Vehicle	$0.00	Yes
ML08050	City of Laguna Beach Public Works	8/12/2009	4/11/2016	10/11/2016	$75,000.00	$75,000.00	3 LPG Trolleys	$0.00	Yes
MS08001	Los Angeles County MTA	12/10/2010	6/9/2014		$1,500,000.00	$1,499,999.66	Big Rig Freeway Service Patrol	$0.34	Yes
MS08003	A-Z Bus Sales, Inc.	5/2/2008	12/31/2008	2/28/2009	$1,480,000.00	$1,400,000.00	Alternative Fuel School Bus Incentive Progra	$80,000.00	Yes
MS08004	BusWest	5/2/2008	12/31/2008		$1,440,000.00	$1,440,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS08005	Burrtec Waste Industries, Inc.	10/23/2008	11/22/2014	10/22/2015	$450,000.00	$450,000.00	15 H.D. Nat. Gas Vehicles - Azusa	$0.00	Yes
MS08006	Burrtec Waste Industries, Inc.	10/23/2008	11/22/2014	10/22/2015	$450,000.00	$450,000.00	15 H.D. Nat. Gas Vehicles - Saugus	$0.00	Yes
MS08009	Los Angeles World Airports	12/24/2008	12/23/2014		$870,000.00	$870,000.00	29 H.D. Nat. Gas Vehicles	$0.00	Yes
MS08012	California Cartage Company, LLC	12/21/2009	10/20/2015	4/20/2016	$480,000.00	$480,000.00	12 H.D. Nat. Gas Yard Tractors	$0.00	Yes
MS08014	City of San Bernardino	12/5/2008	6/4/2015		$390,000.00	$360,000.00	13 H.D. Nat. Gas Vehicles	$30,000.00	Yes
MS08015	Yosemite Waters	5/12/2009	5/11/2015		$180,000.00	$117,813.60	11 H.D. Propane Vehicles	$62,186.40	Yes
MS08016	TransVironmental Solutions, Inc.	1/23/2009	12/31/2010	9/30/2011	$227,198.00	$80,351.34	Rideshare 2 School Program	$146,846.66	Yes
MS08017	Omnitrans	12/13/2008	12/12/2015	12/12/2016	$900,000.00	$900,000.00	30 CNG Buses	$0.00	Yes
MS08019	Enterprise Rent-A-Car Company of L	2/12/2010	7/11/2016		$300,000.00	$300,000.00	10 CNG Vehicles	$0.00	Yes
MS08020	Ware Disposal Company, Inc.	11/25/2008	2/24/2016		$900,000.00	$900,000.00	30 CNG Vehicles	$0.00	Yes
MS08021	CalMet Services, Inc.	1/9/2009	1/8/2016	7/8/2016	$900,000.00	$900,000.00	30 CNG Vehicles	$0.00	Yes
MS08022	SunLine Transit Agency	12/18/2008	3/17/2015		$311,625.00	$311,625.00	15 CNG Buses	$0.00	Yes
MS08053	City of Los Angeles, Bureau of Sanit	2/18/2009	12/17/2015		$400,000.00	$400,000.00	New LNG/CNG Station	$0.00	Yes
MS08056	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		$400,000.00	$400,000.00	New LNG Station - POLB-Anah. & I	$0.00	Yes
MS08057	Orange County Transportation Autho	5/14/2009	7/13/2015		$400,000.00	$400,000.00	New CNG Station - Garden Grove	$0.00	Yes
MS08058	Clean Energy Fuels Corp.	11/26/2009	3/25/2016	3/25/2017	$400,000.00	$400,000.00	New CNG Station - Ontario Airport	$0.00	Yes
MS08061	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		$400,000.00	$400,000.00	New CNG Station - L.A.-La Cienega	$0.00	Yes
MS08063	Go Natural Gas	9/25/2009	1/24/2016	1/24/2017	$400,000.00	$400,000.00	New CNG Station - Moreno Valley	$0.00	Yes
MS08064	Hemet Unified School District	1/9/2009	3/8/2015		$75,000.00	$75,000.00	Expansion of Existing Infrastructure	$0.00	Yes
MS08065	Pupil Transportation Cooperative	11/20/2008	7/19/2014		$10,500.00	$10,500.00	Existing CNG Station Modifications	$0.00	Yes
MS08066	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		$400,000.00	$400,000.00	New CNG Station - Palm Spring Airport	$0.00	Yes
MS08067	Trillium CNG	3/19/2009	6/18/2015	6/18/2016	$311,600.00	$254,330.00	New CNG Station	$57,270.00	Yes
MS08069	Perris Union High School District	6/5/2009	8/4/2015	8/4/2016	$225,000.00	$225,000.00	New CNG Station	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS08070	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		$400,000.00	$400,000.00	New CNG Station - Paramount	$0.00	Yes
MS08071	ABC Unified School District	1/16/2009	1/15/2015		$63,000.00	$63,000.00	New CNG Station	$0.00	Yes
MS08072	Clean Energy Fuels Corp.	12/4/2009	3/3/2015		$400,000.00	$354,243.38	New CNG Station - Burbank	$45,756.62	Yes
MS08073	Clean Energy Fuels Corp.	11/26/2009	2/25/2015		$400,000.00	$400,000.00	New CNG Station - Norwalk	$0.00	Yes
MS08075	Disneyland Resort	12/10/2008	2/1/2015		$200,000.00	$200,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS08076	Azusa Unified School District	10/17/2008	11/16/2014	1/31/2017	$172,500.00	$172,500.00	New CNG station and maint. Fac. Modificati	$0.00	Yes
MS08078	SunLine Transit Agency	12/10/2008	6/9/2015	2/9/2016	$189,000.00	$189,000.00	CNG Station Upgrade	$0.00	Yes
MS09002	A-Z Bus Sales, Inc.	11/7/2008	12/31/2009	12/31/2010	$2,520,000.00	$2,460,000.00	Alternative Fuel School Bus Incentive Progra	$60,000.00	Yes
MS09004	A-Z Bus Sales, Inc.	1/30/2009	3/31/2009		$156,000.00	$156,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS09047	BusWest	7/9/2010	12/31/2010	4/30/2011	$480,000.00	$480,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
Total: 56									
Closed/Incomplete Contracts									
ML08025	Los Angeles County Department of P	10/30/2009	3/29/2011		$75,000.00	$0.00	150 Vehicles (Diagnostic)	$75,000.00	No
MS08079	ABC Unified School District	1/16/2009	12/15/2009	12/15/2010	$50,000.00	$0.00	Maintenance Facility Modifications	$50,000.00	No
Total: 2									
Open/Complete Contracts									
ML08024	City of Anaheim	7/9/2010	7/8/2017	1/8/2018	$425,000.00	$425,000.00	9 LPG Buses and 8 CNG Buses	$0.00	Yes
ML08040	City of Riverside	9/11/2009	9/10/2016	3/10/2019	$455,500.00	$455,500.00	16 CNG Vehicles, Expand CNG Station & M	$0.00	Yes
ML08043	City of Desert Hot Springs	9/25/2009	3/24/2016	3/24/2021	$25,000.00	$25,000.00	1 CNG Heavy-Duty Vehicle	$0.00	Yes
MS08018	Los Angeles County Department of P	8/7/2009	10/6/2016	4/6/2018	$60,000.00	$60,000.00	2 CNG Vehicles	$0.00	Yes
Total: 4									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2008-2009 Contracts									
Open Contracts									
ML09033	City of Beverly Hills	3/4/2011	5/3/2017	5/3/2018	$550,000.00	$100,000.00	10 Nat. Gas Heavy-Duty Vehicles & CNG St	$450,000.00	No
ML09036	City of Long Beach Fleet Services B	5/7/2010	5/6/2017	5/6/2020	$875,000.00	$525,000.00	Purchase 35 LNG Refuse Trucks	$350,000.00	No
Total: 2									
Declined/Cancelled Contracts									
ML09017	County of San Bernardino Public Wo	1/28/2010	7/27/2016		$200,000.00	$0.00	8 Nat. Gas Heavy-Duty Vehicles	$200,000.00	No
ML09018	Los Angeles Department of Water an	7/16/2010	9/15/2012		$850,000.00	$0.00	Retrofit 85 Off-Road Vehicles w/DECS	$850,000.00	No
ML09019	City of San Juan Capistrano Public	12/4/2009	11/3/2010		$10,125.00	$0.00	Remote Vehicle Diagnostics/45 Vehicles	$10,125.00	No
ML09022	Los Angeles County Department of P				$8,250.00	$0.00	Remote Vehicle Diagnostics/15 Vehicles	$8,250.00	No
ML09025	Los Angeles County Department of P	10/15/2010	12/14/2012	6/14/2013	$50,000.00	$0.00	Remote Vehicle Diagnostics/85 Vehicles	$50,000.00	No
ML09028	Riverside County Waste Manageme				$140,000.00	$0.00	Retrofit 7 Off-Road Vehicles w/DECS	$140,000.00	No
ML09039	City of Inglewood				$310,000.00	$0.00	Purchase 12 H.D. CNG Vehicles and Remot	$310,000.00	No
ML09040	City of Cathedral City				$83,125.00	$0.00	Purchase 3 H.D. CNG Vehicles and Remote	$83,125.00	No
ML09044	City of San Dimas				$425,000.00	$0.00	Install CNG Station and Purchase 1 CNG S	$425,000.00	No
ML09045	City of Orange				$125,000.00	$0.00	Purchase 5 CNG Sweepers	$125,000.00	No
MS09003	FuelMaker Corporation				$296,000.00	$0.00	Home Refueling Apparatus Incentives	$296,000.00	No
Total: 11									
Closed Contracts									
ML09007	City of Rancho Cucamonga	2/26/2010	4/25/2012		$117,500.00	$62,452.57	Maintenance Facility Modification	$55,047.43	Yes
ML09008	City of Culver City Transportation De	1/19/2010	7/18/2016	7/18/2017	$175,000.00	$175,000.00	8 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
ML09010	City of Palm Springs	1/8/2010	2/7/2016		$25,000.00	$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	$0.00	Yes
ML09011	City of San Bernardino	2/19/2010	5/18/2016		$250,000.00	$250,000.00	10 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
ML09012	City of Gardena	3/12/2010	11/11/2015		$25,000.00	$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	$0.00	Yes
ML09013	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	$144,470.00	$128,116.75	Traffic Signal Synchr./Moreno Valley	$16,353.25	Yes
ML09014	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	$113,030.00	$108,495.94	Traffic Signal Synchr./Corona	$4,534.06	Yes
ML09015	City of Riverside Public Works	9/10/2010	12/9/2011	7/31/2013	$80,060.00	$79,778.52	Traffic Signal Synchr./Co. of Riverside	$281.48	Yes
ML09016	County of San Bernardino Public Wo	1/28/2010	3/27/2014		$50,000.00	$50,000.00	Install New CNG Station	$0.00	Yes
ML09020	County of San Bernardino	8/16/2010	2/15/2012		$49,770.00	$49,770.00	Remote Vehicle Diagnostics/252 Vehicles	$0.00	Yes
ML09021	City of Palm Desert	7/9/2010	3/8/2012		$39,450.00	$38,248.87	Traffic Signal Synchr./Rancho Mirage	$1,201.13	Yes
ML09024	Los Angeles County Department of P	10/15/2010	12/14/2012	6/14/2013	$400,000.00	$0.00	Maintenance Facility Modifications	$400,000.00	No
ML09027	Los Angeles County Department of P	7/23/2010	3/22/2012	6/22/2012	$150,000.00	$150,000.00	Freeway Detector Map Interface	$0.00	Yes
ML09029	City of Whittier	11/6/2009	4/5/2016		$25,000.00	$25,000.00	1 Nat. Gas Heavy-Duty Vehicle	$0.00	Yes
ML09030	City of Los Angeles GSD/Fleet Servi	6/18/2010	6/17/2011		$22,310.00	$22,310.00	Remote Vehicle Diagnostics/107 Vehicles	$0.00	Yes
ML09031	City of Los Angeles, Department of	10/29/2010	10/28/2017		$825,000.00	$825,000.00	33 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
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?
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
ML09046	City of Newport Beach	5/20/2010	5/19/2016		$162,500.00	$162,500.00	Upgrade Existing CNG Station, Maintenance	$0.00	Yes
ML09047	Los Angeles County Department of P	8/13/2014	8/12/2015	11/12/2015	$400,000.00	$272,924.53	Maintenance Facility Modifications	$127,075.47	No
MS09001	Administrative Services Co-Op/Long	3/5/2009	6/30/2012	12/31/2013	$225,000.00	$150,000.00	15 CNG Taxicabs	$75,000.00	Yes
MS09005	Gas Equipment Systems, Inc.	6/19/2009	10/18/2010		$71,000.00	$71,000.00	Provide Temp. Fueling for Mountain Area C	$0.00	Yes
Total: 24									
Open/Complete Contracts									
ML09009	City of South Pasadena	11/5/2010	12/4/2016	3/4/2019	$125,930.00	$125,930.00	CNG Station Expansion	$0.00	Yes
ML09023	Los Angeles County Department of P	12/10/2010	12/9/2017		$50,000.00	$50,000.00	2 Heavy-Duty Alternative Fuel Transit Vehicl	$0.00	Yes
ML09026	Los Angeles County Department of P	10/15/2010	10/14/2017	4/14/2019	$150,000.00	$80,411.18	3 Off-Road Vehicles Repowers	$69,588.82	Yes
ML09032	Los Angeles World Airports	4/8/2011	4/7/2018		$175,000.00	$175,000.00	7 Nat. Gas Heavy-Duty Vehicles	$0.00	Yes
ML09035	City of Fullerton	6/17/2010	6/16/2017	12/16/2018	$450,000.00	$450,000.00	2 Heavy-Duty CNG Vehicles & Install CNG	$0.00	Yes
ML09042	Los Angeles Department of Water an	12/10/2010	12/9/2017		$1,400,000.00	$1,400,000.00	Purchase 56 Dump Trucks	$0.00	Yes
ML09043	City of Covina	10/8/2010	4/7/2017	10/7/2018	$179,591.00	$179,591.00	Upgrade Existing CNG Station	$0.00	Yes
Total: 7									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2010-2011 Contracts									
Open 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	No
ML11024	County of Los Angeles, Dept of Publi	12/5/2014	6/4/2022		$90,000.00	$0.00	Purchase 3 Nat. Gas H.D. Vehicles	$90,000.00	No
ML11029	City of Santa Ana	9/7/2012	3/6/2020	3/6/2023	$262,500.00	$75,000.00	Expansion of Existing CNG Station, Install N	$187,500.00	No
ML11032	City of Gardena	3/2/2012	9/1/2018	10/1/2020	$102,500.00	$0.00	Purchase Heavy-Duty CNG Vehicle, Install	$102,500.00	No
ML11038	City of Santa Monica	5/18/2012	7/17/2018		$400,000.00	$0.00	Maintenance Facility Modifications	$400,000.00	No
ML11045	City of Newport Beach	2/3/2012	8/2/2018	8/2/2020	$30,000.00	$0.00	Purchase 1 Nat. Gas H.D. Vehicle	$30,000.00	No
MS11065	Temecula Valley Unified School Distr	8/11/2012	1/10/2019		$50,000.00	$46,112.64	Expansion of Existing CNG Station	$3,887.36	No
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: 9									
Declined/Cancelled Contracts									
MS11013	Go Natural Gas, Inc.				$150,000.00	$0.00	New CNG Station - Huntington Beach	$150,000.00	No
MS11014	Go Natural Gas, Inc.				$150,000.00	$0.00	New CNG Station - Santa Ana	$150,000.00	No
MS11015	Go Natural Gas, Inc.				$150,000.00	$0.00	New CNG Station - Inglewood	$150,000.00	No
MS11046	Luis Castro				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11047	Ivan Borjas				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11048	Phase II Transportation				$1,080,000.00	$0.00	Repower 27 Heavy-Duty Vehicles	$1,080,000.00	No
MS11049	Ruben Caceras				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11050	Carlos Arrue				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11051	Francisco Vargas				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11053	Jose Ivan Soltero				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11054	Albino Meza				$40,000.00	$0.00	Repower One Heavy-Duty Vehicle	$40,000.00	No
MS11059	Go Natural Gas				$150,000.00	$0.00	New Public Access CNG Station - Paramou	$150,000.00	No
MS11063	Standard Concrete Products				$310,825.00	$0.00	Retrofit Two Off-Road Vehicles under Showc	$310,825.00	No
MS11070	American Honda Motor Company				$100,000.00	$0.00	Expansion of Existing CNG Station	$100,000.00	No
MS11072	Trillium USA Company DBA Californi				$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No
MS11077	DCL America Inc.				$263,107.00	$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	$263,107.00	No
MS11083	Cattrac Construction, Inc.				$500,000.00	$0.00	Install DECS on Eight Off-Road Vehicles	$500,000.00	No
MS11084	Ivanhoe Energy Services and Develo				$66,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$66,750.00	No
MS11088	Diesel Emission Technologies				$32,750.00	$0.00	Retrofit Three H.D. Off-Road Vehicles Under	$32,750.00	No
MS11089	Diesel Emission Technologies				$9,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$9,750.00	No
MS11090	Diesel Emission Technologies				$14,750.00	$0.00	Retrofit One H.D. Off-Road Vehicle Under S	$14,750.00	No
Total: 21									
Closed Contracts									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML11007	Coachella Valley Association of Gov	7/29/2011	7/28/2012		$250,000.00	$249,999.96	Regional PM10 Street Sweeping Program	$0.04	Yes
ML11027	City of Los Angeles, Dept. of Genera	5/4/2012	7/3/2015	1/3/2016	$300,000.00	$300,000.00	Maintenance Facility Modifications	$0.00	Yes
ML11035	City of La Quinta	11/18/2011	11/17/2012		$25,368.00	$25,368.00	Retrofit 3 On-Road Vehicles w/DECS	$0.00	Yes
MS11001	Mineral LLC	4/22/2011	4/30/2013	4/30/2015	$111,827.00	$103,136.83	Design, Develop, Host and Maintain MSRC	$8,690.17	Yes
MS11002	A-Z Bus Sales, Inc.	7/15/2011	12/31/2011	6/30/2013	$1,705,000.00	$1,705,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS11003	BusWest	7/26/2011	12/31/2011	12/31/2012	$1,305,000.00	$1,305,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS11004	Los Angeles County MTA	9/9/2011	2/29/2012		$450,000.00	$299,743.34	Clean Fuel Transit Service to Dodger Stadiu	$150,256.66	Yes
MS11006	Orange County Transportation Autho	10/7/2011	2/29/2012	8/31/2012	$268,207.00	$160,713.00	Metrolink Service to Angel Stadium	$107,494.00	Yes
MS11018	Orange County Transportation Autho	10/14/2011	1/31/2012		$211,360.00	$211,360.00	Express Bus Service to Orange County Fair	$0.00	Yes
MS11052	Krisda Inc	9/27/2012	6/26/2013		$120,000.00	$120,000.00	Repower Three Heavy-Duty Vehicles	$0.00	Yes
MS11056	The Better World Group	12/30/2011	12/29/2013	12/29/2015	$206,836.00	$186,953.46	Programmatic Outreach Services	$19,882.54	Yes
MS11057	Riverside County Transportation Co	7/28/2012	3/27/2013		$100,000.00	$89,159.40	Develop and Implement 511 "Smart Phone"	$10,840.60	Yes
MS11058	L A Service Authority for Freeway E	5/31/2013	4/30/2014		$123,395.00	$123,395.00	Implement 511 "Smart Phone" Application	$0.00	Yes
MS11061	Eastern Municipal Water District	3/29/2012	5/28/2015		$11,659.00	$1,450.00	Retrofit One Off-Road Vehicle under Showc	$10,209.00	Yes
MS11062	Load Center	9/7/2012	1/6/2016	12/6/2016	$175,384.00	$169,883.00	Retrofit Six Off-Road Vehicles under Showc	$5,501.00	Yes
MS11074	SunLine Transit Agency	5/11/2012	7/31/2012		$41,849.00	$22,391.00	Transit Service for Coachella Valley Festival	$19,458.00	Yes
MS11080	Southern California Regional Rail Au	4/6/2012	7/31/2012		$26,000.00	$26,000.00	Metrolink Service to Auto Club Speedway	$0.00	Yes
MS11086	DCL America Inc.	6/7/2013	10/6/2016		$500,000.00	$359,076.96	Retrofit Eight H.D. Off-Road Vehicles Under	$140,923.04	Yes
MS11087	Cemex Construction Material Pacific,	10/16/2012	2/15/2016		$448,766.00	$448,760.80	Retrofit 13 H.D. Off-Road Vehicles Under Sh	$5.20	Yes
Total: 19									
Closed/Incomplete Contracts									
MS11064	City of Hawthorne	7/28/2012	8/27/2018	8/27/2019	$175,000.00	$0.00	New Limited Access CNG Station	$175,000.00	No
MS11076	SA Recycling, LLC	5/24/2012	9/23/2015		$424,801.00	$0.00	Retrofit of 13 Off-Road Diesel Vehicles with	$424,801.00	No
MS11081	Metropolitan Stevedore Company	9/7/2012	1/6/2016		$45,416.00	$0.00	Install DECS on Two Off-Road Vehicles	$45,416.00	No
MS11082	Baumot North America, LLC	8/2/2012	12/1/2015		$65,958.00	$4,350.00	Install DECS on Four Off-Road Vehicles	$61,608.00	Yes
MS11085	City of Long Beach Fleet Services B	8/23/2013	12/22/2016		$159,012.00	$0.00	Retrofit Seven H.D. Off-Road Vehicles Unde	$159,012.00	No
Total: 5									
Open/Complete Contracts									
ML11021	City of Whittier	1/27/2012	9/26/2018	6/26/2019	$210,000.00	$210,000.00	Purchase 7 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11022	City of Anaheim	3/16/2012	7/15/2018		$150,000.00	$150,000.00	Purchase of 5 H.D. Vehicles	$0.00	Yes
ML11023	City of Rancho Cucamonga	4/20/2012	12/19/2018	9/19/2020	$260,000.00	$260,000.00	Expand Existing CNG Station, 2 H.D. Vehicl	$0.00	Yes
ML11025	County of Los Angeles Department o	3/14/2014	9/13/2021		$150,000.00	$150,000.00	Purchase 5 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11026	City of Redlands	3/2/2012	10/1/2018		$90,000.00	$90,000.00	Purchase 3 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11028	City of Glendale	1/13/2012	5/12/2018		$300,000.00	$300,000.00	Purchase 10 H.D. CNG Vehicles	$0.00	Yes
ML11030	City of Fullerton	2/3/2012	3/2/2018		$109,200.00	$109,200.00	Purchase 2 Nat. Gas H.D. Vehicles, Retrofit	$0.00	Yes
ML11031	City of Culver City Transportation De	12/2/2011	12/1/2018		$300,000.00	$300,000.00	Purchase 10 H.D. Nat. Gas Vehicles	$0.00	Yes
ML11033	City of Los Angeles, Bureau of Sanit	3/16/2012	1/15/2019		$1,080,000.00	$1,080,000.00	Purchase 36 LNG H.D. Vehicles	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML11034	City of Los Angeles, Department of	5/4/2012	1/3/2019		$630,000.00	$630,000.00	Purchase 21 H.D. CNG Vehicles	$0.00	Yes
ML11036	City of Riverside	1/27/2012	1/26/2019	3/26/2021	$670,000.00	$670,000.00	Install New CNG Station, Purchase 9 H.D. N	$0.00	Yes
ML11037	City of Anaheim	12/22/2012	12/21/2019		$300,000.00	$300,000.00	Purchase 12 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11039	City of Ontario, Housing & Municipal	1/27/2012	9/26/2018		$180,000.00	$180,000.00	Purchase 6 Nat. Gas H.D. Vehicles	$0.00	Yes
ML11040	City of South Pasadena	5/4/2012	1/3/2019	1/3/2022	$30,000.00	$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle	$0.00	Yes
ML11041	City of Santa Ana	9/7/2012	11/6/2018	1/6/2021	$265,000.00	$244,651.86	Purchase 7 LPG H.D. Vehicles, Retrofit 6 H.	$20,348.14	Yes
ML11042	City of Chino	2/17/2012	4/16/2018		$30,000.00	$30,000.00	Purchase 1 Nat. Gas H.D. Vehicle, Repower	$0.00	Yes
ML11043	City of Hemet Public Works	2/3/2012	2/2/2019		$60,000.00	$60,000.00	Purchase 2 H.D. Nat. Gas Vehicles	$0.00	Yes
ML11044	City of Ontario, Housing & Municipal	1/27/2012	6/26/2019		$400,000.00	$400,000.00	Expand Existing CNG Station	$0.00	Yes
MS11008	USA Waste of California, Inc.	10/24/2013	4/23/2020		$125,000.00	$125,000.00	Expansion of Existing LCNG Station	$0.00	Yes
MS11009	USA Waste of California, Inc.	10/24/2013	4/23/2020		$125,000.00	$125,000.00	Expansion of Existing LCNG Station	$0.00	Yes
MS11010	Border Valley Trading	8/26/2011	10/25/2017	4/25/2020	$150,000.00	$150,000.00	New LNG Station	$0.00	Yes
MS11011	EDCO Disposal Corporation	12/30/2011	4/29/2019		$100,000.00	$100,000.00	New CNG Station - Signal Hill	$0.00	Yes
MS11012	EDCO Disposal Corporation	12/30/2011	4/29/2019		$100,000.00	$100,000.00	New CNG Station - Buena Park	$0.00	Yes
MS11016	CR&R Incorporated	4/12/2013	10/11/2019		$100,000.00	$100,000.00	New CNG Station - Perris	$0.00	Yes
MS11017	CR&R, Inc.	3/2/2012	2/1/2018		$100,000.00	$100,000.00	Expansion of existing station - Garden Grove	$0.00	Yes
MS11019	City of Corona	11/29/2012	4/28/2020		$225,000.00	$225,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS11055	KEC Engineering	2/3/2012	8/2/2018	8/2/2019	$200,000.00	$200,000.00	Repower 5 H.D. Off-Road Vehicles	$0.00	Yes
MS11060	Rowland Unified School District	8/17/2012	1/16/2019	1/16/2020	$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
MS11066	Torrance Unified School District	11/19/2012	9/18/2018		$42,296.00	$42,296.00	Expansion of Existing CNG Station	$0.00	Yes
MS11067	City of Redlands	5/24/2012	11/23/2018	11/23/2019	$85,000.00	$85,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS11068	Ryder System Inc.	7/28/2012	10/27/2018		$175,000.00	$175,000.00	New Public Access L/CNG Station (Fontana)	$0.00	Yes
MS11069	Ryder System Inc.	7/28/2012	8/27/2018		$175,000.00	$175,000.00	New Public Access L/CNG Station (Orange)	$0.00	Yes
MS11071	City of Torrance Transit Department	12/22/2012	1/21/2019	1/21/2020	$175,000.00	$166,250.00	New Limited Access CNG Station	$8,750.00	Yes
MS11073	Los Angeles Unified School District	9/11/2015	2/10/2022		$175,000.00	$175,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS11079	Bear Valley Unified School District	2/5/2013	10/4/2019		$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes

Total: 35

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?

FY 2011-2012 Contracts

Open Contracts									
ML12014	City of Santa Ana	11/8/2013	8/7/2020		$384,000.00	$4,709.00	9 H.D. Nat. Gas & LPG Trucks, EV Charging	$379,291.00	No
ML12018	City of West Covina	10/18/2013	10/17/2020	1/17/2022	$300,000.00	$0.00	Expansion of Existing CNG Station	$300,000.00	No
ML12041	City of Anaheim Public Utilities Depa	4/4/2014	11/3/2015	11/3/2017	$68,977.00	$0.00	EV Charging Infrastructure	$68,977.00	No
ML12043	City of Hemet	6/24/2013	9/23/2019		$60,000.00	$0.00	Two Heavy-Duty Nat. Gas Vehicles	$60,000.00	No
ML12045	City of Baldwin Park DPW	2/14/2014	12/13/2020	6/13/2022	$400,000.00	$0.00	Install New CNG Station	$400,000.00	No
ML12048	City of La Palma	1/4/2013	11/3/2018		$20,000.00	$0.00	Two Medium-Duty LPG Vehicles	$20,000.00	No
ML12051	City of Bellflower	5/7/2017	2/6/2016	2/6/2018	$100,000.00	$0.00	EV Charging Infrastructure	$100,000.00	No
ML12057	City of Coachella	8/28/2013	8/27/2019	1/27/2022	$57,456.00	$40,375.80	Purchase One Nat. Gas H.D. Vehicle/Street	$17,080.20	No
ML12090	City of Palm Springs	10/9/2015	10/8/2021		$21,163.00	$0.00	EV Charging Infrastructure	$21,163.00	No
MS12008	Bonita Unified School District	7/12/2013	12/11/2019	4/11/2021	$175,000.00	$0.00	Construct New Limited-Acess CNG Station	$175,000.00	No
MS12060	City of Santa Monica	4/4/2014	8/3/2017	8/3/2018	$500,000.00	$412,584.46	Implement Westside Bikeshare Program	$87,415.54	No
MS12077	City of Coachella	6/14/2013	6/13/2020		$225,000.00	$0.00	Construct New CNG Station	$225,000.00	No
MS12083	Brea Olinda Unified School District	7/30/2015	2/29/2024		$59,454.00	$0.00	Install New CNG Infrastructure	$59,454.00	No
MS12084	Airport Mobil Inc.	12/6/2013	5/5/2020		$150,000.00	$0.00	Install New CNG Infrastructure	$150,000.00	No
MS12089	Riverside County Transportation Co	10/18/2013	9/17/2015		$249,136.00	$111,052.74	Implement Rideshare Incentives Program	$138,083.26	No
Total: 15									
Declined/Cancelled Contracts									
ML12016	City of Cathedral City	1/4/2013	10/3/2019		$60,000.00	$0.00	CNG Vehicle & Electric Vehicle Infrastructur	$60,000.00	No
ML12038	City of Long Beach Public Works				$26,000.00	$0.00	Electric Vehicle Charging Infrastructure	$26,000.00	No
ML12040	City of Duarte Transit				$30,000.00	$0.00	One Heavy-Duty Nat. Gas Vehicle	$30,000.00	No
ML12044	County of San Bernardino Public Wo				$250,000.00	$0.00	Install New CNG Station	$250,000.00	No
ML12052	City of Whittier	3/14/2013	7/13/2019		$165,000.00	$0.00	Expansion of Existing CNG Station	$165,000.00	No
ML12053	City of Mission Viejo				$60,000.00	$0.00	EV Charging Infrastructure	$60,000.00	No
MS12007	WestAir Gases & Equipment				$100,000.00	$0.00	Construct New Limited-Acess CNG Station	$100,000.00	No
MS12027	C.V. Ice Company, Inc.	5/17/2013	11/16/2019		$75,000.00	$0.00	Purchase 3 Medium-Heavy Duty Vehicles	$75,000.00	No
MS12030	Complete Landscape Care, Inc.				$150,000.00	$0.00	Purchase 6 Medium-Heavy Duty Vehicles	$150,000.00	No
MS12067	Leatherwood Construction, Inc.	11/8/2013	3/7/2017		$122,719.00	$0.00	Retrofit Six Vehicles w/DECS - Showcase III	$122,719.00	No
MS12070	Valley Music Travel/CID Entertainme				$99,000.00	$0.00	Implement Shuttle Service to Coachella Mus	$99,000.00	No
Total: 11									
Closed Contracts									
ML12013	City of Pasadena	10/19/2012	3/18/2015	9/18/2015	$200,000.00	$65,065.00	Electric Vehicle Charging Infrastructure	$134,935.00	Yes
ML12019	City of Palm Springs	9/6/2013	7/5/2015		$38,000.00	$16,837.00	EV Charging Infrastructure	$21,163.00	Yes
ML12021	City of Rancho Cucamonga	9/14/2012	1/13/2020		$40,000.00	$40,000.00	Four Medium-Duty Nat. Gas Vehicles	$0.00	Yes
ML12023	County of Los Angeles Internal Servi	8/1/2013	2/28/2015		$250,000.00	$192,333.00	EV Charging Infrastructure	$57,667.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML12037	Coachella Valley Association of Gov	3/14/2013	3/13/2014		$250,000.00	$250,000.00	Street Sweeping Operations	$0.00	Yes
ML12042	City of Chino Hills	1/18/2013	3/17/2017		$87,500.00	$87,500.00	Expansion of Existing CNG Station	$0.00	Yes
ML12049	City of Rialto Public Works	7/14/2014	9/13/2015		$30,432.00	$3,265.29	EV Charging Infrastructure	$27,166.71	Yes
ML12050	City of Baldwin Park	4/25/2013	4/24/2014	10/24/2014	$402,400.00	$385,363.00	EV Charging Infrastructure	$17,037.00	Yes
ML12054	City of Palm Desert	9/30/2013	2/28/2015		$77,385.00	$77,385.00	EV Charging Infrastructure	$0.00	Yes
ML12056	City of Cathedral City	3/26/2013	5/25/2014		$25,000.00	$25,000.00	Regional Street Sweeping Program	$0.00	Yes
ML12066	City of Manhattan Beach	1/7/2014	4/6/2015		$5,900.00	$5,900.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
MS12001	Los Angeles County MTA	7/1/2012	4/30/2013		$300,000.00	$211,170.00	Clean Fuel Transit Service to Dodger Stadiu	$88,830.00	Yes
MS12002	Orange County Transportation Autho	9/7/2012	4/30/2013		$342,340.00	$333,185.13	Express Bus Service to Orange County Fair	$9,154.87	Yes
MS12003	Orange County Transportation Autho	7/20/2012	2/28/2013		$234,669.00	$167,665.12	Implement Metrolink Service to Angel Stadiu	$67,003.88	Yes
MS12005	USA Waste of California, Inc.	10/19/2012	8/18/2013		$75,000.00	$75,000.00	Vehicle Maintenance Facility Modifications	$0.00	Yes
MS12006	Waste Management Collection & Re	10/19/2012	8/18/2013		$75,000.00	$75,000.00	Vehicle Maintenance Facility Modifications	$0.00	Yes
MS12012	Rim of the World Unified School Dist	12/20/2012	5/19/2014		$75,000.00	$75,000.00	Vehicle Maintenance Facility Modifications	$0.00	Yes
MS12059	Orange County Transportation Autho	2/28/2013	12/27/2014		$75,000.00	$75,000.00	Maintenance Facilities Modifications	$0.00	Yes
MS12061	Orange County Transportation Autho	3/14/2014	3/13/2017		$224,000.00	$114,240.00	Transit-Oriented Bicycle Sharing Program	$109,760.00	Yes
MS12062	Fraser Communications	12/7/2012	5/31/2014		$998,669.00	$989,218.49	Develop & Implement "Rideshare Thursday"	$9,450.51	Yes
MS12064	Anaheim Transportation Network	3/26/2013	12/31/2014		$127,296.00	$56,443.92	Implement Anaheim Circulator Service	$70,852.08	Yes
MS12065	Orange County Transportation Autho	7/27/2013	11/30/2013		$43,933.00	$14,832.93	Ducks Express Service to Honda Center	$29,100.07	Yes
MS12068	Southern California Regional Rail Au	3/1/2013	9/30/2013		$57,363.00	$47,587.10	Implement Metrolink Service to Autoclub Sp	$9,775.90	Yes
MS12069	City of Irvine	8/11/2013	2/28/2014		$45,000.00	$26,649.41	Implement Special Transit Service to Solar	$18,350.59	Yes
MS12076	City of Ontario, Housing & Municipal	3/8/2013	4/7/2015		$75,000.00	$75,000.00	Maintenance Facilities Modification	$0.00	Yes
MS12078	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		$75,000.00	$73,107.00	Maintenance Facility Modifications - Vernon	$1,893.00	Yes
MS12081	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		$75,000.00	$75,000.00	Maintenance Facility Modifications - Santa A	$0.00	Yes
MS12085	Bear Valley Unified School District	4/25/2013	6/24/2014		$75,000.00	$75,000.00	Maintenance Facility Modifications	$0.00	Yes
MS12087	Los Angeles County MTA	8/29/2013	11/28/2015		$125,000.00	$125,000.00	Implement Rideshare Incentives Program	$0.00	Yes
MS12088	Orange County Transportation Autho	12/6/2013	3/5/2016		$125,000.00	$18,496.50	Implement Rideshare Incentives Program	$106,503.50	Yes
MS12Hom	Mansfield Gas Equipment Systems				$296,000.00	$0.00	Home Refueling Apparatus Incentive Progra	$296,000.00	No
Total: 31									
Closed/Incomplete Contracts									
MS12079	Penske Truck Leasing Co., L.P.	1/7/2014	1/6/2016		$75,000.00	$0.00	Maintenance Facility Modifications - Boyle H	$75,000.00	No
Total: 1									
Open/Complete Contracts									
ML12015	City of Fullerton	4/25/2013	11/24/2020	11/24/2021	$40,000.00	$40,000.00	HD CNG Vehicle, Expand CNG Station	$0.00	Yes
ML12017	City of Los Angeles, Bureau of Sanit	6/26/2013	5/25/2020	11/25/2021	$950,000.00	$950,000.00	32 H.D. Nat. Gas Vehicles	$0.00	Yes
ML12020	City of Los Angeles, Department of	9/27/2012	3/26/2019	3/26/2020	$450,000.00	$450,000.00	15 H.D. Nat. Gas Vehicles	$0.00	Yes
ML12022	City of La Puente	12/6/2013	6/5/2020		$110,000.00	$110,000.00	2 Medium-Duty and Three Heavy-Duty CNG	$0.00	Yes
ML12039	City of Redlands	2/8/2013	10/7/2019		$90,000.00	$90,000.00	Three Heavy-Duty Nat. Gas Vehicles	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML12046	City of Irvine	8/11/2013	3/10/2021		$30,000.00	$30,000.00	One Heavy-Duty Nat. Gas Vehicle	$0.00	Yes
ML12047	City of Orange	2/1/2013	1/31/2019		$30,000.00	$30,000.00	One Heavy-Duty Nat. Gas Vehicle	$0.00	Yes
ML12055	City of Manhattan Beach	3/1/2013	12/31/2018		$10,000.00	$10,000.00	One Medium-Duty Nat. Gas Vehicle	$0.00	Yes
MS12004	USA Waste of California, Inc.	10/24/2013	11/23/2019		$175,000.00	$175,000.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS12009	Sysco Food Services of Los Angeles	1/7/2014	4/6/2020		$150,000.00	$150,000.00	Construct New Public-Access LNG Station	$0.00	Yes
MS12010	Murrieta Valley Unified School Distric	4/5/2013	9/4/2019		$242,786.00	$242,786.00	Construct New Limited-Access CNG Station	$0.00	Yes
MS12011	Southern California Gas Company	6/14/2013	6/13/2019	5/28/2021	$150,000.00	$150,000.00	Construct New Public-Access CNG Station -	$0.00	Yes
MS12024	Southern California Gas Company	6/13/2013	12/12/2019	11/12/2020	$150,000.00	$150,000.00	Construct New Public-Access CNG Station -	$0.00	Yes
MS12025	Silverado Stages, Inc.	11/2/2012	7/1/2018		$150,000.00	$150,000.00	Purchase Six Medium-Heavy Duty Vehicles	$0.00	Yes
MS12026	U-Haul Company of California	3/14/2013	3/13/2019		$500,000.00	$353,048.26	Purchase 23 Medium-Heavy Duty Vehicles	$146,951.74	Yes
MS12028	Dy-Dee Service of Pasadena, Inc.	12/22/2012	1/21/2019		$45,000.00	$40,000.00	Purchase 2 Medium-Duty and 1 Medium-He	$5,000.00	Yes
MS12029	Community Action Partnership of Or	11/2/2012	11/1/2018		$25,000.00	$14,850.00	Purchase 1 Medium-Heavy Duty Vehicle	$10,150.00	Yes
MS12031	Final Assembly, Inc.	11/2/2012	11/1/2018		$50,000.00	$32,446.00	Purchase 2 Medium-Heavy Duty Vehicles	$17,554.00	Yes
MS12032	Fox Transportation	12/14/2012	12/13/2018		$500,000.00	$500,000.00	Purchase 20 Medium-Heavy Duty Vehicles	$0.00	Yes
MS12033	Mike Diamond/Phace Management	12/22/2012	12/21/2018	6/21/2021	$500,000.00	$148,900.00	Purchase 20 Medium-Heavy Duty Vehicles	$351,100.00	No
MS12034	Ware Disposal Company, Inc.	11/2/2012	11/1/2018	5/1/2022	$133,070.00	$133,070.00	Purchase 8 Medium-Heavy Duty Vehicles	$0.00	No
MS12035	Disneyland Resort	1/4/2013	7/3/2019		$25,000.00	$18,900.00	Purchase 1 Medium-Heavy Duty Vehicle	$6,100.00	Yes
MS12036	Jim & Doug Carter's Automotive/VS	1/4/2013	11/3/2018		$50,000.00	$50,000.00	Purchase 2 Medium-Heavy Duty Vehicles	$0.00	Yes
MS12058	Krisda Inc	4/24/2013	1/23/2019		$25,000.00	$25,000.00	Repower One Heavy-Duty Off-Road Vehicle	$0.00	Yes
MS12063	Custom Alloy Light Metals, Inc.	8/16/2013	2/15/2020		$100,000.00	$100,000.00	Install New Limited Access CNG Station	$0.00	Yes
MS12071	Transit Systems Unlimited, Inc.	5/17/2013	12/16/2018		$21,250.00	$21,250.00	Expansion of Existing CNG Station	$0.00	Yes
MS12072	99 Cents Only Stores	4/5/2013	9/4/2019		$100,000.00	$100,000.00	Construct New CNG Station	$0.00	Yes
MS12073	FirstCNG, LLC	7/27/2013	12/26/2019		$150,000.00	$150,000.00	Construct New CNG Station	$0.00	Yes
MS12074	Arcadia Unified School District	7/5/2013	9/4/2019		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS12075	CR&R Incorporated	7/27/2013	1/26/2021	1/26/2022	$100,000.00	$100,000.00	Expansion of Existing CNG Infrastructure	$0.00	No
MS12080	City of Pasadena	11/8/2013	8/7/2020	2/7/2022	$225,000.00	$225,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS12082	City of Los Angeles, Bureau of Sanit	11/20/2013	2/19/2021	2/19/2023	$175,000.00	$175,000.00	Install New CNG Infrastructure	$0.00	Yes
MS12086	SuperShuttle International, Inc.	3/26/2013	3/25/2019		$225,000.00	$225,000.00	Purchase 23 Medium-Heavy Duty Vehicles	$0.00	Yes

Total: 33

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?

FY 2012-2014 Contracts

Open Contracts									
ML14012	City of Santa Ana	2/13/2015	10/12/2021		$244,000.00	$0.00	EV Charging and 7 H.D. LPG Vehicles	$244,000.00	No
ML14016	City of Anaheim	4/3/2015	9/2/2021		$380,000.00	$0.00	Purchase 2 H.D. Vehicles, Expansion of Exi	$380,000.00	No
ML14018	City of Los Angeles, Department of	3/6/2015	9/5/2021	12/5/2022	$810,000.00	$720,000.00	Purchase 27 H.D. Nat. Gas Vehicles	$90,000.00	No
ML14019	City of Corona Public Works	12/5/2014	6/4/2020	6/4/2022	$178,263.00	$15,468.52	EV Charging, Bicycle Racks, Bicycle Locker	$162,794.48	No
ML14021	Riverside County Regional Park and	7/24/2014	12/23/2016	9/23/2018	$250,000.00	$0.00	Bicycle Trail Improvements	$250,000.00	No
ML14023	County of Los Angeles Department o	10/2/2015	9/1/2017	9/1/2018	$230,000.00	$0.00	Maintenance Fac. Modifications-Westcheste	$230,000.00	No
ML14024	County of Los Angeles Department o	10/2/2015	9/1/2017	9/1/2018	$230,000.00	$0.00	Maintenance Fac. Modifications-Baldwin Par	$230,000.00	No
ML14025	County of Los Angeles Dept of Publi	10/2/2015	7/1/2018		$300,000.00	$0.00	Construct New CNG Station in Malibu	$300,000.00	No
ML14026	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023		$300,000.00	$0.00	Construct New CNG Station in Castaic	$300,000.00	No
ML14027	County of Los Angeles Dept of Publi	10/2/2015	5/1/2023	6/1/2024	$500,000.00	$0.00	Construct New CNG Station in Canyon Coun	$500,000.00	No
ML14030	County of Los Angeles Internal Servi	1/9/2015	3/8/2018	6/8/2019	$425,000.00	$25,000.00	Bicycle Racks, Outreach & Education	$400,000.00	No
ML14033	City of Irvine	7/11/2014	2/10/2021		$60,000.00	$0.00	Purchase 2 H.D. CNG Vehicles	$60,000.00	No
ML14049	City of Moreno Valley	7/11/2014	3/10/2021		$105,000.00	$48,250.00	One HD Nat Gas Vehicle, EV Charging, Bicy	$56,750.00	No
ML14051	City of Brea	9/5/2014	1/4/2017	7/4/2018	$450,000.00	$0.00	Installation of Bicycle Trail	$450,000.00	No
ML14055	City of Highland	10/10/2014	3/9/2018		$500,000.00	$0.00	Bicycle Lanes and Outreach	$500,000.00	No
ML14056	City of Redlands	9/5/2014	5/4/2016	5/4/2018	$125,000.00	$0.00	Bicycle Lanes	$125,000.00	No
ML14060	County of Los Angeles Internal Servi	10/6/2017	1/5/2019		$104,400.00	$0.00	Electric Vehicle Charging Infrastructure	$104,400.00	No
ML14062	City of San Fernando	3/27/2015	5/26/2021		$387,091.00	$0.00	Expand Existing CNG Fueling Station	$387,091.00	No
ML14066	City of South Pasadena	9/12/2014	7/11/2016	2/11/2018	$142,096.00	$0.00	Bicycle Trail Improvements	$142,096.00	No
ML14067	City of Duarte Transit	12/4/2015	1/3/2023		$60,000.00	$0.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	$60,000.00	No
ML14068	City of South Pasadena	9/12/2014	10/11/2015	1/11/2020	$10,183.00	$0.00	Electric Vehicle Charging Infrastructure	$10,183.00	No
ML14069	City of Beaumont	3/3/2017	3/2/2025		$200,000.00	$0.00	Construct New CNG Infrastructure	$200,000.00	No
ML14070	City of Rancho Cucamonga	9/3/2016	12/2/2018		$365,245.00	$0.00	Bicycle Trail Improvements	$365,245.00	No
ML14072	City of Cathedral City	8/13/2014	1/12/2021		$136,000.00	$0.00	Medium & H.D. Vehicles, EV Charging, Bike	$136,000.00	No
ML14093	County of Los Angeles Dept of Publi	8/14/2015	1/13/2019		$150,000.00	$0.00	San Gabriel BikeTrail Underpass Improveme	$150,000.00	No
ML14094	City of Yucaipa	6/9/2017	6/8/2018		$84,795.00	$0.00	Installation of Bicycle Lanes	$84,795.00	No
MS14001	Los Angeles County MTA	3/6/2015	4/30/2015		$1,216,637.00	$1,199,512.68	Clean Fuel Transit Service to Dodger Stadiu	$17,124.32	No
MS14037	Penske Truck Leasing Co., L.P.	4/7/2017	6/6/2020		$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - Carson	$75,000.00	No
MS14057	Los Angeles County MTA	11/7/2014	10/6/2019		$1,250,000.00	$0.00	Implement Various Signal Synchronization P	$1,250,000.00	No
MS14059	Riverside County Transportation Co	9/5/2014	3/4/2018		$1,250,000.00	$0.00	Implement Various Signal Synchronization P	$1,250,000.00	No
MS14072	San Bernardino County Transportatio	3/27/2015	3/26/2018		$1,250,000.00	$0.00	Implement Various Signal Synchronization P	$1,250,000.00	No
MS14075	Fullerton Joint Union High School Di	7/22/2016	11/21/2023		$300,000.00	$0.00	Expansion of Existing CNG Infrastructure/Ma	$300,000.00	No
MS14076	Rialto Unified School District	6/17/2015	2/16/2022		$225,000.00	$0.00	New Public Access CNG Station	$225,000.00	No
MS14078	American Honda Motor Co., Inc.	9/4/2015	8/3/2022		$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS14079	Waste Resources, Inc.	9/14/2016	8/13/2022	8/13/2023	$100,000.00	$0.00	New Limited Access CNG Station	$100,000.00	No
MS14082	Grand Central Recycling & Transfer	12/4/2015	3/3/2023	3/3/2024	$150,000.00	$0.00	Construct New Public Access CNG Station	$150,000.00	No
MS14083	Hacienda La Puente Unified School	7/10/2015	3/9/2022		$175,000.00	$0.00	New Limited Access CNG Station	$175,000.00	No
MS14089	Top Shelf Consulting, LLC	1/18/2017	8/4/2016	3/31/2017	$200,000.00	$200,000.00	Enhanced Fleet Modernization Program	$0.00	Yes
MS14092	West Covina Unified School District	9/3/2016	12/2/2022		$124,000.00	$0.00	Expansion of Existing CNG Infrastructure	$124,000.00	No
Total: 39									
Declined/Cancelled Contracts									
ML14063	City of Hawthorne				$32,000.00	$0.00	Expansion of Existng CNG Infrastructure	$32,000.00	No
MS14035	Penske Truck Leasing Co., L.P.				$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - Sun Valle	$75,000.00	No
MS14036	Penske Truck Leasing Co., L.P.				$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - La Mirad	$75,000.00	No
MS14038	Penske Truck Leasing Co., L.P.				$75,000.00	$0.00	Vehicle Maint. Fac. Modifications - Fontana	$75,000.00	No
MS14043	City of Anaheim				$175,000.00	$0.00	Expansion of Existing CNG Station	$175,000.00	No
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: 8									
Closed Contracts									
ML14010	City of Cathedral City	8/13/2014	10/12/2015		$25,000.00	$25,000.00	Street Sweeping Operations	$0.00	Yes
ML14011	City of Palm Springs	6/13/2014	1/12/2016		$79,000.00	$78,627.00	Bicycle Racks, Bicycle Outreach & Educatio	$373.00	Yes
ML14015	Coachella Valley Association of Gov	6/6/2014	9/5/2015		$250,000.00	$250,000.00	Street Sweeping Operations	$0.00	Yes
ML14020	County of Los Angeles Dept of Publi	8/13/2014	1/12/2018		$150,000.00	$0.00	San Gabriel BikeTrail Underpass Improveme	$150,000.00	No
ML14029	City of Irvine	7/11/2014	6/10/2017		$90,500.00	$71,056.78	Bicycle Trail Improvements	$19,443.22	Yes
ML14054	City of Torrance	11/14/2014	4/13/2017	7/13/2017	$350,000.00	$319,908.80	Upgrade Maintenance Facility	$30,091.20	Yes
ML14065	City of Orange	9/5/2014	8/4/2015		$10,000.00	$10,000.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
MS14002	Orange County Transportation Autho	9/6/2013	4/30/2014		$576,833.00	$576,833.00	Clean Fuel Transit Service to Orange Count	$0.00	Yes
MS14003	Orange County Transportation Autho	8/1/2013	4/30/2014	10/30/2014	$194,235.00	$184,523.00	Implement Metrolink Service to Angel Stadiu	$9,712.00	Yes
MS14004	Orange County Transportation Autho	9/24/2013	4/30/2014		$36,800.00	$35,485.23	Implement Express Bus Service to Solar De	$1,314.77	Yes
MS14005	Transit Systems Unlimited, Inc.	4/11/2014	2/28/2016		$515,200.00	$511,520.00	Provide Expanded Shuttle Service to Hollyw	$3,680.00	Yes
MS14007	Orange County Transportation Autho	6/6/2014	4/30/2015		$208,520.00	$189,622.94	Implement Special Metrolink Service to Ang	$18,897.06	Yes
MS14008	Orange County Transportation Autho	8/13/2014	5/31/2015		$601,187.00	$601,187.00	Implement Clean Fuel Bus Service to Orang	$0.00	Yes
MS14009	A-Z Bus Sales, Inc.	1/17/2014	12/31/2014	3/31/2015	$388,000.00	$388,000.00	Alternative Fuel School Bus Incentive Progra	$0.00	Yes
MS14039	Waste Management Collection and	7/10/2015	4/9/2016		$75,000.00	$75,000.00	Vehicle Maint. Fac. Modifications - Irvine	$0.00	Yes
MS14040	Waste Management Collection and	7/10/2015	4/9/2016		$75,000.00	$75,000.00	Vehicle Maint. Fac. Modifications - Santa An	$0.00	Yes
MS14047	Southern California Regional Rail Au	3/7/2014	9/30/2014		$49,203.00	$32,067.04	Special Metrolink Service to Autoclub Speed	$17,135.96	Yes
MS14048	BusWest	3/14/2014	12/31/2014	5/31/2015	$940,850.00	$847,850.00	Alternative Fuel School Bus Incentive Progra	$93,000.00	Yes
MS14058	Orange County Transportation Autho	11/7/2014	4/6/2016	4/6/2017	$1,250,000.00	$1,250,000.00	Implement Various Signal Synchronization P	$0.00	Yes
MS14073	Anaheim Transportation Network	1/9/2015	4/30/2017		$221,312.00	$221,312.00	Anaheim Resort Circulator Service	$0.00	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS14087	Orange County Transportation Autho	8/14/2015	4/30/2016		$239,645.00	$195,377.88	Implement Special Metrolink Service to Ang	$44,267.12	Yes
MS14088	Southern California Regional Rail Au	5/7/2015	9/30/2015		$79,660.00	$66,351.44	Special Metrolink Service to Autoclub Speed	$13,308.56	Yes
Total: 22									
Closed/Incomplete Contracts									
ML14050	City of Yucaipa	7/11/2014	9/10/2015	7/1/2016	$84,795.00	$0.00	Installation of Bicycle Lanes	$84,795.00	No
Total: 1									
Open/Complete Contracts									
ML14013	City of Los Angeles, Bureau of Sanit	10/7/2016	2/6/2025		$400,000.00	$400,000.00	Purchase 14 H.D. Nat. Gas Vehicles	$0.00	Yes
ML14014	City of Torrance	9/5/2014	12/4/2019		$56,000.00	$56,000.00	EV Charging Infrastructure	$0.00	Yes
ML14022	County of Los Angeles Department o	10/2/2015	5/1/2022		$270,000.00	$270,000.00	Purchase 9 H.D. Nat. Gas Vehicles	$0.00	Yes
ML14028	City of Fullerton	9/5/2014	1/4/2022		$126,950.00	$126,950.00	Expansion of Exisiting CNG Infrastructure	$0.00	Yes
ML14031	Riverside County Waste Manageme	6/13/2014	12/12/2020		$90,000.00	$90,000.00	Purchase 3 H.D. CNG Vehicles	$0.00	Yes
ML14032	City of Rancho Cucamonga	1/9/2015	1/8/2022		$113,990.00	$104,350.63	Expansion of Existing CNG Infras., Bicycle L	$9,639.37	Yes
ML14034	City of Lake Elsinore	9/5/2014	5/4/2021		$56,700.00	$56,700.00	EV Charging Stations	$0.00	Yes
ML14061	City of La Habra	3/11/2016	3/10/2022		$41,600.00	$41,270.49	Purchase Two Heavy-Duty Nat. Gas Vehicle	$329.51	Yes
ML14064	City of Claremont	7/11/2014	7/10/2020	1/10/2021	$60,000.00	$60,000.00	Purchase Two Heavy-Duty Nat. Gas Vehicle	$0.00	Yes
ML14071	City of Manhattan Beach	1/9/2015	11/8/2018		$22,485.00	$22,485.00	Electric Vehicle Charging Infrastructure	$0.00	Yes
MS14041	USA Waste of California, Inc.	9/4/2015	10/3/2021		$175,000.00	$175,000.00	Limited-Access CNG Station, Vehicle Maint.	$0.00	Yes
MS14042	Grand Central Recycling & Transfer	6/6/2014	9/5/2021		$150,000.00	$150,000.00	Expansion of Existing CNG Station	$0.00	Yes
MS14044	TIMCO CNG Fund I, LLC	5/2/2014	11/1/2020		$150,000.00	$150,000.00	New Public-Access CNG Station in Santa A	$0.00	Yes
MS14045	TIMCO CNG Fund I, LLC	6/6/2014	12/5/2020		$150,000.00	$150,000.00	New Public-Access CNG Station in Inglewoo	$0.00	Yes
MS14046	Ontario CNG Station Inc.	5/15/2014	5/14/2020	11/14/2021	$150,000.00	$150,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS14052	Arcadia Unified School District	6/13/2014	10/12/2020		$78,000.00	$78,000.00	Expansion of an Existing CNG Fueling Statio	$0.00	Yes
MS14053	Upland Unified School District	1/9/2015	7/8/2021		$175,000.00	$175,000.00	Expansion of Existing CNG Infrastructure	$0.00	No
MS14074	Midway City Sanitary District	1/9/2015	3/8/2021		$250,000.00	$250,000.00	Limited-Access CNG Station & Facility Modif	$0.00	Yes
MS14077	County Sanitation Districts of L.A. Co	3/6/2015	5/5/2021		$175,000.00	$175,000.00	New Limited Access CNG Station	$0.00	Yes
MS14080	CR&R Incorporated	6/1/2015	8/31/2021	8/31/2022	$200,000.00	$200,000.00	Expansion of Existing CNG Infrastructure/Ma	$0.00	No
MS14081	CR&R Incorporated	6/1/2015	5/30/2021		$175,000.00	$100,000.00	Expansion of Existing CNG Infrastructure/Ma	$75,000.00	No
MS14084	US Air Conditioning Distributors	5/7/2015	9/6/2021		$100,000.00	$100,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
MS14090	City of Monterey Park	5/7/2015	5/6/2021		$225,000.00	$225,000.00	Expansion of Existing CNG Infrastructure	$0.00	Yes
Total: 23									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?

FY 2014-2016 Contracts

Open Contracts									
ML16005	City of Palm Springs	3/4/2016	10/3/2017		$40,000.00	$0.00	Install Bicycle Racks, and Implement Bicycl	$40,000.00	No
ML16006	City of Cathedral City	4/27/2016	4/26/2022		$55,000.00	$0.00	Purchase 1 H.D. Nat. Gas Vehicle, Bicycle	$55,000.00	No
ML16007	City of Culver City Transportation De	10/6/2015	4/5/2023		$246,000.00	$210,000.00	Purchase 7 H.D. Nat. Gas Vehicles, EV Cha	$36,000.00	No
ML16008	City of Pomona	9/20/2016	11/19/2022		$310,000.00	$0.00	Purchase 4 Medium-Duty and 9 Heavy-Duty	$310,000.00	No
ML16009	City of Fountain Valley	10/6/2015	2/5/2018		$46,100.00	$0.00	Install EV Charging Infrastructure	$46,100.00	No
ML16010	City of Fullerton	10/7/2016	4/6/2023		$370,500.00	$0.00	Expand Existing CNG Station, EV Charging I	$370,500.00	No
ML16013	City of Monterey Park	12/4/2015	7/3/2022	7/3/2023	$90,000.00	$0.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	$90,000.00	No
ML16015	City of Yorba Linda	3/4/2016	11/3/2017		$85,000.00	$85,000.00	Install Bicycle Lanes	$0.00	No
ML16016	City of Los Angeles, Department of	2/5/2016	12/4/2022		$630,000.00	$0.00	Purchase 21 Heavy-Duty Nat. Gas Vehicles	$630,000.00	No
ML16017	City of Long Beach	2/5/2016	8/4/2023		$1,445,400.00	$809,642.73	Purchase 48 Medium-Duty, 16 H.D. Nat. Ga	$635,757.27	No
ML16018	City of Hermosa Beach	10/7/2016	1/6/2023		$29,520.00	$0.00	Purchase 2 M.D. Nat. Gas Vehicles, Bicycle	$29,520.00	No
ML16019	City of Los Angeles, Dept of General	1/25/2017	3/24/2020		$102,955.00	$0.00	Install EV Charging Infrastructure	$102,955.00	No
ML16020	City of Pomona	4/1/2016	2/1/2018		$440,000.00	$0.00	Install Road Surface Bicycle Detection Syste	$440,000.00	No
ML16021	City of Santa Clarita	10/7/2016	6/6/2024		$49,400.00	$0.00	Install EV Charging Infrastructure	$49,400.00	No
ML16022	Los Angeles Department of Water an	5/5/2017	3/4/2024		$360,000.00	$0.00	Purchase 13 H.D. Nat. Gas Vehicles	$360,000.00	No
ML16025	City of South Pasadena	6/22/2016	4/21/2023		$180,535.00	$0.00	Purchase 2 H.D. Nat. Gas Vehicles, Expand	$180,535.00	No
ML16028	City of Azusa	9/9/2016	4/8/2018		$25,000.00	$0.00	Enhance Existing Class 1 Bikeway	$25,000.00	No
ML16032	City of Azusa	9/9/2016	4/8/2019	4/8/2020	$474,925.00	$0.00	Implement a "Complete Streets" Pedestrian	$474,925.00	No
ML16033	Coachella Valley Association of Gov	4/27/2016	4/26/2018		$250,000.00	$0.00	Street Sweeping Operations in Coachella Va	$250,000.00	No
ML16034	City of Riverside	3/11/2016	10/10/2018		$500,000.00	$0.00	Implement a "Complete Streets" Pedestrian	$500,000.00	No
ML16035	City of Wildomar	4/1/2016	11/1/2017		$500,000.00	$0.00	Install Bicycle Lanes	$500,000.00	No
ML16036	City of Brea	3/4/2016	12/3/2018		$500,000.00	$0.00	Install a Class 1 Bikeway	$500,000.00	No
ML16038	City of Palm Springs	4/1/2016	7/31/2022		$230,000.00	$0.00	Install Bicycle Lanes & Purchase 4 Heavy-D	$230,000.00	No
ML16039	City of Torrance Transit Department	1/6/2017	9/5/2022		$32,000.00	$0.00	Install EV Charging Infrastructure	$32,000.00	No
ML16040	City of Eastvale	1/6/2017	7/5/2022		$110,000.00	$0.00	Install EV Charging Infrastructure	$110,000.00	No
ML16041	City of Moreno Valley	9/3/2016	1/2/2021		$20,000.00	$0.00	Install EV Charging Infrastructure	$20,000.00	No
ML16042	City of San Dimas	4/1/2016	12/31/2019		$55,000.00	$0.00	Install EV Charging Infrastructure	$55,000.00	No
ML16045	City of Anaheim	6/22/2016	8/21/2019		$275,000.00	$0.00	Maintenance Facility Modifications	$275,000.00	No
ML16046	City of El Monte	4/1/2016	5/31/2021		$20,160.00	$0.00	Install EV Charging Infrastructure	$20,160.00	No
ML16047	City of Fontana	1/6/2017	8/5/2019		$500,000.00	$0.00	Enhance an Existing Class 1 Bikeway	$500,000.00	No
ML16048	City of Placentia	3/26/2016	5/25/2021	6/25/2022	$90,000.00	$18,655.00	Install a Bicycle Locker and EV Charging Infr	$71,345.00	No
ML16049	City of Buena Park	4/1/2016	11/30/2018		$429,262.00	$0.00	Installation of a Class 1 Bikeway	$429,262.00	No
ML16051	City of South Pasadena	2/12/2016	1/11/2017	12/11/2017	$320,000.00	$0.00	Implement "Open Streets" Event with Variou	$320,000.00	No
ML16052	City of Rancho Cucamonga	9/3/2016	11/2/2019		$315,576.00	$0.00	Install Two Class 1 Bikeways	$315,576.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
ML16053	City of Claremont	3/11/2016	7/10/2018		$498,750.00	$0.00	Implement a "Complete Streets" Pedestrian	$498,750.00	No
ML16054	City of Yucaipa	3/26/2016	7/26/2018		$120,000.00	$0.00	Implement a "Complete Streets" Pedestrian	$120,000.00	No
ML16056	City of Ontario	3/23/2016	9/22/2020		$150,000.00	$0.00	Expansion of an Existing CNG Station	$150,000.00	No
ML16057	City of Yucaipa	4/27/2016	1/26/2019		$380,000.00	$0.00	Implement a "Complete Streets" Pedestrian	$380,000.00	No
ML16058	Los Angeles County Department of P	10/7/2016	4/6/2024		$491,898.00	$0.00	Purchase 15 H.D. Nat. Gas Vehicles and Ins	$491,898.00	No
ML16059	City of Burbank	4/1/2016	2/28/2022		$180,000.00	$180,000.00	Purchase 6 H.D. Nat. Gas Vehicles	$0.00	No
ML16060	City of Cudahy	2/5/2016	10/4/2017		$73,910.00	$0.00	Implement an "Open Streets" Event	$73,910.00	No
ML16064	County of Orange, OC Parks	2/21/2017	10/20/2018		$204,073.00	$0.00	Implement "Open Streets" Events with Vario	$204,073.00	No
ML16066	City of Long Beach Public Works	1/13/2017	9/12/2018		$75,050.00	$0.00	Implement an "Open Streets" Event	$75,050.00	No
ML16068	Riverside County Dept of Public Heal	12/2/2016	8/1/2018		$171,648.00	$0.00	Implement an "Open Streets" Events with V	$171,648.00	No
ML16069	City of West Covina	3/10/2017	6/9/2021		$54,199.00	$0.00	Installation of EV Charging Infrastructure	$54,199.00	No
ML16070	City of Beverly Hills	2/21/2017	6/20/2023		$90,000.00	$0.00	Purchase 3 H.D. Nat. Gas Vehicles	$90,000.00	No
ML16071	City of Highland	5/5/2017	1/4/2020		$264,500.00	$0.00	Implement a "Complete Streets" Pedestrian	$264,500.00	No
ML16072	City of Palm Desert	3/4/2016	1/3/2020	1/3/2022	$56,000.00	$0.00	Installation of EV Charging Infrastructure	$56,000.00	No
ML16074	City of La Verne	7/22/2016	1/21/2023		$365,000.00	$0.00	Install CNG Fueling Station	$365,000.00	No
ML16075	City of San Fernando	10/27/2016	2/26/2019		$354,000.00	$0.00	Install a Class 1 Bikeway	$354,000.00	No
ML16076	City of San Fernando	2/21/2017	8/20/2021		$100,000.00	$0.00	Install EV Charging Infrastructure	$100,000.00	No
ML16078	City of Moreno Valley	5/6/2016	11/5/2017	5/5/2018	$32,800.00	$5,569.49	Install Bicycle Infrastructure & Implement Bi	$27,230.51	No
ML16083	City of El Monte	4/1/2016	4/30/2021		$57,210.00	$0.00	Install EV Charging Infrastructure	$57,210.00	No
MS16001	Los Angeles County MTA	4/1/2016	4/30/2017		$1,350,000.00	$1,042,039.84	Clean Fuel Transit Service to Dodger Stadiu	$307,960.16	No
MS16004	Mineral LLC	9/4/2015	7/3/2017	1/3/2018	$27,690.00	$8,700.00	Design, Develop, Host and Maintain MSRC	$18,990.00	No
MS16030	The Better World Group	12/19/2015	12/31/2017		$130,716.00	$104,648.69	Programmic Outreach Services to the MSR	$26,067.31	No
MS16082	Riverside County Transportation Co	9/3/2016	8/2/2018		$590,759.00	$0.00	Extended Freeway Service Patrols	$590,759.00	No
MS16084	Transit Systems Unlimited, Inc.	5/6/2016	2/28/2018		$565,600.00	$396,930.00	Implement Special Shuttle Service from Uni	$168,670.00	No
MS16086	San Bernardino County Transportatio	9/3/2016	10/2/2021		$800,625.00	$61,602.57	Freeway Service Patrols	$739,022.43	No
MS16087	Burrtec Waste & Recycling Services,	7/8/2016	3/7/2023		$100,000.00	$0.00	Construct New Limited-Access CNG Station	$100,000.00	No
MS16088	Transit Systems Unlimited, Inc.	5/12/2017	1/11/2023		$17,000.00	$15,300.00	Expansion of Existing CNG Station	$1,700.00	No
MS16090	Los Angeles County MTA	10/27/2016	4/26/2020		$2,500,000.00	$0.00	Expansion of the Willowbrook/Rosa Parks Tr	$2,500,000.00	No
MS16091	San Bernardino County Transportatio	10/7/2016	11/6/2018		$1,000,000.00	$0.00	Traffic Signal Synchronization Projects	$1,000,000.00	No
MS16092	San Bernardino County Transportatio	2/3/2017	1/2/2019		$250,000.00	$84,744.00	Implement a Series of "Open Streets" Event	$165,256.00	No
MS16093	Orange County Transportation Autho	9/3/2016	3/2/2018		$1,553,657.00	$0.00	Implement a Mobile Ticketing System	$1,553,657.00	No
MS16094	Riverside County Transportation Co	1/25/2017	1/24/2022		$1,909,241.00	$0.00	MetroLink First Mile/Last Mile Mobility Strate	$1,909,241.00	No
MS16096	San Bernardino County Transportatio	10/27/2016	12/26/2019		$450,000.00	$0.00	EV Charging Infrastructure	$450,000.00	No
MS16097	Walnut Valley Unified School District	10/7/2016	11/6/2022		$250,000.00	$175,000.00	Expand CNG Station & Modify Maintenance	$75,000.00	No
MS16099	Foothill Transit	3/3/2017	3/31/2017		$50,000.00	$0.00	Provide Special Bus Service to the Los Ange	$50,000.00	No
MS16100	Southern California Regional Rail Au	5/5/2017	9/30/2017		$80,455.00	$66,169.43	Provide Metrolink Service to Autoclub Speed	$14,285.57	Yes
MS16102	Nasa Services, Inc.	2/21/2017	4/20/2023		$100,000.00	$0.00	Construct a Limited-Access CNG Station	$100,000.00	No

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16103	Arrow Services, Inc.	2/3/2017	4/2/2023		$100,000.00	$0.00	Construct a Limited-Access CNG Station	$100,000.00	No
MS16105	Huntington Beach Union High School	3/3/2017	7/2/2024		$175,000.00	$0.00	Expansion of Existing CNG Infrastructure	$175,000.00	No
MS16110	City of Riverside	10/6/2017	2/5/2025		$300,000.00	$0.00	Expansion of Exisiting CNG Station and Mai	$300,000.00	No
MS16112	Orange County Transportation Autho	4/14/2017	3/13/2024		$1,470,000.00	$0.00	Repower Up to 98 Transit Buses	$1,470,000.00	No
MS16113	Los Angeles County MTA	5/12/2017	4/11/2024		$1,875,000.00	$0.00	Repower Up to 125 Transit Buses	$1,875,000.00	No
MS16114	City of Norwalk	3/3/2017	6/2/2024		$45,000.00	$0.00	Repower Up to 3 Transit Buses	$45,000.00	No
MS16115	City of Santa Monica	4/14/2017	7/13/2025		$870,000.00	$0.00	Repower Up to 58 Transit Buses	$870,000.00	No
MS16116	Riverside Transit Agency	3/3/2017	1/2/2023		$10,000.00	$9,793.00	Repower One Transit Bus	$207.00	No
MS16117	Omnitrans	4/21/2017	6/20/2023		$175,000.00	$166,250.00	Expansion of Existing CNG Infrastructure	$8,750.00	No
MS16118	Omnitrans	4/21/2017	6/20/2023		$175,000.00	$166,250.00	Expansion of Existing CNG Infrastructure	$8,750.00	No
MS16119	Omnitrans	4/21/2017	8/20/2022		$150,000.00	$0.00	New Public Access CNG Station	$150,000.00	No
MS16120	Omnitrans	4/7/2017	5/6/2025		$945,000.00	$0.00	Purchase 39 Transit Buses and Repower 24	$945,000.00	No
Total: 83									
Pending Execution Contracts									
ML16067	City of South El Monte				$73,329.00	$0.00	Implement an "Open Streets" Event	$73,329.00	No
ML16077	City of Rialto				$463,216.00	$0.00	Pedestrian Access Improvements, Bicycle L	$463,216.00	No
MS16029	Orange County Transportation Autho				$851,883.00	$0.00	Transportation Control Measure Partnership	$851,883.00	No
MS16104	City of Perris				$175,000.00	$0.00	Expansion of Existing CNG Infrastructure	$175,000.00	No
MS16106	City of Lawndale				$175,000.00	$0.00	Expansion of Existing CNG Infrastructure	$175,000.00	No
MS16107	Athens Services				$100,000.00	$0.00	Construct a Limited-Access CNG Station	$100,000.00	No
MS16108	VNG 5703 Gage Avenue, LLC				$150,000.00	$0.00	Construct Public-Access CNG Station in Bell	$150,000.00	No
MS16109	Sanitation Districts of Los Angeles C				$275,000.00	$0.00	Expansion of an Existing L/CNG Station	$275,000.00	No
MS16111	VNG 5703 Gage Avenue, LLC				$150,000.00	$0.00	Construct Public Access CNG Station in Pla	$150,000.00	No
MS16121	Long Beach Transit				$600,000.00	$0.00	Purchase 40 New Transit Buses with Near-Z	$600,000.00	No
Total: 10									
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
MS16043	LBA Realty Company LLC				$100,000.00	$0.00	Install Limited-Access CNG Station	$100,000.00	No
MS16080	Riverside County Transportation Co				$1,200,000.00	$0.00	Passenger Rail Service for Coachella and St	$1,200,000.00	No
MS16098	Long Beach Transit				$198,957.00	$0.00	Provide Special Bus Service to Stub Hub Ce	$198,957.00	No
Total: 5									
Closed Contracts									
ML16026	City of Downey	5/6/2016	9/5/2017		$40,000.00	$40,000.00	Install EV Charging Infrastructure	$0.00	No
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
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
MS16002	Orange County Transportation Autho	10/6/2015	5/31/2016		$722,266.00	$703,860.99	Clean Fuel Transit Service to Orange Count	$18,405.01	Yes

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
MS16003	Special Olympics World Games Los	10/9/2015	12/30/2015		$380,304.00	$380,304.00	Low-Emission Transportation Service for Sp	$0.00	Yes
MS16085	Southern California Regional Rail Au	3/11/2016	9/30/2016		$78,033.00	$64,285.44	Special MetroLink Service to Autoclub Spee	$13,747.56	No
MS16089	Orange County Transportation Autho	7/8/2016	4/30/2017		$128,500.00	$128,500.00	Implement Special Bus Service to Angel Sta	$0.00	Yes
MS16095	Orange County Transportation Autho	7/22/2016	5/31/2017		$694,645.00	$672,864.35	Implement Special Bus Service to Orange C	$21,780.65	Yes
Total: 8									
Open/Complete Contracts									
ML16011	City of Claremont	10/6/2015	6/5/2022		$90,000.00	$90,000.00	Purchase 3 Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML16012	City of Carson	1/15/2016	10/14/2022		$60,000.00	$60,000.00	Purchase 2 Heavy-Duty Nat. Gas Vehicles	$0.00	Yes
ML16023	City of Banning	12/11/2015	12/10/2021		$30,000.00	$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	$0.00	Yes
ML16024	City of Azusa	4/27/2016	2/26/2022		$30,000.00	$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	$0.00	Yes
ML16027	City of Whittier	1/8/2016	11/7/2022		$30,000.00	$30,000.00	Purchase 1 H.D. Nat. Gas Vehicle	$0.00	Yes
ML16037	City of Rancho Cucamonga	2/5/2016	11/4/2022		$30,000.00	$30,000.00	Purchase One Heavy-Duty Natural Gas Vehi	$0.00	Yes
ML16050	City of Westminster	5/6/2016	7/5/2020	5/5/2022	$115,000.00	$93,925.19	Installation of EV Charging Infrastructure	$21,074.81	No
ML16055	City of Ontario	5/6/2016	5/5/2022		$270,000.00	$270,000.00	Purchase Nine Heavy-Duty Natural-Gas Veh	$0.00	Yes
ML16061	City of Murrieta	4/27/2016	1/26/2020		$11,642.00	$9,398.36	Installation of EV Charging Infrastructure	$2,243.64	Yes
ML16062	City of Colton	6/3/2016	7/2/2020		$25,000.00	$21,003.82	Installation of EV Charging Infrastructure	$3,996.18	Yes
ML16063	City of Glendora	3/4/2016	4/3/2022		$30,000.00	$30,000.00	Purchase One H.D. Nat. Gas Vehicle	$0.00	Yes
ML16079	City of Yucaipa	4/1/2016	3/31/2020		$5,000.00	$5,000.00	Purchase Electric Lawnmower	$0.00	Yes
MS16081	EDCO Disposal Corporation	3/4/2016	10/3/2022		$150,000.00	$150,000.00	Expansion of Existing Public Access CNG St	$0.00	Yes
Total: 13									

Cont.#	Contractor	Start Date	Original End Date	Amended End Date	Contract Value	Remitted	Project Description	Award Balance	Billing Complete?
FY 2016-2018 Contracts									
Open Contracts									
MS18001	Los Angeles County MTA	6/29/2017	4/30/2018		$807,945.00	$0.00	Provide Clean Fuel Transit Service to Dodge	$807,945.00	No
MS18002	Southern California Association of G	6/9/2017	11/30/2018		$2,500,000.00	$0.00	Regional Active Transportation Partnership	$2,500,000.00	No
MS18003	Geographics	2/21/2017	2/20/2021		$56,953.00	$33,564.00	Design, Host and Maintain MSRC Website	$23,389.00	No
MS18004	Orange County Transportation Autho	8/3/2017	4/30/2019		$503,272.00	$0.00	Provide Special Rail Service to Angel Stadiu	$503,272.00	No
MS18006	Anaheim Transportation Network	10/6/2017	2/28/2020		$219,564.00	$0.00	Implement Anaheim Circulator Service	$219,564.00	No
Total: 5									
Pending Execution Contracts									
MS18005	Orange County Transportation Autho				$834,222.00	$0.00	Clean Fuel Bus Service to OC Fair	$834,222.00	No
MS18008	Foothill Transit				$100,000.00	$0.00	Special Transit Service to LA County Fair	$100,000.00	No
MS18009	Penske Truck Leasing Co., L.P.				$82,500.00	$0.00	Maintenance Facility Modifications and Tech	$82,500.00	No
MS18010	Southern California Regional Rail Au				$351,186.00	$0.00	Special Train Service to Coliseum	$351,186.00	No
MS18011	Southern California Regional Rail Au				$239,565.00	$0.00	Special Train Service to Festival of Lights	$239,565.00	No
MS18012	City of Hermosa Beach				$36,000.00	$0.00	Construct New Limited-Access CNG Station	$36,000.00	No
Total: 6									

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 30

REPORT: California Air Resources Board Monthly Meeting

SYNOPSIS: The California Air Resources Board held a meeting on November 16, 2017, in Sacramento, CA. The following is a summary of the meeting.

RECOMMENDED ACTION:
Receive and file.

Judith Mitchell, Member
SCAQMD Governing Board

dg

The California Air Resources Board's (CARB or Board) November meeting was held on November 16, 2017 in Sacramento at the California Environmental Protection Agency Headquarters Building. Key items presented are summarized below.

CONSENT ITEMS

17-11-2: Public Meeting to Consider the Chico PM2.5 Maintenance Plan

The Board adopted a maintenance plan and redesignation request for the Chico, CA/Butte County PM2.5 nonattainment area (Plan). The Plan demonstrates Chico attained the 35 ug/m3 daily PM2.5 standard and includes an assessment of how the standard will be maintained for the next ten years. The California Air Resources Board will submit the Plan to the United States Environmental Protection Agency as a revision to the California State Implementation Plan.

17-11-7: Public Meeting to Consider the Low Carbon Fuel Standard Litigation Order Compliance Action

The Board took action to comply with a California court order and set aside parts of the 2015 Low Carbon Fuel Standard environmental analysis addressing NOx emissions from biodiesel. The Board further directed staff to present corrective action for Board consideration in 2018 in order to complete compliance with the writ of mandate as soon as is feasible.

DISCUSSION ITEMS

17-11-3: Public Meeting to Hear the 2017 Legislative Update

The Board heard a review of air quality and climate change legislation in the first year of the 2017-2018 Legislative Session, including post-2020 Climate Action, Community Air Quality Protection, transportation incentive funding, and compliance with rules necessary to meet air quality goals.

17-11-1: Public Meeting to Consider the Ozone State Implementation Plan for the Sacramento Nonattainment Region

The Board approved the Sacramento Regional 2008 National Ambient Air Quality Standards 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Plan). Staff briefed the Board on the success the Sacramento region has achieved reducing ozone pollution and how the Plan meets all of the Clean Air Act requirements for the 75 part per billion federal ozone standard. The Plan further demonstrates the Sacramento nonattainment region will attain the ozone standard two years earlier than the federal attainment deadline. The California Air Resources Board will submit the Plan to the United States Environmental Protection Agency as a revision to the California State Implementation Plan.

17-11-6: Public Hearing to Consider Proposed Amendments to Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater, and to the Statewide Portable Equipment Registration Program Regulations

The Board adopted amendments to the Airborne Toxic Control Measure (ATCM) for Portable Diesel Engines and the Portable Equipment Registration Program (PERP) regulation. These amendments are intended to reduce the economic impact on industry while maintaining the long-term emission reductions needed to protect areas with the worst pollution.

17-11-5: Public Meeting to Hear an Update on Secondary PM2.5 Formation in the San Joaquin Valley and Research on Potential Controls

The Board heard an update on the role of ammonia in the formation of ammonium nitrate, a significant component of fine particulate matter (PM2.5) in the San Joaquin Valley (Valley). Staff briefed the Board on current programs that reduce ammonia in the Valley and the importance of NOx reductions in lowering ammonium nitrate and PM2.5. The Board also heard about research related to methane controls and the potential for associated co-benefits for reducing ammonia. Staff will update the Board regarding ongoing methane and ammonia reduction research projects in the spring of 2018 when the Board considers the Valley PM2.5 State Implementation Plan.

Attachment
CARB November 16, 2017 Meeting Agenda

CALIFORNIA AIR RESOURCES BOARD

PUBLIC MEETING AGENDA

November 16, 2017

LOCATION:
California Environmental Protection Agency
California Air Resources Board
Byron Sher Auditorium, 2nd Floor
1001 I Street
Sacramento, California 95814

This facility is accessible by public transit. For transit information, call (916) 321-BUSS, website: http://www.sacrt.com
(This facility is accessible to persons with disabilities.)

TO SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO: http://www.arb.ca.gov/lispub/comm/bclist.php

Thursday
November 16, 2017
9:00 a.m.

CONSENT CALENDAR:

The following items on the consent calendar will be presented to the Board immediately after the start of the public meeting, unless removed from the consent calendar either upon a Board member's request or if someone in the audience wishes to speak on them.

Consent Item #

17-11-2: Public Meeting to Consider the Chico PM2.5 Maintenance Plan

The Board will consider adopting the maintenance plan and redesignation request for the Chico, CA/Butte County PM2.5 nonattainment area (Plan). The Plan demonstrates attainment of the 35 ug/m3 daily PM2.5 standard along with an assessment of how the standard will be maintained for the next ten years. If adopted, the California Air Resources Board will submit the Plan to the United States Environmental Protection Agency as a revision to the California State Implementation Plan.

17-11-7: Public Meeting to Consider the Low Carbon Fuel Standard Litigation Order Compliance Action

The Board will comply with a California court order by setting aside parts of the 2015 Low Carbon Fuel Standard environmental analysis addressing NOx emissions from biodiesel. Further action to complete compliance with the court's order will come before the Board for consideration in 2018.

DISCUSSION ITEMS:

Note: The following agenda items may be heard in a different order at the Board meeting.

Agenda Item #

17-11-1: Public Meeting to Consider the Ozone State Implementation Plan for the Sacramento Nonattainment Region

The Board will consider adopting the Sacramento Regional 2008 National Ambient Air Quality Standards 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Plan). If adopted, the California Air Resources Board will submit the Plan to the United States Environmental Protection Agency as a revision to the California State Implementation Plan.

17-11-3: Public Meeting to Hear the 2017 Legislative Update

The Board will hear a review of air quality and climate change legislation from the first year of the 2017-2018 Legislative Session from the California Air Resources Board Legislative Office.

17-11-4: Public Meeting to Consider Proposed Updates to the Senate Bill 375 Greenhouse Gas Emissions Reduction Targets

The Board will consider approving updates to regional greenhouse gas emissions reduction targets for California's Metropolitan Planning Organizations as required by the Sustainable Communities and Climate Protection Act of 2008 (SB 375). This is the second of two Board hearings on this item.

17-11-6: Public Hearing to Consider Proposed Amendments to the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines Rated at 50 Horsepower and Greater, and to the Statewide Portable Equipment Registration Program Regulations

The Board will consider adopting proposed amendments to the requirements in the Airborne Toxic Control Measure for Diesel Particulate Matter from Portable Engines that will provide more time for cleaner engine replacement while preserving the expected emission reductions, and make other improvements to the program. In addition, the Board will consider corresponding amendments to the Portable Engine and Equipment Registration Program and make other improvements to the program. Collectively, these amendments will work together to improve implementation and enforcement of both regulatory programs.

17-11-5: Public Meeting to Hear an Update on Secondary PM2.5 Formation in the San Joaquin Valley and Research on Potential Controls

The Board will hear an update on the role of ammonia in the formation of ammonium nitrate PM2.5 in the San Joaquin Valley. Staff will also update the Board on past and future research related to methane controls and associated co-benefits of reducing ammonia.

CLOSED SESSION

The Board will hold a closed session, as authorized by Government Code section 11126(e), to confer with, and receive advice from, its legal counsel regarding the following pending or potential litigation, and as authorized by Government Code section 11126(a):

American Fuels and Petrochemical Manufacturers, et al. v. Jane O'Keeffe, et al., U.S. District Court (D. Ore. Portland), Case No. 3:15-CV-00467; Plaintiffs' appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 15-35834.

California et al. v. U.S. Department of Transportation et al., United States District Court, Northern District of California, Case No. 4:17-CV-05439.

Kimberly-Clark Worldwide, Inc. v. California Air Resources Board, et al., Sacramento County Superior Court, Case No. 34-2015-80002246.

Mexichem Fluor Inc. v. United States Environmental Protection Agency et al., U.S. Court of Appeals, District of Columbia Circuit, Case Nos. 15-1328 and 15-1329.

POET, LLC, et al. v. California Air Resources Board, et al., Superior Court of California (Fresno County), Case No. 09CECG04659; plaintiffs' appeal, California Court of Appeal, Fifth District, Case No. F064045; California Supreme Court, Case No. S213394 [remanded to trial court]; plaintiff's appeal of trial court order discharging peremptory writ of mandate, Court of Appeal, Fifth District, Case No. F073340.

POET, LLC, et al. v. California Air Resources Board, et al., Superior Court of California (Fresno County), Case No. 15CECG03380.

Rocky Mountain Farmers Union, et al. v. Corey, U.S. District Court (E.D. Cal. Fresno), Case No. 1:09−CV−02234−LJO−DLB; ARB interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 12-15131 [remanded to trial court].

American Fuels and Petrochemical Manufacturers, et al. v. Corey, et al., U.S. District Court (E.D. Cal. Fresno), Case No. 1:10-CV-00163-AWI-GSA; ARB's interlocutory appeal, U.S. Court of Appeals, Ninth Circuit, Case No. 10-CV-00163 [remanded to trial court].

Sowinski v. California Air Resources Board, et al., U.S. District Court, Central District of California, Case No. 8:15-CV-02123.

State of New York, et al. v. United States Environmental Protection Agency et al., U.S. Court of Appeals, District of Columbia Circuit, Case No. 17-1185.

State of North Dakota, et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 16-1242.

State of North Dakota v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1381.

State of West Virginia et al. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1363.

State of Wyoming, et al. v. United States Department of the Interior, et al., U.S. District Court, District of Wyoming, Case No. 16-CV-285-SWS.

Adam Brothers Farming, Inc. v. California Air Resources Board, et al., Santa Barbara County Superior Court, Case No. 15 CV04432.

Alliance for California Business v. California Air Resources Board, et al., Glenn County Superior Court, Case No. 13CV01232; plaintiffs' appeal, Court of Appeal, Third District, Case No. C082828.

Alliance for California Business v. California State Transportation Agency, et al., Sacramento County Superior Court, Case No. 34-2016-80002491.

American Coatings Association, Inc. v. State of California and California Air Resources Board, Sacramento County Superior Court, Case No. 04CS01707.

Jack Cody dba Cody Transport v. California Air Resources Board, et al., Sacramento Superior Court, Case No. 34-2015-80002116; plaintiff's appeal, Court of Appeal, Third District, Case No. C083083.

Dalton Trucking, Inc. v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 13-1283 (dismissed), U.S. Court of Appeals, Ninth Circuit, Case No. 13-74019.

John R. Lawson Rock & Oil, Inc. et al. v. California Air Resources Board et al., Fresno County Superior Court, Case No. 14-CECG01494; ARB's appeal, Court of Appeal, Fifth District, Case No. F074003.

Murray Energy Corporation v. United States Environmental Protection Agency, U.S. Court of Appeals, District of Columbia Circuit, Case No. 15-1385.

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.

California Air Resources Board v. BP West Coast Products LLC, Contra Costa County Superior Court, Case No. C12-00567.

California Air Resources Board v. SSA Containers, Inc., Los Angeles County Superior Court, Case No. BC628573 and No. BC628722.

California Air Resources Board v. Adam Brothers Farming Inc., Santa Barbara County Superior Court, Case No. 16CV01758.

People v. Southern California Gas Company, Los Angeles Superior Court, Case No. BC 602973.

In re: Volkswagen "Clean Diesel" MDL, United States District Court, Northern District of California, Case No. 15-MD-2672-CRB (JSC).

Mahan v. California Air Resources Board, Sacramento County Superior Court, Case No. 34-2016-80002416.

OPPORTUNITY FOR MEMBERS OF THE BOARD TO COMMENT ON MATTERS OF INTEREST

Board members may identify matters they would like to have noticed for consideration at future meetings and comment on topics of interest; no formal action on these topics will be taken without further notice.

OPEN SESSION TO PROVIDE AN OPPORTUNITY FOR MEMBERS OF THE PUBLIC TO ADDRESS THE BOARD ON SUBJECT MATTERS WITHIN THE JURISDICTION OF THE BOARD

Although no formal Board action may be taken, the Board is allowing an opportunity to interested members of the public to address the Board on items of interest that are within the Board's jurisdiction, but that do not specifically appear on the agenda. Each person will be allowed a maximum of three minutes to ensure that everyone has a chance to speak.

TO ELECTRONICALLY SUBMIT WRITTEN COMMENTS ON AN AGENDA ITEM IN ADVANCE OF THE MEETING GO TO:

https://www.arb.ca.gov/lispub/comm/bclist.php

(Note: not all agenda items are available for electronic submittals of written comments.)

PLEASE NOTE: No outside memory sticks or other external devices may be used at any time with the Board audio/visual system or any CARB computers. Therefore, PowerPoint presentations to be displayed at the Board meeting must be electronically submitted via email to the Clerk of the Board at cotb@arb.ca.gov no later than noon on the business day prior to the scheduled Board meeting.

IF YOU HAVE ANY QUESTIONS, PLEASE CONTACT THE CLERK OF THE BOARD:
1001 I Street, 23rd Floor, Sacramento, California 95814
(916) 322-5594
CARB Homepage: www.arb.ca.gov

SPECIAL ACCOMMODATION REQUEST

Consistent with California Government Code Section 7296.2, special accommodation or language needs may be provided for any of the following:

- An interpreter to be available at the hearing;
- Documents made available in an alternate format or another language;
- A disability-related reasonable accommodation.

To request these special accommodations or language needs, please contact the Clerk of the Board at (916) 322-5594 or by facsimile at (916) 322-3928 as soon as possible, but no later than 7 business days before the scheduled Board hearing. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Consecuente con la sección 7296.2 del Código de Gobierno de California, una acomodación especial o necesidades lingüísticas pueden ser suministradas para cualquiera de los siguientes:

- Un intérprete que esté disponible en la audiencia
- Documentos disponibles en un formato alterno u otro idioma
- Una acomodación razonable relacionados con una incapacidad

Para solicitar estas comodidades especiales o necesidades de otro idioma, por favor llame a la oficina del Consejo al (916) 322-5594 o envié un fax a (916) 322-3928 lo más pronto posible, pero no menos de 7 días de trabajo antes del día programado para la audiencia del Consejo. TTY/TDD/Personas que necesiten este servicio pueden marcar el 711 para el Servicio de Retransmisión de Mensajes de California.

SMOKING IS NOT PERMITTED AT MEETINGS OF THE CALIFORNIA AIR RESOURCES BOARD

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BOARD MEETING DATE: December 1, 2017 AGENDA NO. 31

PROPOSAL: Determine That Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring and Guidelines are Exempt from CEQA, Adopt Rule 1180, and Approve Guidelines

SYNOPSIS: Proposed Rule 1180 establishes fenceline and community air monitoring requirements for petroleum refineries. The proposed rule will require petroleum refineries to install and operate fenceline air monitoring systems to measure a comprehensive list of criteria pollutants and toxic air contaminants. The proposal will require the submittal and approval of a plan that provides detailed information about the fenceline air monitoring systems such as siting, wind data collection, maintenance procedures, measures in case of failures, auditing, and data reporting methods. Further, the proposed rule will set-forth requirements for the plan review process, notifications and recordkeeping. The rule also establishes a fee schedule, to be paid by the petroleum refineries, for the SCAQMD's cost of designing, developing, installing and initial operation of refinery-related community air monitoring systems.

COMMITTEE: Stationary Source, September 15 and October 20, 2017, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached Resolution:

1. Determining that the proposed adoption of Rule 1180 - Refinery Fenceline and Community Air Monitoring and Guidelines are exempt from the requirements of the California Environmental Quality Act;
2. Adopting Rule 1180 – Refinery Fenceline and Community Air Monitoring; and
3. Approving Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.

Wayne Nastri
Executive Officer

PF: SN: MK: DG

Background

Petroleum refineries are among the largest stationary sources of air pollution in the South Coast Air Basin. These sources process crude oil into various products, such as, gasoline, diesel fuel, aviation fuel and other fuel oils. Crude oil consists of a complex mixture of hydrocarbon compounds with smaller amounts of impurities, including sulfur, nitrogen, organic acids, metals and various toxic compounds. The processing of crude oil at petroleum refineries can result in potential emissions of greenhouse gases, criteria pollutants, toxic air contaminants, and other air pollutants. In recent years, community concerns over emissions from refineries and the potential for community exposure to air contaminants has increased, both from routine facility operations and potential releases due to upset conditions or emergency situations. For example, the explosion at the former Exxon-Mobil Refinery in Torrance in 2015, as well as other refinery incidents in the Bay Area and elsewhere, have added to a heightened level of community concern.

SCAQMD has conducted studies to assess the level of air toxics and criteria pollutants on-site and near refineries, and to compare the shorter-duration sampling to reported annual emissions inventories. These studies include two technology demonstration projects focused on refinery monitoring in 2013 and 2014, the SCAQMD Optical Remote Sensing (ORS) Experiment to study emissions from refineries and other sources in 2015, and ongoing work with ORS and low-cost sensors to study hazardous air pollutants in communities. This effort has increased the knowledge of measurement techniques and instrumentation that can be successfully applied to refinery fenceline and community air quality measurements. Furthermore, plans are already being implemented for a temporary fenceline and community monitoring near the Torrance Refining Company in Torrance, utilizing Exxon-Mobil settlement funds related to violations associated with the 2015 explosion. Refinery related sampling will also be a component of the fifth SCAQMD Multiple Air Toxic Exposure Study (MATES V), which will be conducted throughout 2018.

AB 1647 was recently approved by the Governor on October 8, 2017, and it requires that by January 1, 2020, 1) petroleum refineries develop, install, operate, and maintain a fenceline air monitoring system, and 2) Air Districts design, develop, install, operate, and maintain a refinery-related community air monitoring system. Further, AB 1647 requires petroleum refineries to be responsible for the cost associated with implementing the refinery-related community air monitoring system. Consistent with AB 1647, Proposed Rule 1180 establishes requirements for fenceline air monitoring systems and cost recovery provisions for a refinery-related community air monitoring system. The Refinery Fenceline Air Monitoring Plan Guidelines further implement requirements of AB 1647. In accordance with the requirements of AB 1647, the SCAQMD staff will also develop a plan for a community air monitoring system in a future public process. Further, recently passed state legislation AB 617 will likely require air monitoring in communities near large facilities, such as large petroleum refineries. The monitoring requirements in Proposed Rule 1180 may partially satisfy these new requirements.

Proposal

The purpose of Proposed Rule 1180 is to require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the SCAQMD and the public about levels of various criteria air pollutants, volatile organic compounds and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities. Proposed Rule 1180 does not directly reduce emissions from the facilities, but will provide information that could be useful in leak detection monitoring and to address emission reduction requirements from petroleum refineries in the future.

Proposed Rule 1180 will require the submittal and approval of a fenceline air monitoring plan that provides detailed information about the fenceline air monitoring systems such as siting, wind data collection, maintenance procedures, temporary measures for equipment failures, quality assurance and auditing, and data reporting methods. Additionally, the proposed rule establishes requirements for a plan review process, notifications and recordkeeping. The associated Rule 1180 Refinery Fenceline Air Monitoring Guidelines will inform petroleum refinery operators subject to Proposed Rule 1180 about the elements necessary to complete a fenceline air monitoring plan. These guidelines will also serve as a written framework to be used by the Executive Officer to evaluate and approve the fenceline air monitoring plans required by the proposed rule.

Proposed Rule 1180 also includes cost recovery provisions for refinery-related community air monitoring. Specifically, Proposed Rule 1180 requires payment of fees for initial costs of the refinery-related community air monitoring system based on an established fee schedule in Table 2 – Refinery-Related Community Air Monitoring System Fees, of the proposed rule. Table 2 requires that by no later than July 1, 2018, the owner or operator of a petroleum refinery is required to make an initial minimum payment to the SCAQMD toward the installation fee. Also, no later than January 30, 2019, the owner or operator of a petroleum refinery is required to make a final payment for the remaining installation fee balance. Annual payments for operation and maintenance of community air monitoring systems, are required pursuant to Rule 301 – Permitting and Associated Fees, when applicable. Staff is planning to update Rule 301 to include operation and maintenance fees for refinery-related community air monitoring.

The proposed rule exempts petroleum refineries that have a maximum processing capacity of less than 40,000 barrels per day of crude oil. For the purposes of this rule, maximum crude oil throughput capacities are based on information reported to the California Energy Commission (CEC) in accordance with the Petroleum Industry Information Reporting Act. The Petroleum Industry Information Act requires all refiners to submit weekly, monthly and annual data to the CEC. The CEC analyzes this data and provides an annual report that identifies California oil refinery locations and capacities that are made available on their website. Based on SCAQMD permits, there are eight (8) petroleum refinery facilities that would be affected by Proposed Rule 1180.

Public Process
Proposed Rule 1180 was developed with input from a stakeholder working group that included representatives from industry, consultants, environmental groups, community groups, and public agencies. Six working group meetings were held on April 5, 2017, June 13, 2017, July 28, 2017, August 29, 2017, September 21, 2017, and October 24, 2017. The September working group meeting was held in the evening in Wilmington. A Public Workshop was held on September 6, 2017 to present the proposed rule and receive public comment.

Key Issues
A petroleum refinery subject to Proposed Rule 1180 has commented that their facility currently produces renewable fuels from animal fats and vegetable oils. Therefore, the facility requested that Proposed Rule 1180 be revised to exempt facilities with non-crude oil processing operations with a provision that requires compliance with the rule when the petroleum refinery resumes crude oil processing operations. However, the facility maintains all permits necessary to process crude oil. Also, production of biofuels still has the potential of generating emissions that can be detected at the fenceline and in the nearby communities.

Certain stakeholders have commented that the Proposed Rule 1180 requires petroleum refineries to address some air pollutants that are not associated with refinery operations. However, the pollutants covered by PR 1180 are clearly identified as refinery-related emissions in the draft report titled "Analysis of Refinery Chemical Emissions and Health Effects," recently released by the State's Office of Environmental Health Hazard Assessment (OEEHA). Also, pollutants covered by Proposed Rule 1180 are intrinsically measured by the monitoring technologies that are an option for compliance with Proposed Rule 1180. Further, Proposed Rule 1180 also includes a provision that provides the owner or operator of a petroleum refinery an opportunity to demonstrate that their facility does not emit certain pollutants and propose excluding certain pollutants from measurements.

AQMP and Legal Mandates
Pursuant to Health & Safety Code Section 40460 (a), the SCAQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all federal regulations and standards. The SCAQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. PR 1180 is not a control measure of the 2016 AQMP but is needed to implement the requirements of California Health and Safety Code §42705.6 and further protect public health by requiring petroleum refineries to collect real-time data of refinery air pollutant emissions at or near their property boundaries, and to provide data as quickly as possible to the SCAQMD and the public. This data will improve staff's understanding of the impacts that these emissions at petroleum refineries have on local and regional air quality.

California Environmental Quality Act
Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, the SCAQMD, as lead agency for the proposed project, has reviewed Proposed Rule 1180 and the Guidelines pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA.

SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the proposed project may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 – Notice of Exemption, and is included as an attachment to the Board package. If the proposed project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

Socioeconomic Assessment
PR 1180 would require real-time fenceline air monitoring systems and establish a fee schedule to fund installation of refinery-related community air monitoring systems. All fees including O&M were analyzed; however, only fees related to installation are in the rule proposal. Eight petroleum refineries located in Los Angeles County would be potentially affected and incur compliance costs. None of the eight affected refineries are classified as small businesses. They all have a maximum capacity to process 40,000 or more barrels per day of crude oil and therefore would not be exempt from PR 1180 requirements. The fenceline air monitoring requirements were estimated to have an average annual cost of approximately $3.6 million, while the community air monitoring fees were estimated to have an average annual cost of $3.5 million, resulting in a total estimated annual compliance cost of $7.1 million. The facility-specific annual compliance cost was estimated to range from $489,000 to $1.5 million depending on the refinery's size and their specific fee schedule. PR 1180 is projected to result in a net positive job impact of 35 jobs per year on average in the four-county region over the 2018-2028 time period, due to an increase in jobs in industries related to monitoring activities being greater than the foregone jobs in industries primarily related to petroleum refining.

Implementation and Resource Impact
Existing SCAQMD resources will be used to implement Proposed Rule 1180.

Attachments
A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Rule 1180 Rule Language
G. Rule 1180 Refinery Fenceline Air Monitoring Guidelines
H. Final Staff Report
I. Final Socioeconomic Assessment
J. Notice of Exemption
K. Board Meeting Presentation

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring

Purpose

- To require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities

Fenceline Air Monitoring Plan

- No later than eight months after date of rule adoption, petroleum refineries are required to submit to the Executive Officer a written fenceline air monitoring plan for establishing and operating a real-time fenceline air monitoring system consistent with the PR 1180 Refinery Fenceline Air Monitoring Plan Guidelines

Fenceline Air Monitoring Plan Requirements

- The fenceline air monitoring plan is required to provide the following detailed information:
  - Equipment to be used to continuously monitor, record, and report air pollutant levels at or near the property boundary of the petroleum refinery
  - Siting and equipment specifications
  - Equipment in at least one on-site location to continuously record wind speed and wind direction
  - Procedures for air monitoring equipment maintenance and failures
  - Procedures for implementing quality assurance, quality control and audits by a qualified independent party
  - Procedures for implementing the fenceline air monitoring system
  - Methods for dissemination of data to the public and SCAQMD

Fenceline Air Monitoring System Requirements

- No later than one year after a fenceline air monitoring plan is approved by the Executive Officer, petroleum refineries are required to complete installation and begin operation of a real-time fenceline air monitoring system in accordance with the approved plan

Fenceline Air Monitoring Plan Review Process

- Approval of a fenceline air monitoring plan shall be based on, at minimum, submittal of information satisfying the criteria set-forth in the Rule 1180 Fenceline Air Monitoring Plan Guidelines
- If a fenceline air monitoring plan is disapproved, the petroleum refinery must resubmit the fenceline air monitoring plan within 30 days, addressing deficiencies identified in the disapproval letter

- The Executive Officer will either approve the revised and resubmitted fenceline air monitoring plan or modify the plan and approve it as modified
- The owner or operator may appeal the fenceline air monitoring plan modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans
- A fenceline air monitoring plan submitted to the Executive Officer shall be made available for public review no less than fourteen (14) days prior to approval

Fenceline Air Monitoring Plan Update Requirements

- The owner or operator of a petroleum refinery shall submit an updated fenceline air monitoring plan to the Executive Officer as follows:
  - Ten (10) days after the date of any unplanned facility, equipment, process or administrative modification that could result in changes to an approved fenceline air monitoring plan
  - Forty-five (45) days before the date of implementation of any planned facility, equipment, process or administrative modification that could result in changes to an approved fenceline air monitoring plan
  - Sixty (60) days after the date of receiving information that an approved fenceline air monitoring plan does not adequately monitor for coverage for any pollutant(s) emitted from the petroleum refinery
  - Failure to submit an updated fenceline air monitoring plan triggered by the above requirements shall result in revocation of an approved fenceline air monitoring plan

Notifications

- Upon installation and operation of a fenceline air monitoring system the owner or operator of a petroleum refinery shall:
  - Call 1-800-CUT-SMOG to notify the Executive Officer 48 hours prior to planned maintenance activities necessary to maintain proper performance of the fenceline air monitoring equipment
  - Call 1-800-CUT-SMOG to notify the Executive Officer within two hours of discovering that fenceline air monitoring equipment failed to accurately provide real-time air monitoring information
  - Submit a written notification to the Executive Officer for any equipment failure that results in a failure to accurately provide continuous, real-time air monitoring information as required by the approved fenceline air monitoring plan

    Submit an update fenceline air monitoring plan to the Executive Officer if an equipment failure results in a failure to accurately provide continuous, real-time air monitoring information for more than 30 days

Recordkeeping

- Maintain records of all information required under the rule for at least five years
- Maintain records of all information onsite for at least two years
- Make the information available to SCAQMD upon request

Community Air Monitoring Fees

- Pay an installation fee for refinery-related community air monitoring system based on an established fee schedule.
  - No later than July 1, 2018, make an initial minimum payment to the SCAQMD
  - No later than January 30, 2019, make a final payment for the remaining installation fee balance
  - Make annual payments for operation and maintenance of community air monitoring systems, pursuant to Rule 301 – Permitting and Associated Fees
  - No later than January 1, 2025 and every 5 years thereafter, the Executive Officer shall conduct a refinery-related community air monitoring assessment to evaluate adequate coverage and/or need for equipment upgrades

Exemption

- Petroleum refineries that have a maximum capacity to process less than 40,000 barrels per year of crude oil are exempt from the requirements of this rule

ATTACHMENT B
KEY ISSUES AND RESPONSES

Proposed Rule (PR) 1180 – Refinery Fenceline and Community Air Monitoring
Applicability: A petroleum refinery subject to Proposed Rule 1180 has commented that their facility currently produces renewable fuels from animal fats and vegetable oils. Therefore, the facility requested that Proposed Rule 1180 be revised to exempt facilities with non-crude oil processing operations with a provision that requires compliance with the rule when the petroleum refinery resumes crude oil processing operations. • The facility maintains all permits necessary to process crude oil. Also, production of biofuels still has the potential of generating emissions that can be detected at the fenceline and in the nearby communities. Additionally, if there are fewer pollutants being emitted, the required air monitoring would likely require fewer detection devices. Also, if the facility owner or operator adequately demonstrates that their facility does not emit pollutants covered by the requirements of Proposed Rule 1180 then the approved fenceline air monitoring plan may not require those pollutants to be monitored. Fenceline Air Monitoring Requirements: Stakeholders have commented that the PR 1180 plan requirements cover air pollutants that are not associated with refinery operations. • The pollutants required to be addressed by PR 1180 are clearly identified as refinery-related emissions in the draft report titled "Analysis of Refinery Chemical Emissions and Health Effect," released by the State's Office of Environmental Health Hazard Assessment. Also, most pollutants required to be addressed by PR 1180 will be intrinsically measured by the open-path technologies that are likely to be utilized to for compliance with PR 1180. Further, if the facility owner or operator adequately demonstrates that their facility does not emit pollutants covered by the requirements of Proposed Rule 1180 then the approved fenceline air monitoring plan may not require those pollutants be monitored.

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring

Initiated Rule Development: April 2017

↓

Working Group Meetings (6)
1st Working Group Meeting: April 5, 2017
2nd Working Group Meeting: June 13, 2017
3rd Working Group Meeting: July 28, 2017
4th Working Group Meeting: August 29, 2017
5th Working Group Meeting: September 21, 2017*
6th Working Group Meeting: October 24, 2017

↓

75-Day Public Notice: August 17, 2017

↓

Public Workshop: September 6, 2017

↓

1st Stationary Source Committee Briefing: September 15, 2017
2nd Stationary Source Committee Briefing: October 20, 2017

↓

30-day Notice of Public Hearing: November 1, 2017

↓

Set Hearing (30-day): November 3, 2017

↓

Public Hearing: December 1, 2017

Eight (8) months spent in rule development.
One (1) Public Workshop.
Two (2) Stationary Source Committee Meetings.
Six (6) Working Group Meetings.

*** Meeting held in Wilmington Senior Citizens Center, Wilmington, California**

ATTACHMENT D
KEY CONTACTS LIST

Almega Environmental

ALON USA – Paramount Petroleum

ALTAIR

Andeavor - Tesoro

AQM Resources, LLC

Assembly member Al Muratsuchi's Representative

California Air Resources Board

California Council for Environmental & Economic Balance (CCEEB)

California Metals Coalition

California Small Business Alliance

California State University, Dominguez Hills

Chevron U.S.A., Inc.

City of Carson

City of Long Beach

City of Torrance

City of Torrance Fire Department

Coalition for a Safe Environment

Committee for a Safe Environment

Communities for a Better Environment (CBE)

Del Amo Action Committee

Eco Cira Energy & Environmental Consulting

Environmental Management Professionals, LLC

FluxSense Inc.

Los Angeles Fire Department

Montrose Air Quality Services

MRS Environmental

OPSIS AB

Philips 66

Pod Technologies

Port of Los Angeles High School

Ramboll Environ

Regulatory Flexibility Group

Safer Systems

Sempra Energy Utilities

Sierra Club

Sonoma Technology, Inc.

Southern California Air Quality Alliance

The Los Angeles County Business Federation (BizFed)

Torrance Refining Company

Trihydro Corp.

Valero

Western States Petroleum Association (WSPA)

World Oil Corp.

ATTACHMENT E

RESOLUTION NO. 17-_____

A Resolution of the Governing Board of the South Coast Air Quality Management District (SCAQMD) determining that Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring, and the Guidelines are exempt from the requirements of the California Environmental Quality Act (CEQA).

A Resolution of the SCAQMD Governing Board Adopting Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring.

WHEREAS, the SCAQMD Governing Board finds and determines that Proposed Rule 1180 and the Guidelines are considered a "project" pursuant to CEQA Guidelines Section 15002(K) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and

WHEREAS, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and has conducted a CEQA review pursuant to such program (SCAQMD Rule 110); and

WHEREAS, the SCAQMD Governing Board finds and determines that it can be seen with certainty that there is no possibility that the proposed project may have any significant effects on the environment, and is therefore, exempt from CEQA pursuant to CEQA Guideline Section 15061(b)(3) – Activities Covered by General Rule; and

WHEREAS, the SCAQMD staff has prepared a Notice of Exemption for the proposed project, that is completed in compliance with CEQA Guidelines Section 15062 – Notice of Exemption; and

WHEREAS, Proposed Rule 1180 and supporting documentation, including but not limited to, the Notice of Exemption, the Socioeconomic Impact Assessment, the Guidelines and the Staff Report, were presented to the SCAQMD Governing Board and the SCAQMD Governing Board has reviewed and considered the entirety of this information, as well as has taken and considered staff testimony and public comment prior to approving the project; and

WHEREAS, the SCAQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D)(i) of the Administrative Code), that the modifications which have been made to Proposed Rule 1180 since the notice of public hearing was published 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 as the rule only requires monitoring and does not address emission reductions, (b) the changes do not impact the number or type of sources regulated by the rule, the changes to the overall community air monitoring system cost is approximately $5,000, which represents less than 0.07 percent of the total overall community air monitoring system cost of $7.5 million, and thus does not significantly affect the overall community air monitoring system cost, and the changes to the apportionment of the initial community air monitoring system costs to the individual petroleum refinery facilities do not have a significant impact relative to the annual operating expenses of the parent company (the maximum increase in fees of approximately $370,000 is small relative to the facilities' annual operating expense of $15.43 billion), (c) the changes are consistent with information contained in the public notice, and (d) the consideration of the range of CEQA alternatives is not applicable because Proposed Rule 1180 is exempt from CEQA; and

WHEREAS, Proposed Rule 1180 is not a control measure in the 2016 Air Quality Management Plan (AQMP) and was not ranked by cost-effectiveness relative to other AQMP control measures in the 2016 AQMP, and furthermore, pursuant to Health and Safety Code Section 40910, an incremental cost-effectiveness analysis pursuant to Health and Safety Code Section 40920.6 is not applicable where the rule does not reduce emissions in terms of dollars per ton of pollutant reduced; and

WHEREAS, Proposed Rule 1180 will not be submitted for inclusion into the State Implementation Plan; and

WHEREAS, the SCAQMD staff conducted a public workshop regarding Proposed Rule 1180 on September 6, 2017; and

WHEREAS, Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Rule 1180 is needed to further protect public health by providing air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds at or near the property boundaries of petroleum refineries, and can be used to identify leaks in order to take corrective action sooner, and alert communities of accidental releases; and

WHEREAS, the SCAQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, and 41508, and et. seq. of the Health and Safety Code; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Rule 1180, as proposed to be adopted, is written and displayed so that the meaning can be easily understood by persons directly affected by it; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Rule 1180, as proposed to be adopted, is in harmony with, and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Rule 1180, as proposed to be adopted, does not impose the same requirements as any existing state or federal regulations, and the proposed project is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD; and

WHEREAS, the SCAQMD Governing Board, in adopting this regulation, references the following statutes which the SCAQMD hereby implements, interprets or makes specific: the provisions of the Health and Safety Code Section 42705.6 (Refinery-Related Monitoring) and 42708 (More Stringent Monitoring Requirements); and

WHEREAS, Health and Safety Code Section 40727.2 requires the SCAQMD 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 that the SCAQMD's comparative analysis of Proposed Rule 1180 is included in the staff report; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment of Proposed Rule 1180 is consistent with the March 17, 1989 and October 14, 1994 Governing Board Socioeconomic Resolutions for rule adoption; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Rule 1180 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 SCAQMD Governing Board has actively considered the Socioeconomic Impact Assessment and has made a good faith effort to minimize such impacts; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment is consistent with the provisions of the California Health and Safety Code Sections 40440.8, and 40728.5, and (40920.6 doesn't apply here); and

WHEREAS, the SCAQMD Governing Board specifies the Planning and Rules Manager overseeing the rule development for Proposed Rule 1180 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the SCAQMD, 21865 Copley Drive, Diamond Bar, California; and

WHEREAS, a public hearing has been properly noticed in accordance with all provisions of Health and Safety Code Section 40725; and

WHEREAS, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Rule 1180 will further protect public health by requiring petroleum refineries to install and operate fenceline air monitoring systems and by establishing a fee schedule to fund a refinery-related community air monitoring system that provides air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities; and

WHEREAS, SCAQMD staff will provide the fenceline air monitoring plans for public review as soon as reasonably possible after submittal by the refinery but no less than 14 days prior to approval; and

WHEREAS, SCAQMD staff will consider, in writing, public and other stakeholder comments in the decision making to approve, disapprove, or modify the Refinery Monitoring Plans; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby determine, pursuant to the authority granted by law, that Proposed Rule 1180 is exempt from CEQA pursuant to CEQA Guidelines Section 1506(b)(3) – Activities Covered by General Rule. This information was presented to the SCAQMD Governing Board, whose members reviewed, considered and approved the information therein prior to acting on Proposed Rule 1180; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Rule 1180 as set forth in Attachment F and incorporated herein by this reference.

DATE: _____ _____

CLERK OF THE BOARDS

ATTACHMENT F

PR 1180
December 1, 2017

PROPOSED RULE 1180 **REFINERY FENCELINE AND COMMUNITY AIR MONITORING**

(a) Purpose

The purpose of this rule is to require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities.

(b) Applicability

This rule applies to petroleum refineries.

(c) Definitions

For the purposes of this rule, the following definitions shall apply:

(1) COMMUNITY AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations in communities near a petroleum refinery.

(2) FENCELINE AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery.

(3) PETROLEUM REFINERY is a facility that is permitted to processes petroleum, as defined in the Standard Industrial Classification Manual as Industry No. 2911.

(4) REAL-TIME is the actual or near actual time during which pollutant levels occur at or near the property boundary of a petroleum refinery or in a nearby community.

(5) RULE 1180 REFINERY FENCELINE AIR MONITORING PLAN GUIDELINES are a written framework to be used by the Executive Officer to evaluate a refinery fenceline air monitoring plan.

(d) Plan Requirements

(1) No later than [*eight months after ~~D~~date of ~~R~~rule Adoption*], the owner or operator of a petroleum refinery shall submit to the Executive Officer a written fenceline air monitoring plan for establishing and operating a real-time fenceline air monitoring system.

(2) The fenceline air monitoring plan shall provide the following detailed information:

(A) Equipment to be used to continuously monitor, record, and report air pollutant levels for the pollutants specified in Table 1 – Air Pollutants to be Addressed by Fenceline Air Monitoring Plans in real-time, at or near the property boundary of the petroleum refinery;

(B) Siting and equipment specifications;

(C) Equipment in at least one petroleum refinery on-site location to continuously record wind speed and wind direction data;

(D) Procedures for air monitoring equipment maintenance and failures. The procedures for equipment maintenance and failures shall include a plan that describes the maintenance activities necessary to maintain proper performance of the fenceline air monitoring equipment and a plan that deals with equipment failures. At a minimum, the maintenance and failure plan shall describe the following:

(i) Routine maintenance requirements for equipment;

(ii) A planned schedule for routine maintenance performed on equipment;

(iii) Length of time that equipment will not be operating during routine maintenance activities; and

(iv) Temporary air monitoring measures that will be implemented in the event of an equipment failure or during routine maintenance activities and used until the fenceline air monitoring system is restored to normal operating conditions.

(E) Procedures for implementing quality assurance by a qualified independent party, including quality control and audits of the fenceline air monitoring systems;

(F) Procedures for implementing the fenceline air monitoring plan, including, information pertaining to the installation, operation, maintenance, and quality assurance, for the fenceline air monitoring system;

(G) Methods for dissemination of data collected by the equipment specified in subparagraphs (d)(2)(A) and (d)(2)(C) to the public, local response agencies, and SCAQMD as expeditiously as possible.

(3) The fenceline air monitoring plan required by paragraph (d)(1) shall address real-time air monitoring for the air pollutants specified in Table 1 on a continuous basis. The fenceline air monitoring system required by subdivision (e) shall monitor for all pollutants identified in Table 1. The owner or operator of a petroleum refinery must provide an explanation for not including real-time air monitoring for any of

the pollutants specified in Table 1 in the fenceline air monitoring plan. Explanations for not including real-time air monitoring for any of the pollutants specified in Table 1 must be consistent with the criteria ~~set forth~~ in the Rule 1180 Fenceline Air Monitoring Guidelines.

(4) The review and approval of the fenceline air monitoring plan shall be subject to plan fees as specified in Rule 306 – Plan Fees.

(5) The owner or operator of a petroleum refinery shall submit an updated fenceline air monitoring plan to the Executive Officer as follows:

(A) Ten (10) days after the date of any unplanned facility, equipment, process or administrative modification that could result in changes to an approved fenceline air monitoring plan.

(B) Forty-five (45) days before the date of implementation of any planned facility, equipment, process or administrative modification that could result in changes to an approved fenceline air monitoring plan.

(C) Sixty (60) days after the date of receiving information that an approved fenceline air monitoring plan does not adequately measure any pollutant(s) identified in Table 1 that are emitted from the petroleum refinery.

(D) Failure to comply with the requirements of subparagraphs (d)(5)(A) through (d)(5)(C) shall result in revocation of an approved fenceline air monitoring plan. Thirty (30) days after revocation of an approved fenceline air monitoring plan the owner or operator of a petroleum refinery shall submit a new fenceline air monitoring plan to the Executive Officer pursuant to paragraphs (d)(1) through (d)(4) and (d)(6) through (d)(7). The updated fenceline air monitoring plan shall not be subject to the implementation schedule in subdivision (e). An updated implementation schedule subject to approval by the Executive Officer shall be included in the new fenceline air monitoring plan but in no case shall be longer than 180 days.

(6) The owner or operator of a petroleum refinery may include the use of emerging technologies in a fenceline air monitoring plan that is compliant with the requirements of this rule.

(7) All fenceline air monitoring plans shall be consistent with the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.

(e) Fenceline Air Monitoring System Requirements

Beginning no later than one year after a fenceline air monitoring plan is approved by the Executive Officer, the owner or operator of a petroleum refinery shall complete installation and begin operation of a real-time fenceline air monitoring system in accordance with the approved fenceline air monitoring plan. ~~The fenceline air monitoring system shall monitor for all pollutants identified in Table 1.~~

(f) Plan Review Process

(1) The Executive Officer shall notify the owner or operator in writing whether the fenceline air monitoring plan is approved or disapproved. Determination of approval status for the fenceline air monitoring plan shall be based on, at a minimum, submittal of information that satisfies the criteria ~~set forth~~ in subdivision (d) and the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.

(A) If disapproved, the owner or operator shall resubmit the fenceline and air monitoring plan, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the plan. The resubmitted plan shall include any information necessary to address deficiencies identified in the disapproval letter.

(B) The Executive Officer will either approve the revised and resubmitted fenceline air monitoring plan or modify the plan and approve it as modified. <u>The owner or operator may appeal the fenceline air monitoring plan modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans.</u>

(2) A fenceline air monitoring plan that is submitted pursuant to the requirements of subdivision (d) shall be made available, by the Executive Officer, for public review no less than fourteen (14) days prior to approval.

(g) Notifications

(1) Upon installation and operation of a fenceline air monitoring system as required by paragraph (d)(5) or subdivision (e), the owner or operator of a petroleum refinery shall comply with the following notification requirements by:

(A) Calling 1-800-CUT-SMOG to notify the Executive Officer 48 hours prior to the planned maintenance activity subject to subparagraph (d)(2)(D) and (d)(5)(B) by providing the name of the petroleum refinery, the name of the monitor, and the planned date(s) of the occurrence(s).

(B) Calling 1-800-CUT-SMOG to notify the Executive Officer within two hours of discovering that equipment described in the fenceline air

monitoring plan subject to subdivision (d) failed to accurately provide real-time air monitoring information. The owner or operator shall also provide the name of the petroleum refinery, the name of the air monitor, the date of the occurrence, and the reason for the lapse in collecting and/or reporting the real-time air monitoring information.

(2) The owner or operator of the petroleum refinery shall submit a written notification to the Executive Officer of any equipment failure that also results in a failure to accurately provide continuous, real-time air monitoring information as required by the approved fenceline air monitoring plan subject to subdivision (d) for 24-hours or longer. The written notification shall be submitted to the Executive Officer within 24 hours of discovering the equipment failure and shall include the following:

(A) An explanation of activities currently being pursued or taken to remedy the equipment failure;

(B) Estimated time needed to restore the fenceline air monitoring equipment to normal operating conditions that comply with the approved fenceline and community air monitoring plan; and

(C) Temporary air monitoring measures subject to subparagraph (d)(2)(D) from the approved fenceline air monitoring plan to be implemented until the fenceline air monitoring system is restored to normal operating conditions.

(3) The owner or operator of a petroleum refinery shall submit an updated fenceline air monitoring plan to the Executive Officer if an equipment failure results in a failure to accurately provide continuous, real-time air monitoring information for more than 30 days.

(i) Recordkeeping

The owner or operator of a petroleum refinery shall maintain records of all information required under this rule for at least five years and shall make the information available to SCAQMD personnel upon request. Records for ~~with~~ at least the two most recent years shall be kept onsite.

(j) Community Air Monitoring Fees

(1) Pursuant to CA Health and Safety Code §42705.6, an owner or operator of a petroleum refinery shall pay an installation fee for refinery-related community air monitoring system based on ~~a rate of $0.0195 per annual barrels. The fee required by this paragraph shall be assessed on the petroleum refineries crude oil throughput capacity and calculated as:~~

~~Crude oil throughput capacity (barrels per year) x $0.0195 = Installation Fee~~the fee schedule established in Table 2 – Refinery-Related Community Air Monitoring System Fees.

(2) No later than July 1, 2018, the owner or operator of a petroleum refinery shall make an initial minimum payment to the SCAQMD ~~of thirty percent of the installation fee required by~~as specified in Table 2~~ paragraph (j)(1)~~.

(3) No later than January 30, 2019, the owner or operator of a petroleum refinery shall make a final payment to the SCAQMD for the remaining balance of the installation fee ~~required~~ as specified ~~by paragraph (j)(1)~~in Table 2. The remaining balance shall be equal to the installation fee minus the initial minimum payment required by paragraph (j)(2).

(4) Annual operating and maintenance fees for the community air monitoring system shall be ~~recovered~~ paid pursuant to Rule 301–Permitting and Associated Fees, when applicable.

(5) The refinery-related community air monitoring fees required by paragraph (j)(1) are in addition to permit and other fees otherwise authorized to be collected from such facilities~~ and shall be included as part of the annual permit renewal fees~~.

(6) No later than January 1, 2025 and every five years thereafter, the Executive Officer shall conduct a refinery-related community air monitoring assessment to evaluate adequate coverage and/or need for equipment upgrades.

(k) Exemptions

An owner or operator of a petroleum refinery that has a maximum capacity to process less than 40,000 barrels per day of crude oil is exempt from the requirements of this rule.

Table 1– Air Pollutants to be Addressed by Fenceline Air Monitoring Plans

Air Pollutants
Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3 Butadiene
Styrene
BTEX Compounds (Benzene, Toluene, -Ethylbenzene, Xylenes)
Other Compounds
Hydrogen Sulfide
Carbonyl Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride+

[+] If the facility uses hydrogen fluoride.

ATTACHMENT F

Table 2 – Refinery-Related Community Air Monitoring System Fees

Facility Name* and Location	No later than July 1, 2018, petroleum refineries shall make the following initial minimum payment required by paragraph (j)(2)	No later than January 30, 2019, petroleum refineries shall make the following final payment required by paragraph (j)(3)
Andeavor Corporation (Carson)	$429,078	$1,001,181
Andeavor Corporation (Wilmington)	$214,539	$500,591
Chevron U.S.A, Inc. (El Segundo)	$429,078	$1,001,181
Delek U.S. Holdings, Inc. (Paramount)	$107,269	$250,295
Phillips 66 Company (Carson)	$214,539	$500,591
Phillips 66 Company (Wilmington)	$214,539	$500,591
PBF Energy, Torrance Refining Company (Torrance)	$429,078	$1,001,181
Valero Energy (Wilmington)	$214,539	$500,591

*Based on the current facility names. Any subsequent owner(s) or operator(s) of the above listed facilities ~~could~~shall be subject to this rule unless exempted pursuant to its terms.

ATTACHMENT G

Rule 1180

Refinery Fenceline Air Monitoring Plan Guidelines

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
Diamond Bar, California
December 2017

Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines

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1. Background

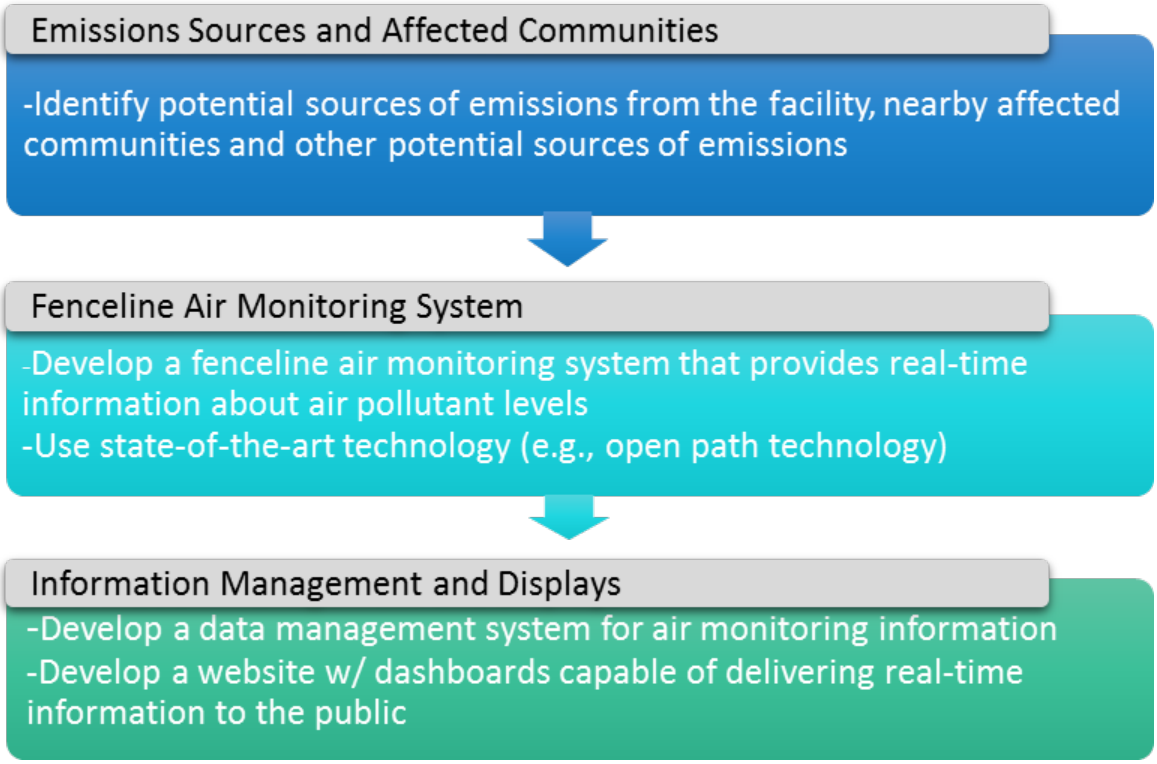
The South Coast Air Quality Management District (SCAQMD) Governing Board adopted Rule 1180 – Refinery Fenceline and Community Air Monitoring on (date of adoption). The purpose of Rule 1180 is to require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the public and local response agencies about levels of various criteria air pollutants, volatile organic compounds and other compounds at or near the property boundaries of petroleum refineries~~ and in nearby communities~~.

Rule 1180 requires that refinery operators submit a written fenceline air monitoring plan (air monitoring plan) for establishing and operating a ~~continuous,~~ real-time fenceline air monitoring system. Therefore, SCAQMD staff developed the Rule 1180 – Refinery Fenceline Air Monitoring Plan Guidelines (Guidelines) as a written framework to be used by the Executive Officer to evaluate air monitoring plans required by Rule 1180. By design, these Guidelines will inform petroleum refinery operators subject to the Rule 1180 about the elements necessary to complete an air monitoring plan. SCAQMD recognizes the need for flexibility when designing an air monitoring plan, therefore, each plan will be evaluated on a case-by-case basis and tailored to each facility's size, operations, specific location, and its surrounding receptors. Therefore, a fenceline air monitoring system must be representative of the size of the affected facility and its emissions.

A fundamental requirement of Rule 1180 is that a~~n~~ fenceline air monitoring plan must provide detailed information about the installation, operation and maintenance of a fenceline air monitoring system. A fenceline air monitoring system is defined as a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery. An effective fenceline air monitoring system should be capable of measuring routine emissions from refineries and detecting leaks, as well as unplanned releases from refinery equipment and other sources of refinery-related emissions. The fenceline air monitoring system would inform refinery operators and the public about air pollution impacts to nearby communities from refinery operations.

Developing an air monitoring plan requires three important steps; identification of emissions sources and affected communities, deriving a fenceline air monitoring system that can provide real-time information about certain air pollutant levels, and effectively communicating this information using data management technology and displays. Figure 1 - Overview of Key Steps to Developing an Air Monitoring Plan, below outlines important considerations for developing a fenceline air monitoring system.

Figure 1: Overview of Key Steps to Developing an Air Monitoring Plan



An approvable fenceline air monitoring plan shall meet the following key objectives:

- Provide ~~continuous~~ information about various air pollutant levels (i.e., determined by air pollutant concentration) measured in real-time in durations short enough to adequately address significant emissions changes from refinery operations;
- Gather accurate air quality and meteorological data to identify both the time(s) and location(s) of various air pollutant levels near refinery operations and provide a comparison of these levels to other pollutant levels monitored in the Basin;
- Track long-term air pollutant levels, variations, and trends over time at or near the property boundaries of petroleum refineries and in nearby communities;
- Provide context to the data so that local communities can distinguish air quality in their location from other locations in the Basin and understand the potential health impacts associated with local air quality near petroleum refinery operations;
- Provide a notification system for communities near refineries when emissions exceed thresholds (e.g., RELs); and
- Provide quarterly reports summarizing the measurements, data completeness, and quality assurance.

Rule 1180 sets-forth requirements for air monitoring plans. The air monitoring plan shall include detailed information for the following:

- An evaluation of routine emission sources at the refinery (e.g., utilizing remote sensing or other measurement techniques or modeling studies, such as those used for health risk assessments);
- An analysis of the distribution of operations and processes within the refinery to determine potential emission sources;
- An assessment of air pollutant distribution in surrounding communities (e.g., mobile surveys, gradient measurements, and/or modeling studies used for health risk assessments);
- A summary of ~~open-path~~fenceline air monitoring instruments and ancillary equipment that are proposed to continuously measure, monitor, record, and report air pollutant levels in real-time near the petroleum refinery facility perimeter (i.e., fenceline);
- A summary of instrument specifications, detectable pollutants, minimum and maximum detection limits for all air monitoring instruments;
- Proposed monitoring equipment siting and selected pathways (when applicable) for ~~open-path~~fenceline instruments, including the justification for selecting specific locations based on the assessments mentioned above;
- Operation and maintenance requirements for the proposed monitoring systems;
- An implementation schedule consistent with the requirements of Rule 1180;
- Procedures for implementing quality assurance and quality control of data;
- A web-based system for disseminating information collected by the fenceline air monitoring system;
- Details of the proposed public notification system; and
- Demonstration of independent oversight.

This information will assist the Executive Officer in determining the approval status of an air monitoring plan during the plan review process required by paragraph (f) of Rule 1180.

2. Fenceline Air Monitoring Systems

Pursuant to the requirements of Rule 1180 discussed above, development of a fenceline air monitoring system shall take into account geospatial layout of the refinery site, potential release sources, local meteorology, atmospheric dispersion characteristics of the compounds of concern, the relative risk to likely receptors based on these criteria, and other considerations outlined below.

Fenceline Air Monitoring Plan Checklist	
Fenceline Air Monitoring Coverage (or Spatial Coverage)	
☑	Identify the facility's proximity to sensitive receptors affected by the refinery operation and provide the information below.
	o Distance from facility to closest sensitive receptor(s)
	o Location of downwind and upwind communities
	o Eminent sources of non-refinery emissions surrounding the facility (e.g. non-refinery industrial facilities)
	o Dispersion modeling†
☑	Describe historical facility emission patterns and pollutant hotspots based on the following:
	o On-site location of operations and processes within the facility's perimeter
	o On-site location of emissions sources and level of emissions
	o Facility plot plans and topography
	o Dispersion modeling†
☑	Select sampling locations along the perimeter of the facility based on the information above. Also, provide the following:
	o Locations where equipment will be sited (e.g., GIS coordinates) and measurement pathways
	o Elevations of equipment and pathways
	o A description of how the monitoring system will cover all nearby downwind communities
Fenceline Air Monitoring Equipment Description	
☑	Select ~~open-path~~fenceline air monitoring equipment that is capable of continuously measuring air pollutants in real-time and provide the following:
	o Specifications for the ~~open-path~~fenceline instruments (e.g., detection limits, time resolution, etc.)
	o Explanation of the operation and maintenance requirements for selected equipment
	o Substantiate any request to use alternative technologies
☑	Monitor for the pollutants listed in Table 1 of Rule 1180 and include the following:
	o Specify pollutant detection limits for all instruments and paths measured
	o Substantiate any exclusion of chemical compounds listed in Table 1 of Rule 1180 or measurement of a surrogate compound~~or the use of an alternative air monitoring technology~~
Quality Assurance	
☑	Develop a Quality Assurance Project Plan (QAPP) that describes the following:

	o Quality assurance procedures for data generated by the fenceline air monitoring system (e.g. procedures for assessment, verification and validation data)
	o Standard operating procedures (SOP) for all measurement equipment
	o Routine equipment and data audits
Data Presentation to the Public	
☑	Design a data display website that includes the following:
	o Educational material that describes the objectives and capabilities of the fenceline air monitoring system
	o A description of all pollutants measured and measurement techniques
	o A description of background levels for all pollutants measured and provide context to levels measured at the fenceline
	o Procedures to upload the data and ensure quality control
	o Definition of QC flags
	o Hyperlinks to relevant sources of information
	o A means for the public to provide comments and feedback; Procedures to respond
	o Archived data that with data quality flags, explains changes due to QA/QC and provides chain of custody information
	o Quarterly data summary reports, including relationship to health thresholds, data completeness, instrument issues, and quality control efforts
Notification System	
☑	Design a notification system for the public to voluntarily participate in that includes the following:
	o Notifications for activities that could affect the fenceline air monitoring system (e.g., planned maintenance activities or equipment failures)
	o Notifications for the availability of periodic reports that inform the community about ~~the~~ air quality ~~and provide updates on the performance and maintenance of the fenceline air monitoring system~~
	o Triggers for exceedances in thresholds (e.g. Acute Reference Exposure Levels (RELs))
	o Communication methods for notifications, such as, website, mobile applications, automated emails/text messages and social media

†Dispersion modeling shall be conducted using U.S. EPA's Preferred and Recommended Air Quality Dispersion Model (e.g., Health Risk Assessment)

Details about each of these key considerations are explained below.

a. Multi-Pollutant Monitoring

Multi-pollutant monitoring is a means to broaden the understanding of air quality conditions and pollutant interactions, furthering capabilities to evaluate air quality models, develop emissions control strategies, and support research, including health studies. Petroleum refineries and

activities associated with them emit a wide range of air pollutants, including criteria pollutants (SO_2, NO_X, CO, and PM); volatile organic compounds (VOCs), including photochemically reactive VOCs that contribute to formation of tropospheric ozone (e.g., ethylbenzene, formaldehyde); carcinogenic hazardous air pollutants (e.g., benzene, 1,3-butadiene, naphthalene, polycyclic aromatic hydrocarbons, formaldehyde); non-carcinogenic air toxics (hydrogen fluoride, hydrogen cyanide); persistent bio-accumulative toxics (mercury), and other air pollutants (e.g., hydrogen sulfide and carbonyl sulfide).

Chemical compounds associated with health risk and those measured at other ambient air monitoring locations should be identified in the air monitoring plans. Identification of the health risk drivers can be informed by the health risk assessment studies performed at the refineries, as well as other information regarding potential health risk near refineries. ~~At the minimum, compounds listed in Table 1 below, shall be considered for the fenceline air monitoring as part of the air monitoring plan. Therefore, e~~Exclusion of any of these chemical compounds identified in Table 1 must be thoroughly explained and justified within the fenceline ~~Air~~ air ~~Monitoring~~ monitoring ~~Plan~~plan. Additional chemicals may be of interest to monitor as a part of the fenceline air monitoring system, for example, if certain annual emissions exceed 10,000 lbs/year. ~~-~~Other chemicals may also be inherently monitored by the ~~open-path~~ systems and may be included in the reporting for additional public information.

i. Chemical Species of Interest

The California Environmental Protection Agency's (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is collaborating with the California Air Resources Board (ARB) and the Interagency Refinery Task Force to identify and develop information on chemicals emitted from refineries and their health effects in order to assist air agencies in developing plans for air monitoring at refineries in California. OEHHA published the draft report[1] in September 2017 that presents a comprehensive list of chemicals emitted from California refineries, including emissions that occur routinely in daily operations, as well as accidental and other non-routine emissions. The list prioritizes the chemicals according to their emissions levels and toxicity, providing a list of chemicals that would be top candidates for air monitoring near refineries according to the volume of the chemicals emitted and their toxicity. The presence of a chemical on this comprehensive list does not necessarily mean it is released from all refineries, at all times, or in significant quantities.

The potential compounds emitted from refineries that pose the highest health risk in nearby communities should be identified along with the appropriate monitoring technologies selected to measure them. This assessment should be informed by the OEHHA report on Refinery Chemical Emissions and Health Effects Report. ~~Measurements should be continuous and reported in real-time when available. The fenceline monitoring should be performed using open-~~

[1] Analysis of Refinery Chemical Emissions and Health Effects – Report. September 27, 2017 (https://oehha.ca.gov/media/downloads/faqs/refinerychemicalsreport092717.pdf)

~~path technology capable of measuring the pollutants associated with petroleum refinery operations.~~ The chemical compounds of interest for Rule 1180 are presented in Table 1 below.

~~The air monitoring plan must provide specification about the open-path instruments selected for a fenceline air monitoring system, such as, detection limits of the equipment for each chemical and time-resolution capability. Also, the air monitoring plan must demonstrate that the instruments can measure the pollutants identified in Table 1. The selected open-path instruments should be able to record and store the measured spectral absorption and associated average concentrations of measured pollutants for retrospective investigations. Where open-path monitors are being operated, all factors that could affect air pollutant measurements, such as, the maximum path length the instruments are capable of measuring and potential interferences must be discussed in the air monitoring plan.~~

~~Further, t~~The petroleum refinery air monitoring plan must explain exclusion or replacement of monitoring for any of the compounds identified in Table 1 below. For example, in certain instances a petroleum refinery operator may propose to exclude monitoring for specific compounds that are not likely to be measured at or above the detection limits of the fenceline air monitoring equipment. In these instance, the petroleum refinery operator would be required to provide an alternative measurement methodology or evidence (e.g., historical air monitoring data or operational information) to support the proposed exclusion. A petroleum refinery may submit a revised fenceline air monitoring plan if changes to the fenceline air monitoring system are supported based on new information.

Table 1- Refinery-Related Air Pollutants to be Addressed by Fenceline Air Monitoring Plans

Air Pollutants
Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3-Butadiene
Styrene
BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylenes)
Other Compounds
Hydrogen Sulfide
Carbonyl Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride[+]

[+] If the facility uses hydrogen fluoride.

- **Sulfur Dioxide (SO_2)**

Heating and burning of fossil fuel releases the sulfur present in these materials and result in the formation of SO_2. SO_2 is the criteria pollutant that is the indicator of SOx concentrations in the ambient air and can have direct health impacts and can cause damage to the environment. As result, SO_2 is routinely measured in ambient air monitoring networks. The major sources of SO_2 at refineries are fuel fired in furnaces and boilers, FCC units, Sulphur Recovery Units, flares, etc. As a result, measurement of this compound will help identify potential contribution of refineries to the ambient concentrations in nearby communities.

- **Nitrogen Oxides (NOx)**

Both gasoline and diesel powered vehicles are the main source of NOx emissions, however substantial emissions are also added by stationary sources such as petroleum refineries. Nitrogen oxides is a group of highly reactive gases that contribute to the formation of secondary particles, as well as tropospheric ozone. Scientific evidence links NO_2 exposures with adverse respiratory effects and is one of the criteria pollutants, making it a compound that is routinely measured in ambient air monitoring networks. NO_2 measurements also typically include measurement of NO

and NO_X. Measurement of these constituents will help determine if refineries add significant concentrations to nearby urban environments.

- **Volatile Organic Compounds (VOCs)**

VOCs include non-methane hydrocarbons (NMHC) and oxygenated NHMC such as alcohols, aldehydes and organic acids. They are emitted by a large number of sources, but many hydrocarbons are associated with fuels and the production of fuels. VOCs, mainly hydrocarbons, originate from production processes, storage tanks, transport pipelines and waste areas. As a result, measurement of these compounds is critical to determine the impacts that refineries have on nearby communities. While measurements of NMHC could provide valuable information about potential refinery emissions, for a refinery it is possible to distinguish a few and well defined number of specified VOCs to represent refinery fugitive emissions and/or health risk drivers. Measurement of these specified VOCs must be carried out continuously, using open-path technologies at the fenceline of the refineries

Unless it is demonstrated in the fenceline air monitoring plan that an alternative measurement technique (e.g. point monitors) can be effectively utilized. Automated gas chromatographs (Auto-GCs) is the best point monitor option to measure select VOC pollutant concentrations semi-continuously at a monitoring site. This technology has been developed by a number of manufacturers and U.S. EPA have evaluated current state and availability of several commercially available auto-GCs in order to determine their suitability for use in air monitoring stations and have published the results in the Photochemical Air Monitoring Station (PAMS) Gas Chromatography Evaluation Study Report[2]. Other methods for continuous measurement of speciated VOCs include, but not limited to, in-situ FTIR systems and quantum cascade laser instruments that can effectively measure selected VOCs simultaneously with high time resolution. The use of these measurement techniques can potentially provide real-time and continuous air quality data, however, a substantial number of auto-GC units (or other point monitors) would need to be deployed to achieve sufficient spatial coverage along the property boundary or fenceline of a petroleum refinery.

In some cases more traditional measurement techniques could be utilized, if the air monitoring plan successfully demonstrates the effectiveness of the measurement technique. For example, VOCs could be measured by the collection of ambient air using evacuated canister sampling and subsequent analysis on a gas chromatograph (GC). This method relies on acquiring air samples that often require a considerable amount of time depending on the measured concentrations (e.g., several hours with canisters to several days with adsorption cartridges) and subsequent chemical analysis in a certified laboratory. The sample collection time can vary from instantaneous grab samples to averaging times of 24 hours. If this sampling technique is selected, periodic 24-hour samples (e.g., 1 in 6 days) and instantaneous grab samples (e.g., 5- or 10-minute

[2] RTI (2014). Gas Chromatograph (GC) Evaluation Study: Laboratory Evaluation Phase Report. Prepared for U.S. EPA PAMS Program. [https://www3.epa.gov/ttnamti1/files/ambient/pams/labevalreport.pdf]

samples) that are triggered by elevated readings of continuous NMHC are required. The continuous NMHC measurement must achieve the temporal and spatial coverage requirements of the rule, while the periodic and triggered samples will provide information on the speciation of the measured VOCs.

Measurement of hydrocarbons will help determine if refineries add significant concentrations to nearby urban environments and can indicate leaks and emissions from refinery sources. The following are potential compounds of interest and are separated out based on their measurement and/or analytical techniques.

- **Aldehydes**

Aldehydes emitted into ambient air include, but are not limited to, formaldehyde, acetaldehyde, and acrolein that are identified as toxic air contaminants (TAC) and could be emitted from a refinery. These compounds are the products of incomplete combustion of natural gas and are both precursors of atmospheric radicals that accelerate the formation of ozone and toxic air pollutants that may cause respiratory symptoms and cancer. These compounds ~~should~~ could be measured continuously at the fenceline of the refineries using open-path technologies. A more detailed listing of aldehydes with potential health concerns is provided by OEHHA.

- **Aromatic Hydrocarbons**

Some of the aromatic hydrocarbons known as BTEX (referring to benzene, toluene, ethylbenzene, and xylenes) occur naturally in crude oil and are associated with emissions from petroleum refineries. The BTEX compounds are products of incomplete combustion of natural gas, and also fugitive emissions from petroleum storage and transfer. Emissions also occur from different combustion sources, such as wood combustion, and stationary and motor vehicle fossil fuel combustion, and elevated levels of BTEX compounds are expected in vicinity of major roadways. This group of aromatic VOCs are important because not only they pose risk to human health, they also play a role in formation of tropospheric ozone.

Analytical methods for BTEX compounds in air include absorption traps and subsequent separation by gas chromatography (GC) with detection by flame ionization optical absorption or mass chromatography, as well as automatic-GC monitors. Optical methods such UV-DOAS and OP-FTIR monitors are more advanced techniques for measurement, however, UV-DOAS instruments are particularly more sensitive in detection of BTEX compounds at low concentrations and with good time resolution compared to OP-FTIR instruments.

- **Other Hazardous Air Pollutant VOCs**

Other VOC air toxics of concern that are often reported in refineries' emission inventories include 1,3-butadiene and styrene that have been detected in routine and non-routine refinery emissions and therefore must be measured and reported. A more detailed listing of potential VOCs of health concern is provided by the OEHHA and the AB 2588 Health Risk Assessment reports that will help inform other toxics specific to each facility. Depending on emissions from each facility,

measurement of other VOC air toxics may be ~~required~~appropriate. Such VOC compounds include, but are not limited to, methanol, phenol, naphthalene, and hexane. For example, the plan could include a requirement that these toxic gases shall be ~~measured and reported~~monitored and reported, if the ~~reported~~ emissions exceed 10,000 lbs/year and/or selected monitoring technologies are capable of detecting them.

- **Hydrogen Sulfide (H_2S)**

Hydrogen sulfide is a colorless, flammable, extremely hazardous gas with a "rotten egg" smell. It can result from the breakdown of organic matter in the absence of oxygen such as in swamps and sewers, occurs naturally in crude petroleum and natural gas, and is produced at oil refineries as a by-product of refining crude oil. As a result, low-level concentrations can occur continuously at petroleum refineries and its measurement will help identify potential leaks at refineries and address community odor concerns.

- **Carbonyl Sulfide (COS)**

Carbonyl sulfide (COS) is naturally found in crude oil and is a chemical intermediate and a byproduct of oil refining with a distinct sulfide odor. It is classified as a California Toxic Air Contaminant (TAC) and a federal hazardous air pollutant (HAP). COS can be released into atmosphere as fugitive emissions from refineries and at high concentration levels may cause narcotic effects in humans. COS can be measured using open-path technologies and should be measured and reported at the fenceline if the selected open-path monitors can detect it at desirable levels.

- **Ammonia (NH_3)**

While the main sources of ammonia are natural, primarily from the decay of organic matter, petroleum refineries can also emit considerable amounts, particularly from catalyst regenerator vent releases. It is colorless, pungent-smelling, and corrosive and even though it is unlikely to have adverse effect on health at background levels, exposure to high concentrations following an accidental release or in occupational settings may induce adverse health impacts.

- **Black Carbon (BC)**

Black carbon (BC) is a product of incomplete combustion of fossil fuels, biofuels, and biomass, and it is emitted directly into atmosphere in form of particles, mostly in the PM2.5 size range. BC is a major component of "soot", a complex mixture that also contains some organic carbon (OC). It is emitted in high quantities by diesel engines and biomass burning. Although BC is often associated with emissions from heavy-duty diesel engines, a portion of all combustion emissions contains these constituents. BC has been routinely used to estimate the contribution of diesel particulate matter (DPM) to total PM. DPM is the major contributor to air toxic health risk in the South Coast Air Basin, however it cannot be directly measured through atmospheric measurements and has to be estimated, usually based on BC measurements. ~~The DPM contribution to PM in areas where the affected refineries are situated are expected to be high~~

~~due to high total truck trips from the ports of Los Angeles and Long Beach for goods movement, as well as presence of other industrial activities in the region. Therefore, elevated BC levels are expected in communities near refineries.~~ In order to help determine if refineries add significant BC concentrations to nearby urban environments and discern the contribution of refineries to observed BC levels in the community, the refinery operators are advised to determine potential BC hotspots on the facility fenceline (or within the facility), and perform BC measurements.

- **Hydrogen Cyanide (HCN)**

Hydrogen cyanide is colorless, highly flammable and can be explosive when exposed to air in high concentrations. It is released from various industrial activities, including refining. At high concentrations, such as from accidental releases, it is highly toxic. HCN can be effectively measured using open-path technologies and should be measured and reported at the fenceline if the selected open-path monitors can detect it at desirable levels.

- **Hydrogen Fluoride (HF)**

Hydrogen fluoride (HF) is a pungent, highly corrosive acid used at some oil refineries in a process called alkylation that boosts gasoline octane. HF also is used at chemical plants to manufacture compounds including refrigerants. The chemical poses a health risk to nearby residents and businesses because in the event of an accidental release, it can form a dense, fuming cloud capable of etching glass and causing severe damage to human skin and lung tissue. The facilities with alkylation units may already have monitors in place for detecting HF, such as could be associated with an accidental releases. Such monitors should ideally be placed near the alkylation unit, to ensure a rapid detection of accidental leaks to subsequently provide warning and real-time alerts to inform health concerns for the protection of refinery workers and the nearby communities in the vicinity of the refinery. All facilities that use hydrogen fluoride must monitor the ambient concentrations of HF or demonstrate in the air monitoring plan that HF concentrations are adequately monitored and reported at the alkylation unit to be exempt from HF measurements at the fenceline.

b. Continuous and Real-Time Measurement of Air Pollutants

Continuous air monitoring at or near the property boundaries of petroleum refineries can significantly improve rapid detection and communication of potential hazardous releases to refinery operators, responders, and the public in addition to providing long-term data be used to determine trends in emissions (e.g., diurnal, seasonal routine emissions variations). Therefore, the fenceline monitoring shall be operated continuously with a required time resolution of five-minute averaging when feasible. High time resolution monitoring reduces the chance of pollutant hot spots being undetected over the measured area and can provide real-time emissions information to refinery personnel and the nearby communities. If achieving the desired time-resolution is not feasible, refinery operators shall provide rationale in the air monitoring plan for any proposed time resolutions greater than five-minute averaging (e.g., based on the equipment

employed, the number of paths covered by each open-path system, or other operational limitations).

c. Selection of Fenceline Air Monitoring Technologies

A petroleum refinery fenceline air monitoring system is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery. Multiple technologies may need to be employed to ensure adequate compound identification. Conventional fenceline air monitoring techniques rely on point monitors that only provide concentration information from a single point in the survey area, greatly increasing the chances of missing surface emissions hotspots or emissions plumes. Therefore, even after collecting data from multiple points in the survey area, the point sampling approaches may lack the spatial or temporal data necessary to obtain a complete picture of the emissions from large area sources.

Open-path technology is a well-established method to measure path-integrated trace gas absorptions and concentrations in the open atmosphere making it ideal for long-term fenceline ~~air~~ monitoring of ~~emissions~~ pollutant concentration levels emitted from refineries or other large area sources. Open-path technology is a type of Optical Remote Sensing (ORS) that measures air ~~emissions~~ pollutant concentration levels along an open-path, significantly improving the spatial coverage. ORS instruments use a light signal to continuously detect and measure concentrations of chemical compounds along the distance covered by the light signal in real-time. As a result, open-path technologies can provide greater temporal and spatial resolution compared to conventional air monitoring techniques; for example, narrow pollutant plumes can be detected by an open-path fenceline air monitoring system that might otherwise be missed by point monitors. The light source emits light towards a detector either at the opposite end of the light path (bi-static configuration) or co-located with the light source (mono-static configuration) if the light is reflected back by a reflector, providing path-averaged concentrations of multiple pollutants, simultaneously. Although the open-path ORS techniques have been used for over 20 years and are well-established, they are constantly improving and gaining use for large area source monitoring applications that are not conductive to traditional point source testing methods. Improvements often include changes to technologies that improve detection limits or the type of compounds detected.

Another advantage of open-path measurements is the capability of monitoring pollutant concentrations due to point source and fugitive emissions at or near the property boundary of a petroleum refinery operation~~ depending on the design of the monitoring system~~. Fugitive emissions are emissions of gases or vapors from leaks and other unintended or accidental releases of emissions. Leaks from pressurized process equipment generally occur through valves, pipe connections, mechanical seals, or related equipment, usually originating from the process area. Fugitive emissions also occur from storage tanks. These tanks are used to store crude oil prior to refining, intermediates between refining processes, and refined product streams. Except for a few process storage tanks, the storage tanks are generally located together in what is

referred to as the "tank farm". Due to the large number of potential leak sources that are scattered over a wide area at large refineries and difficulties in detecting and repairing these leaks (which may become significant collectively), these emissions are best monitored over a large area or path, using the open path systems. U.S. EPA has published a comprehensive assessment of various open-path ORS technologies, outlining the advantages and limitations of each measurement method.[3] Based on the advantages that open-path technologies provide over conventional air monitoring techniques, SCAQMD staff recommends the use of open-path technology, when applicable, for implementing a fenceline air monitoring system required by Rule 1180.

The air monitoring plan must provide specifications for the fenceline instruments selected for a fenceline air monitoring system, such as~~,~~ detection limits of the equipment for each chemical and time-resolution capabilities~~y~~. Also, the air monitoring plan must demonstrate that the instruments can measure the pollutants identified in Table 1. The selected open-path instruments should be able to record and store the measured spectral absorption and associated average concentrations of measured pollutants for retrospective investigations. Where open-path monitors are being operated, all factors that could affect air pollutant measurements, such as~~,~~ the maximum path length the instruments are capable of measuring and potential interferences must be discussed in the air monitoring plan. In certain instances a refinery owner or operator may demonstrate that other air monitoring techniques and/or technologies (e.g., emerging technologies) could be used in place of open-path technology depending on the pollutant(s) that are monitored.

d. Alternative Fenceline Air Monitoring Technologies

In certain instances, alternative monitoring technologies may be appropriate to cover areas along the perimeter of a refinery~~ that are not well-suited to open-path technologies~~. In these instances, the refinery operator may propose an alternative air monitoring technology(s). The refinery operator must demonstrate the proposed alternative air monitoring technology(s) will meet the requirements of Rule 1180 and provide adequate sensitivity and adequate temporal and spatial coverage for the compounds identified in Table 1.

e. Fenceline Sampling Location(s) and Coverage

Air monitoring plans must specify the following information related to the locations selected for the fenceline air monitoring equipment:

- Areas along the perimeter that are likely to detect compounds associated with petroleum refinery operations;
- Proximity of proposed fenceline monitoring equipment to residences in the community and other sensitive receptors, such as schools, data care centers, hospitals, clinics, nursing homes, and recreation areas;

[3] https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf

- Where equipment will be sited (e.g., GIS coordinates);
- Elevations at which equipment will be placed; and
- Length of each path that will be monitored with ~~open-path~~fenceline instruments.

The air monitoring plan must provide a discussion that explains the rationale for choosing these equipment siting specifications. When considering a suitable ~~open-path~~fenceline technology for sites along the petroleum refinery perimeter the refinery operator must address key considerations, such as, the distance necessary to accurately measure emissions and critical transport areas around the perimeter of the petroleum refinery. These considerations are further discussed below.

To ensure the highest level of accuracy when measuring emissions levels at or near the property boundary of a petroleum refinery facility the fenceline air monitoring system should be designed considering the following key factors:

i. Local Meteorological Conditions

Meteorological conditions can significantly affect the concentration of air pollutants in a region. Therefore, it is important that the petroleum refinery operators consider the typical meteorological conditions (e.g., wind patterns, temperature, rainfall, cloud cover, etc.) of a site. For example, if a facility is in an area that is prone to fog, the facility operator should ensure the equipment for the fenceline air monitoring system is not sensitive or easily impeded by low-lying cloud cover produced by fog.

Evaluating historical meteorological data is imperative in air monitoring equipment site selection and in determining whether certain candidate equipment locations are likely to experience higher measured pollutant concentrations from an emissions source. Wind can be the most critical meteorological element for the transport of refinery emissions to the surrounding communities. Often, peak concentrations occur during stable, low wind speed conditions when pollutants can build up and meander in any direction. To the extent feasible, both long- and short-term wind measurements should be assessed in the air monitoring plan. Frequency distributions of winds and associated graphic analyses (i.e., wind roses) can be analyzed to evaluate predominant wind patterns, as well as diurnal and seasonal variability.

ii. Topography

Concentrations of pollutants can be greater in valleys than for areas of higher ground. This is because, under certain weather conditions, pollutants can become trapped in low lying areas. Therefore, the topography of the petroleum refinery can affect the distribution and dispersion of pollutants from refinery operations. ~~To ensure that maximum pollutant levels along the perimeter of the facility are measured, t~~The petroleum refinery operator should design the fenceline air monitoring system to ensure fenceline air monitoring equipment is sited such that it captures the most critical transport and dispersion areas ~~highest concentrations of pollutants~~ along the perimeter of the facility to the extent feasible.

iii. Pollutant Hotspots

It is essential for the refinery operators to identify potential pollutant hotspots within the facility to ensure fenceline monitoring of these emissions and to provide effective information to the neighboring communities with sufficient spatial coverage. Therefore, in developing the air monitoring plan the refinery operator should survey the facility with special attention to areas where emissions are most likely, such as, tank storage, processing, wastewater treatment, and loading areas. Information gathered from the survey should be used to establish the facility's overall emissions profile. The survey should also consider geographical and topographical parameters, as well as the elevation of potential pollutant hotspots.

iv. Spatial Coverage of Monitors

The fenceline monitoring system should be designed to ensure adequate coverage of the area along the facility perimeter, to the extent feasible. Considerations, such as, the proximity of refinery emissions sources to sensitive receptors (i.e., residents, schools, hospitals, etc.) and type of pollutants to be measured could require additional open-path monitors for a facility. Also, information available from dispersion modeling, gradient sampling and mobile measurements, should be taken into consideration when assessing adequate coverage of a facility perimeter with a fenceline air monitoring system.

Sampling locations should be away from certain supporting structures and have an open, unobstructed path. Ideally, each air monitoring path should be at least 1 meter vertically and horizontally from any supporting structure, and away from dusty or dirty areas. Moreover, the air monitoring plans must identify potential disruption of airflow and the potential effect on measured concentrations caused by obstacles or traffic. Also, potential interferences caused by meteorological (e.g., fog or rain) or process issues (e.g., process steam) associated with the selected location(s) must be addressed. The air monitoring plan should describe how the proposed fenceline air monitoring system will effectively provide relevant information for all nearby downwind communities given the expected meteorological conditions. Due to the high prevalence of marine fog in the areas where the Basin refineries are located, heaters and fans may be required to keep the instrument optics and reflector mirrors free of moisture to maximize data recovery.

f. Emerging Technologies

Some emerging next-generation monitoring technologies could possibly meet the requirements for this rule. For example, low-cost sensors could potentially allow cost-effective, real-time monitoring at numerous fixed locations along the perimeter (i.e., the fenceline) of a petroleum refinery. Despite substantial progress, at this time, none of these methods can provide the level of sensitivity and accuracy required to measure the pollutants required by Table 1 of Rule 1180 at the levels expected during normal refinery operations. However, gaseous sensors are expected to improve in the near future and fenceline air monitoring plans could be augmented to employ

these sensors, therefore, SCAQMD may consider approving emerging technologies for future compliance with Rule 1180.

SCAQMD has established an Air Quality Sensor Performance Evaluation Center (AQ-SPEC)[4] to inform the public about commercially available low-cost sensors. Under this program, the performance of these sensors is compared against Federal Reference Method (FRM), Federal Equivalent Method (FEM), and Best Available Technology (BAT) instruments to determine their performance relative to more established measurement techniques. Some of these commercially available low-cost sensors can provide measurements for criteria pollutants (e.g., PM2.5, PM10, ozone, NO_2, and CO) which correlate well with FRM, FEM, and BAT methods, however, the situation is different for gaseous air toxics, where sensors with sufficiently low detection limits for specific compounds (e.g., benzene) are generally not available at this time. Total VOC concentrations can be measured using sensors based on Photon Ionization Detection (PID) at parts-per-billion (ppb) levels, although they do not provide VOC speciation and are not considered "low-cost" sensors. These sensors can serve as a temporary measurement technique in the event of an equipment failure or during extended maintenance activities until the fenceline air monitoring system is restored to normal operating conditions. However, as a substitute for the ORS-based approach, the refinery operators would have to deploy a network of traditional point monitors simultaneously at the fenceline of a facility. This would likely result in substantially increased sampling and analysis costs in order to achieve the same level of temporal and spatial resolution and speciation of the target pollutants achieved with the ORS methods. In comparing the costs of an ORS-based measurement approach with traditional point monitoring approaches for long-term fenceline measurements, an ORS-based approach is likely to be more cost-effective.

3. Meteorological Measurements

Exposures to air contaminants within an urban area can vary greatly due to proximity to emission sources, the magnitude and specific mix of emissions, structures and terrain influences, and meteorological conditions. Variability in wind speed and direction in particular, pose significant challenges for the analysis of data from air quality monitoring programs and exposure assessments that rely on the ability to determine upwind and downwind locations in relation to emissions sources at any time. Therefore, an understanding and assessment of the general meteorological patterns in and around each facility is a critical component in not only the design of the measurement systems but also interpreting the measurement results, including the transport and dispersion of air pollutants from the refinery to the community. Therefore, the sub-paragraph (d)(2)(D) of Rule 1180 requires fenceline monitoring locations to continuously record wind speed and wind direction data.

The Air Monitoring Plan must provide information on siting considerations and equipment to be employed for real-time meteorological data collection at high time resolution (at minimum,

[4] http://www.aqmd.gov/aq-spec

matching the time resolution of the air quality monitors), in order to provide high quality data. Wind sensor quality, siting, and quality assurance shall meet the specifications and guidelines that are typically required by air quality regulatory measurements and modeling purposes (for reference, see the U.S. EPA Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements[5].

4. Quality Assurance/Quality Control (QA/QC)

The measurements from the fenceline air monitoring system shall reflect a commitment to quality data that is outlined in the air monitoring plan. The air monitoring plan shall address quality assurance, including training of personnel, development and maintenance of proper documentation [i.e., instrument manuals, Standard Operating Procedures (SOP), and a Quality Assurance Project Plan (QAPP)], routine maintenance and calibration checks, technical audits, data verification and validation, and data quality assessment. A QAPP for each refinery fenceline monitoring project must be developed that outlines the QA/QC plan, following U.S.EPA guidelines[6]. The QAPP provides a blueprint for conducting and documenting a study or program that produces quality results and must outline the specific goals of the monitoring networks and instrumentation, the data quality that is required and how that relates to when data generated by the instrumentation is accepted, and how the data will be reviewed and managed by the refineries. The QAPP should provide clear definitions and procedures for QA/QC that are necessary to indicate why some data may be missing, suspect, or invalid.

The critical functions to be addressed in the QAPP are summarized below:

- **Project background and management:** The QAPP should provide background information and define the problem(s) to be addressed and the general goals of the fenceline and community monitoring, and describe project organization, quality objectives and acceptance criteria for measurement data, and plans for documentation, record keeping, and data dissemination.
- **Technical Approach:** The QAPP should demonstrate that the appropriate approaches and methodologies are employed for performing measurements, data handling, and quality control are selected and address the design and implementation of the measurement systems.
- **Assessment/Oversight:** The QAPP should offer appropriate QA/QC steps for ensuring the effectiveness of the monitoring plan covering experimental design, representativeness of the data, instrument operation and data acquisition, calibration check procedures, data quality indicators, independent systems and performance audits, and peer-review.

[5] https://www3.epa.gov/ttn/amtic/files/ambient/met/Volume_IV_Meteorological_Measurements.pdf
[6] U.S. EPA (2002). Guidance for Quality Assurance Project Plans. EPA/240/R-02/009. [https://www.epa.gov/sites/production/files/2015-06/documents/g5-final.pdf]

- **Data Validation and Usability:** The QAPP should describe what steps will be taken to ensure that the individual data elements conform to the criteria specified in the monitoring plans.

All monitoring data must be collected, managed and archived in a standard electronic format after necessary data processing and validation. Processing the data involves collecting the data, assuring its quality, storing the data in a standardized format, and interpreting the data for communication to the public. The most critical steps in this process include:

- Automatically retrieving data from the fenceline monitors containing the measured levels of each air pollutant along with meteorological parameters;
- Validating data file completeness and integrity;
- Transferring file contents to a database;
- Flagging data that do not meet pre-defined quality control limits;
- Copying quality assured data and indices into a database for use by data display and dissemination program;
- Generating and recording logs to monitor system operation;
- Notifications when measured concentrations are above pre-defined concentrations limits.

To ensure that the collected data meets the highest quality possible, each piece of monitoring equipment must be operated in strict accordance with an in-depth operating protocol. To achieve the appropriate level of detail and standardization, and to consequently ensure that the monitoring equipment provides high quality data, Standard Operating Procedures (SOPs) must be prepared for each specific measurement method. The SOPs should be informed by general operating instructions that are typically provided by the manufacturers of equipment, by operational experience and audits, and by general operational guidelines and performance specifications that are available for U.S. EPA and State approved methods. The SOPs should address specific topics such as calibration procedures and quality control procedures (indicating standards and checks, acceptance criteria and schedule), as well as data reduction (indicating validation procedures, reporting and schedule).

Rule 1180 requires that the measurements from the fenceline monitoring system be available to the public on a real-time basis with Quality Assurance/Quality Control (QA/QC) measures implemented to provide confidence in the data collected. Publicly available quarterly measurement reports should reflect a higher level of data validation, including a manual review of the data by qualified personnel. The real-time and near-real-time disseminated measurement data should not be considered final, but it is important that the preliminary real-time measurement data distributed to the public be of an acceptable quality. Also, it is important that instrument failures are detected quickly, with automated screening where feasible, to prevent grossly invalid data from being presented to the public. This can be accomplished by utilizing built-in status flags on the instrument operational parameters and by providing real-time data

screening for outliers, impossible values, stuck values, negative values, rates of change, excessive short-term noise, etc.

5. Data Display and Dissemination

The primary goal of Rule 1180 is to ~~provide continuous and~~collect -real-time emissions data and share that data with ~~to~~ the- community, local responders, and industry, to the extent feasible and as quickly as possible, so that it can be used to evaluate and adaptively manage the impacts of refineries' emissions on the community. Therefore, it is essential that the collected data must be made available and displayed online in a relevant, useful and understandable manner to the public in real-time or near-real-time and clearly identified as preliminary data. The real-time or near-real-time data must be submitted to SCAQMD, as quickly as practicable, in an approved format. The refinery operators must also publish quarterly reports written at a public-friendly level on the data dissemination website. The air monitoring plan must include information and examples of how the quality controlled data will be displayed and the steps taken to provide context to the real-time measurements to the public. Also, the air monitoring plan shall address means for providing automated, reliable, useful, and understandable information, including, the intent and limitations of the data collected and an explanation of how background concentrations and/or contributions from other sources may affect measured concentrations.

The refinery operators must provide quarterly data reports after rigorous review of calibration data, data processing calculations (such as conversion calculations of instrument signal to pollutant concentration), data consistency, field data sheets and logbooks, instrument performance checks, and equipment maintenance and calibration forms. All changes to the reported real-time data must be explained in quarterly reports. The major goals of the outreach program include:

- Developing multiple communication venues to ensure widespread access to environmental information and to appeal to the various communication preferences (e.g., text messages, email, website, etc.) among the end users;
- Promoting access to and awareness of the measurements and use of the real-time air pollution data through an active outreach and education program;
- Developing contextual material to assist interpretation and understanding of the real-time data and its limitations;
- Designing an effective public outreach program (e.g., informational meetings, workshops, etc.) that informs the public about the health impacts associated with emissions levels detected by the fenceline air monitoring system and informs decision related to reducing community exposure;
- Identifying designated personnel to address SCAQMD's and public questions about monitoring equipment and readings.

The air monitoring data must be provided in a manner that the public can readily access and understand. Websites for all refineries should be designed in a user-friendly format. In order to

make the data provided in this outreach as accessible as possible, the project websites should use data visualization tools to graphically depict information using maps and time series plots of measured pollutants and wind data. In order to provide context to this complex data set for the public, the designed website should contain information regarding the species measured and the measurement techniques, discussion of levels of concern for each measured species, typical background levels, potential non-refinery sources that could contribute to measured concentrations, and definition of data QC flags. This should be written at a public-friendly level with clarity and thoroughness and with links provided to additional sources of information. In addition, the air monitoring plan and the data website should include details of how the public can report experiences and provide comments and feedback for improvement of the website and other data dissemination tools, and the monitoring activities in general.

6. Notification System

The website should offer an opt-in notification system that is integrated with the data collected by the air monitoring network that automatically generates and issues notifications to subscribers when each of the pollutant levels ~~are above~~exceed ~~specified~~corresponding thresholds pursuant to the approved air monitoring plan. Resources that should inform the thresholds include the National Ambient Air Quality Standards (NAAQS), California Ambient Air Quality Standards (CAAQS), and the acute, chronic or carcinogenic Reference Exposure Levels (RELs) as assessed by California Office of Environmental Hazard Assessment (OEHHA[7])~~, as well as unusually high concentrations (e.g. once a major leak is detected).~~.

An REL is an airborne concentration level of a chemical at or below which no adverse health effects are anticipated for a specified exposure duration as developed by RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. RELs are designed to protect the most sensitive individuals in the population by the inclusion of margins of safety. Therefore, exceeding the REL does not automatically indicate an adverse health impact. The REL is not the threshold where population health effects would first be seen. However, levels of exposure above the REL levels may have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals (e.g., the very young, the elderly, pregnant women, and those with acute or chronic illnesses). OEHHA has developed acute RELs for assessing potential non-cancer health impacts for short-term, one-hour peak exposures to air pollutants including facility emissions.~~, therefore~~ For example, if the one hour average concentration of any of the measured pollutants exceed its corresponding acute REL, notifications should be sent out to the subscribers. By definition, an acute REL is an exposure that is not likely to cause adverse health effects in a human population, including sensitive subgroups, exposed to that concentration for the specified exposure duration on an intermittent basis. Chronic RELs are developed for assessing non-cancer impacts from long-term exposure, at or below which no adverse health impacts are anticipated following long-term exposure. Long-

[7] OEHHA, 2008; http://www.oehha.ca.gov/air/allrels.html

term exposure for these purposes has been defined by U.S. EPA as at least 12% of a lifetime, or about eight years for humans. However, for assessment and reporting programs, such as those required by AB 2588, 1-year emissions assessments are typically used for modeling ambient conditions in nearby communities for long-term exposures. Therefore, chronic RELs must be compared to annual average concentrations of measured toxic pollutants and be reported in the periodic reports once one year of data is available.

The notification system should be designed to provide information to the public via email, text message or other communication venues, with, at minimum, the ability to be notified regarding: (1) data availability and release of periodic reports; (2) ~~acute or chronic REL~~ exceedances of thresholds established in approved fenceline air monitoring plans; and (3) monitoring system status. The timely notifications will inform the public when certain pollutants exceed those concentration thresholds or may pose a potential health concern, allowing the public to consider further actions to protect their health. The notifications would also provide information to refinery operators to rapidly identify and mitigate any undetected and/or accidental emissions. This can have a significant impact on the reduction of refinery fugitive emissions.

Websites should not simply provide graphical information about current conditions. Air monitoring plans should include a plan for how residents can access historical data directly and in a user-friendly manner. The archived data should include data quality control flags, explain changes, and provide information to identify data that should be removed or was removed after QA/QC. The data must also be made available to SCAQMD in an approved format.

The air monitoring plan should also identify alternative methods of accessing ~~data~~periodic reports ~~without a computer~~ for those members of the community who may not have internet access (e.g., automated phone systems for dial-in information, ~~or~~ public displays, hard copies of periodic reports in libraries or community centers, etc.). Based on the needs of the communities, providing information in other languages should be strongly considered.

Some examples of methods for communicating the data to the public include the following:

- Website data displays;
- Mobile application;
- Automated email/fax/text notification system;
- Social media feeds;
- Public data displays in community locations;
- Automated call-in phone system;
- Television and radio reports; and
- Published quarterly data summary reports.

As provided by state law, emergency response agencies such as local fire agencies, have the primary responsibility for scene management during an accidental release of emissions or other emergency incidents. The refinery operators must identify the primary local agency that provide emergency preparedness and response services for each refinery, and coordinate with the first

responders ~~outline the process to be developed~~ to integrate with and augment the existing public alert systems and communication mechanisms to provide the public with access to timely alerts and public safety information during refinery upsets and accidental releases of pollutants and not to conflict or duplicate the first response alert systems in case of an accidental release of emissions.

The California Air Resources Board (CARB) Monitoring and Laboratory Division and the California Air Pollution Control Officers Association (CAPCOA) have completed the first volume and a draft a second volume of the Refinery Emergency Air Monitoring Assessment Report. . The Objective 1: Delineation of Existing Capabilities report, released in May 2015, provides a comprehensive inventory of emergency air monitoring assets and capabilities located in and around California's major oil refineries. The draft report for Objective 2: Evaluation of Air Monitoring Capabilities, Gaps, and Potential Enhancements became available in September 2017. Also in September 2017 OEHHA released a related draft report: Analysis of Refinery Chemical Emissions and Health Effects. These are available from the CARB Refinery Air Monitoring website.[8]

7. Other Regulatory Programs

The U.S. EPA adopted a rule in December 2015 (40 CFR §63.658) with fenceline monitoring provisions that require sampling for benzene at refinery property boundaries. Considering that open-path technologies are currently the best available and the most accurate method for fenceline monitoring of benzene and other pollutants, SCAQMD will assist the refineries in seeking U.S. EPA approval for monitoring systems proposed as part of Rule 1180 through the refinery's fenceline air monitoring plan to also meet U.S. EPA requirements for monitoring of benzene.

8. Future Updates to Rule 1180 – Fenceline Air Monitoring Guidelines

Revisions and updates to this guidance are expected and will be required as new instrumentation, methodologies and monitoring strategies are developed.

[8] https://www.arb.ca.gov/fuels/carefinery/crseam/crseam.htm

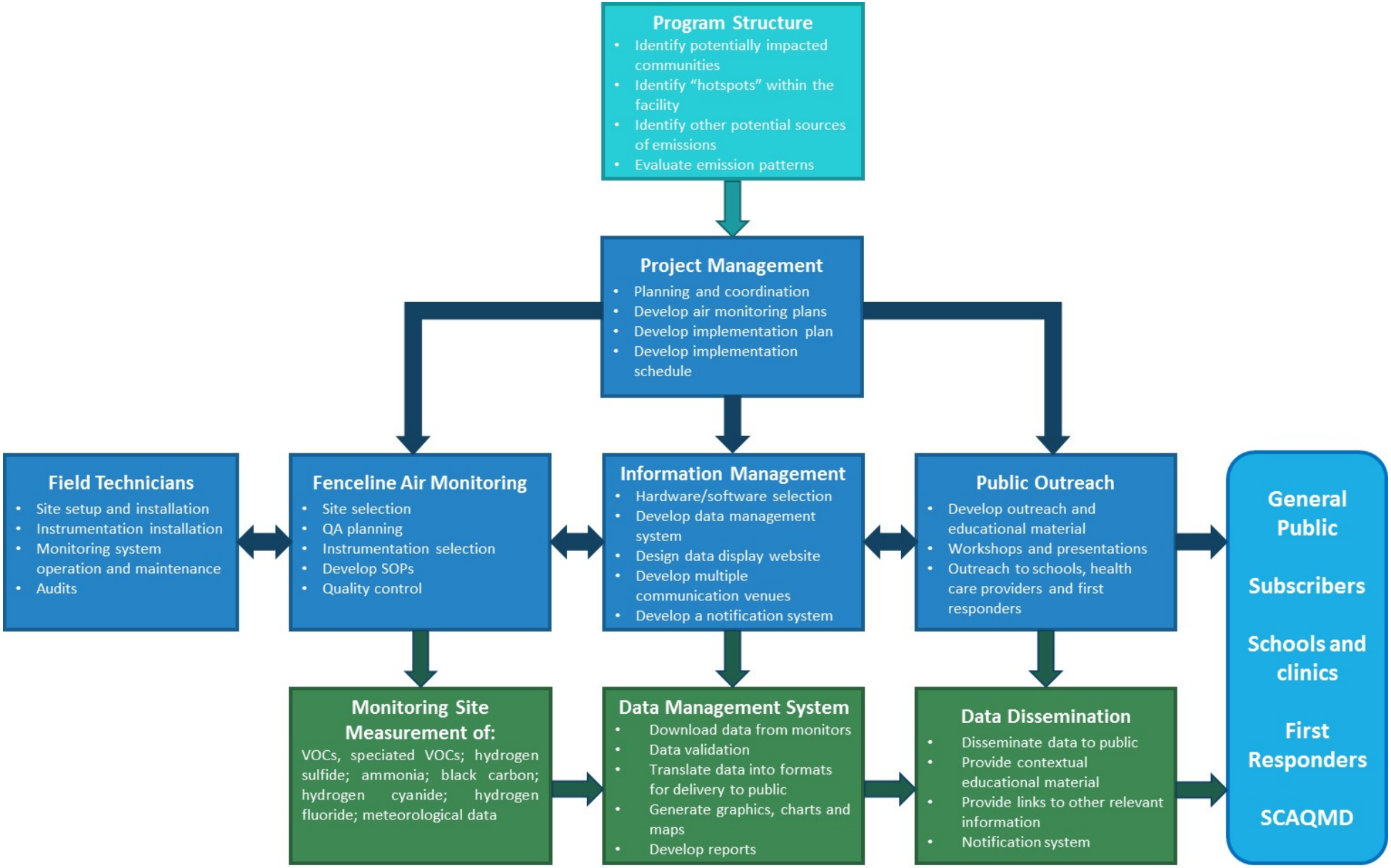


Figure 2 - Overview of the Refinery Fenceline Air Monitoring Programs

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[https://goo.gl/HGCNrR]

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b)
[https://www3.epa.gov/ttn/amtic/airtox.html]

Guidance for Preparing Standard Operating Procedures (SOPs) (EPA QA/G-6, EPA/240/B-01/004)
[https://www.epa.gov/sites/production/files/2015-06/documents/g6-final.pdf]

U.S.EPA Handbook: Optical Remote Sensing for Measurement and Monitoring of Emissions Flux
[https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf]

Draft CARB/CAPCOA Refinery Air Monitoring Assessment Reports
[https://www.arb.ca.gov/fuels/carefinery/crseam/crseam.htm]

Draft OEHHA Report: Analysis of Refinery Chemical Emissions and Health Effects
[https://oehha.ca.gov/air/analysis-refinery-chemical-emissions-and-health-effects]

ATTACHMENT H

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Staff Report
Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring

December 1, 2017

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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CHAPTER 1: BACKGROUND

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INTRODUCTION

The South Coast Air Quality Management District (SCAQMD) is the lead air pollution agency in the South Coast Air Basin (Basin) and has jurisdiction over all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. SCAQMD is responsible for controlling emissions primarily from non-vehicular sources of air pollution. SCAQMD performs inspections of more than 27,000 facilities in the Basin, in addition to responding to public complaints regarding air quality.

Proposed Rule 1180 (PR 1180) applies to petroleum refineries, facilities that are permitted and regulated by SCAQMD. The proposed rule requires petroleum refineries to collect real-time data of refinery air pollutant emissions at or near their property boundaries, and to provide data as quickly as possible to the public. The proposed rule requires petroleum refineries to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. PR 1180 also establishes a fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems. The proposed rule exempts petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil. PR 1180 implements the inspections and investigations of emissions from petroleum refineries mandated by Health and Safety Code §42705.6.

Key provisions of Health and Safety Code §42705.6 include the following: 1) By January 1, 2020, the SCAQMD shall design, develop, install, operate, and maintain the refinery-related community air monitoring system 2) By January 1, 2020, petroleum refineries must develop, install, operate, and maintain the fenceline monitoring system 3) The SCAQMD and petroleum refinery shall collect real-time data from the refinery-related community air monitoring system and the fence-line monitoring system and to the extent feasible, the data shall be provided to the public as quickly as possible in a publicly accessible format 4) The petroleum refineries shall be responsible for the costs associated with implementing a refinery-related community air monitoring system.

PR 1180 does not directly regulate air pollutant emissions from petroleum refineries ~~directly~~, however, implementation of the proposed rule will provide valuable information to petroleum refineries, nearby communities, and SCAQMD staff about the potential presence of air contaminants, including some toxics, resulting from petroleum refinery operations. The availability of this information could result in efforts to further reduce emissions from refineries. For example, information provided by a fenceline air monitoring system could provide petroleum refineries with real-time information that could complement existing leak detection programs to identify and resolve leaks more expeditiously.

The proposed rule will require the submittal and approval of a fenceline air monitoring plan (plan) for a specified list of air pollutants. The plan must provide detailed information about the fenceline air monitoring system, including siting, instrument choices, wind data collection, maintenance procedures, measures in case of failures, quality assurance and auditing, and data reporting methods. Further, the proposed rule will set-forth requirements for the plan review process, notifications and recordkeeping. The plan review process includes a public review period of no less than fourteen (14) days prior to approval by the Executive Officer. SCAQMD staff will review and respond to public input ~~accordingly~~.

SCAQMD staff developed Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines (Rule 1180 Guidelines) to provide criteria for an approvable plan and for plan evaluation. The Rule 1180 Guidelines identify ~~open-path remote-sensing~~fenceline air monitoring technologies~~y~~ for fenceline air monitoring systems that provide data to the public in real time, if feasible.

As required by the provisions of the Health and Safety Code §42705.6, a refinery-related community air monitoring system will be implemented by the SCAQMD. Guidance for the refinery-related community air monitoring system will be developed in a public process that provides an opportunity for input from community members, industry stakeholders and other interested parties. Consistent with Health and Safety Code §42705.6, PR 1180 does not require petroleum refineries to conduct refinery-related community air monitoring, however, it does set-forth requirements for petroleum refineries to be responsible for the costs associated with SCAQMD implementing a refinery-related community air monitoring system.

SCAQMD staff compiled a cost analysis of the estimated cost to implement a refinery-related community air monitoring system. The cost analysis included the costs for the installation (e.g., site preparation costs, capital equipment costs) and operation and maintenance costs of a community air monitoring system. These costs were developed based on SCAQMD staff's prior and ongoing monitoring projects in the Basin. The monitoring equipment cost was estimated based on the commercially-available, state-of-the-art monitoring equipment capable of monitoring the pollutant levels continuously and in real-time. PR 1180 seeks to recover the installation costs in ~~section~~ paragraph (j)(1). Also, as identified in ~~section~~paragraph (j)(4), the operation and maintenance costs will be proposed for inclusion in Rule 301– Permitting and Associated Fees. The cost analysis was provided to the PR 1180 Working Group for review and is in Table 1-1 below. These costs represent the dollar amounts needed to recover the estimated costs for an average refinery-related community air monitoring system for one facility and the total estimated costs for all refineries combined.

Table 1-1: Cost Analysis for the Community Air Monitoring System

Cost Analysis for the Community Air Monitoring System	
Initial Capital Cost (one time)	**$938,607**
Site preparation	$150,000
Air Monitoring Station Container	$50,000
Site Preparation	$40,000
Building Pad / Cement Slab	$30,000
Fencing	$15,000
Power	$15,000
Monitoring Equipment	$700,000
NOx Analyzer	$30,000
SOx Analyzer	$25,000
Total VOC Analyzer	$30,000
VOC Canister System	$30,000

Auto-GC	$250,000
H2S Analyzer	$35,000
PM2.5 Analyzer	$30,000
PM10 Analyzer	$30,000
BC Analyzer	$25,000
HCN Analyzer	$25,000
CO Analyzer	$20,000
Speciated Metals Analyzer	$150,000
Met Station	$20,000
Data logging system	$6,000
ESC Data Logger	$3,500
Computer System	$2,500
Technical Labor: Equipment installation, initial calibration and testing	$82,607
Two Instrument Specialists	
Annual Operation and Maintenance Cost (per year)	**$435,543**
Routine costs associated with site maintenance	$29,950
Electricity	$2,880
Utilities	$5,470
Land/Site Lease	$14,400
Lavatory Rental	$7,200
Routine costs associated monitoring equipment maintenance	$16,100
Calibration Gases	$6,100
Maintenance Parts	$10,000
Technical labor*	$389,493
One Air Quality Specialist and two Instrument Specialists	

*Permanent employees with health and retirement benefits.

Total Community Air Monitoring Network Costs for All Refineries Combined	**$7,508,858**
Total Annual/Reoccurring Community Air Monitoring Network Costs for All Refineries Combined	**$3,484,340**

SCAQMD staff evaluated various metrics to ensure that the costs for a refinery-related community air monitoring system would be shared in a reasonably equitable manner based on the burdens imposed and benefits received by the refineries and the costs are limited to the amounts necessary for compliance with Health and Safety Code §42705.6. Specifically, SCAQMD staff performed an analysis of metrics based on petroleum refinery-related emissions levels and operational activity levels measured in annual crude oil throughput capacity. These metrics were used to apportion the costs of a refinery-related community air monitoring system. Further, through the Working Group process the SCAQMD staff provided its analysis of these metrics and recommendation to the public for review.

Upon review of the various metrics developed to cover the cost for a refinery-related community air monitoring system and considering important factors~~, such as,~~ (e.g., the cost of air monitoring

equipment, equipment siting, data logging systems and labor~~,~~) and with substantial stakeholder input SCAQMD staff determined that the fee schedule in Table 2 – Refinery Related Community Air Monitoring System Fees, of PR 1180 would meet the aforementioned objectives for (~~that a facility's annual crude oil throughput capacity could be apportioned to~~ the cost of implementing a refinery-related community air monitoring system. ~~For example, a facility with greater annual crude oil throughput capacity would result in additional air monitoring equipment needs than a facility with a lower annual crude oil throughput capacity.~~ Therefore, PR 1180 requires an ~~one-time~~ installation fee ~~of $0.0195 per annual barrels~~ and operating and maintenance fees that will be recovered pursuant to Rule 301 – Permitted and Associated Fees. This fee was determined by ~~dividing~~ the total installation costs of the community air monitoring system ~~by the total annual throughput capacity of the~~ that was apportioned among petroleum refiner~~y~~ies subject to the rule based on the expected estimated cost of implementing the community air monitoring system for that specific refinery. The installation fee for each facility was based on the cost to monitor for adequate coverage, facility size, location relative to nearby communities, and location to other affected facilities for the potential to share community monitoring. The evaluation resulted in one monitoring station would cost approximately $715,000, two monitoring stations would cost approximately $1.4 million, and the one facility anticipated to not need to be fully equipped would be half the cost of one station. These overall estimated cost needed to implement the community air monitoring system could change based on the final cost of actual equipment needed, number of stations required for adequate coverage for each affected community, and input during the upcoming development of the community air monitoring plan. Also, in response to stakeholder concerns about the fee schedule, the proposed rule allows for the installation fee to be paid with an initial minimum payment ~~of thirty percent~~ by no later than July 1, 2018 and the remaining balance of the installation fee by no later than January 30, 2019. Future amendments of Regulation III – Fees, will include proposed operation and maintenance costs for the air monitoring system.

BACKGROUND

Petroleum refineries are among the largest stationary sources of air pollutants in the Basin. These sources process crude oil into various products, such as, gasoline, diesel fuel, aviation fuel and other fuel oils. Crude oil consists of a complex mixture of hydrocarbon compounds with smaller amounts of impurities, including sulfur, nitrogen, organic acids, metals and various toxic compounds. The processing of crude oil at petroleum refineries can result in potential emissions of criteria pollutants, toxic air contaminants and other air pollutants. In recent years, community concerns over emissions from refineries and the potential for community exposure to air contaminants has increased, both from routine facility operations and potential releases due to upset conditions or emergency situations. For example, the explosion at the former Exxon-Mobil Refinery in Torrance in 2015, as well as other refinery incidents in the Bay Area and elsewhere, have added to a heightened level of community concern.

SCAQMD has undertaken studies to assess the level of air toxics and other air pollutants on-site and near refineries, and to compare the shorter-duration sampling to reported annual emissions inventories. These studies include two technology demonstration projects focused on refinery monitoring in 2013 and 2014, the SCAQMD Optical Remote Sensing (ORS) Experiment to study emissions from refineries and other sources in 2015, and ongoing work with ORS and low-cost sensors to study hazardous air pollutants in communities. This effort has increased the knowledge of measurement techniques and instrumentation that can be successfully applied to refinery fenceline and community air quality measurements. Furthermore, plans are already being

implemented for multi-year fenceline and community monitoring near the Torrance Refining Company in Torrance, utilizing Exxon-Mobil settlement funds related to violations associated with the 2015 explosion. Refinery related sampling will also be a component of the fifth SCAQMD Multiple Air Toxic Exposure Study (MATES V), which will be conducted throughout 2018.

In December 2015, U.S. EPA promulgated a final national rulemaking in 40 CFR Part 63.658 for fenceline monitoring of benzene at petroleum refining process units and related emission points that are a major source as defined by section 112(a) of the Clean Air Act and that emit or have equipment containing or contacting one or more of the hazardous air pollutants identified in Table 1 of 40 CFR 63.658. Also, the Bay Area Air Quality Management District (BAAQMD) promulgated Regulation 12, Rule 15 (Rule 12-15) in April 2016. Rule 12-15 requires refineries to prepare and submit to the BAAQMD an air monitoring plan for establishing and operating a fenceline monitoring system. The BAAQMD also published guidelines (i.e., Air Monitoring Guidelines for Petroleum Refineries) that described the factors that would be used to evaluate air monitoring plans to be evaluated on a case by case basis. These guidelines point refineries toward open-path fenceline measurements. The measurements must be continuously measured with a time resolution of five minutes or the refinery operators must provide a rationale in the air monitoring plan for lesser time resolution based on equipment or other operational limitations. To provide the public with a concise overview of the U.S. EPA and BAAQMD rules pertaining to fenceline monitoring, SCAQMD staff provided a summary of the requirements for both rules in Table 3-1. Further, recently passed legislation passed in California (AB 617) will likely require air monitoring in communities near large facilities subject to California's greenhouse gas Cap-and-Trade Program, such as large petroleum refineries. The monitoring requirements in PR 1180 may potentially or fully satisfy these new requirements. PR 1180 will also satisfy the requirements of other recently passed legislation, AB 1647 (Health and Safety Code Section 42705.6), which mandates the development and implementation of fenceline and community air monitoring systems for petroleum refineries throughout California.

NEED FOR PROPOSED RULE 1180

Petroleum refineries are among the largest stationary sources of criteria pollutants and precursors to the formation of criteria pollutants and toxic air contaminant in the South Coast Air Basin. Given the significance of these facilities, it is important that SCAQMD obtain data on petroleum refinery emissions so that staff has a comprehensive understanding of the ~~regional and local community~~ impacts that ~~petroleum refineries~~these emissions have on local and regional air quality as SCAQMD permits and regulates these facilities. The requirements for fenceline air monitoring systems that provide air quality information in accordance with PR 1180, along with the development of refinery-related community air monitoring systems funded in accordance with PR 1180, will result in valuable air quality data that will help achieve this goal. This data can be used to ensure there are no undetected facility leaks and inform potential future rulemaking. For example, a fenceline air monitoring system could provide source-specific emissions data that would be an important step toward addressing potential air quality issues at petroleum refineries, such as fugitive emissions that contribute to health risk impacts in nearby communities

PUBLIC PROCESS

PR 1180 was developed through an open public process. A Working Group was formed to provide the public and stakeholders an opportunity to discuss important details about the proposed rule and provide SCAQMD staff with important input during the rule development process. The Working

Group and interested parties were comprised of a variety of stakeholders including representatives from industry, environmental groups, community groups, and public agency representatives. SCAQMD staff held six (6) working group meetings. The Working Group convened on April 5, 2017, June 13, 2017, July 28, 2017, August 29, 2017, September 21, 2017, and October 24, 2017. At the request of community members, the Working Group meeting held on September 21, 2017 was held in Wilmington in the evening.

INDUSTRY PROCESS DESCRIPTON

Petroleum refineries process crude oil into a variety of products, including liquefied petroleum gas, gasoline, kerosene, aviation fuel, diesel fuel, fuel oils, lubricating oils, and feedstocks for the petrochemical industry. Petroleum refining generally begins with the delivery of crude for storage at the refinery, followed by petroleum handling and refining operations, and ending with storage and transfer of the refined products. The refining industry can employ a variety of processes, which can depend on the composition of the crude oil feedstock and the petroleum products being produced.

In Chapter 5 of AP-42[1], U.S. EPA provides a list of petroleum refining process categories (i.e., separation processes, petroleum conversion processes, petroleum treating processes, feedstock and process handling, and auxiliary facilities) along with other associated operations that are specific to the petroleum industry. These categories are provided in Table 1-2 below.

Crude oil consists of a mixture of hydrocarbon compounds including paraffinic, naphthenic, and aromatic hydrocarbons with small amounts of impurities, including sulfur, nitrogen, oxygen, and metals. The primary pollutants emitted from petroleum refining are volatile organic compounds arising from leakage, venting, and evaporation of the raw materials and finished products. Significant amounts of sulfur oxides, hydrogen sulfide, particulate matter, and several toxic species can also be generated from operations specific to this industry. Most of the petroleum refinery related air emissions are associated with catalytic or thermal cracking units, catalytic reformer units, sulfur recovery plants, storage vessels, fluid coking units, wastewater streams, cooling towers, equipment leaks, blowdown systems, vacuum distillation units, steam boilers, process furnaces, process heaters, compressor engines, barge or ship loading, and gasoline loading.

[1] U.S. EPA. (1995). AP-42: Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Fifth Edition [https://www.epa.gov/air-emissions-factors-and-quantification/ap-42-compilation-air-emission-factors]

Table 1-2: Summary of Petroleum Refinery Process Categories and Associated Operations

Refinery Process Category	Associated Operations
Separation Processes - Separates crude oil into its major constituents by common boiling-point fractions	• Atmospheric distillation • Vacuum distillation • Light ends recovery (gas processing)
Petroleum Conversion Processes - Components, such as residual oils, fuel oils and light ends, are converted to gasolines and other light fractions to meet demands for high-octane gasoline, jet fuel, and diesel fuel	• Cracking (thermal and catalytic) • Reforming • Alkylation • Polymerization • Isomerization • Coking • Visbreaking
Petroleum Treating Processes - Treating stabilizes and upgrades petroleum products by separating them from less desirable products and by removing objectionable elements, such as sulfur, nitrogen and oxygen	• Hydrodesulfurization • Hydrotreating • Chemical sweetening • Acid gas removal • Deasphalting
Feedstock and Product Handling	• Storage • Blending • Loading • Unloading
Auxiliary Facilities - A variety of processes and equipment not directly involved in the refining of crude oil are employed in functions vital to the operation of the refinery	• Boilers • Waste water treatment • Hydrogen production • Sulfur recovery plant • Cooling towers • Blowdown system • Compressor engines

Fenceline Air Monitoring Technology

A petroleum refinery fenceline air monitoring systems require a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery. Conventional fenceline air monitoring techniques rely on point monitors that are limited to providing information about emissions concentrations from a single point within a survey area, thereby, significantly increasing the chances of identifying surface emissions hotspots or plumes. Given the lack of spatial and temporal data that is provided by point monitors it is necessary to employ additional technologies that contribute to a more comprehensive understanding of emissions from large area sources like petroleum refineries.

Open-path technology is a well-established method to measure path-integrated trace gas absorptions and concentrations in the open atmosphere making it ideal for long-term fenceline air monitoring of emissions from refineries or other large area sources. Open-path technology is a type of Optical Remote Sensing (ORS) that measures air emissions along an open-path, significantly improving the spatial coverage. ORS instruments use a light signal to continuously detect and measure concentrations of chemical compounds along the distance covered by the light signal in real-time. As a result, open-path technologies can provide greater temporal and spatial resolution compared to conventional air monitoring techniques; for example, narrow pollutant plumes can be detected by an open-path fenceline air monitoring system that might otherwise be

missed by point monitors. The light source emits light towards a detector either at the opposite end of the light path (bi-static configuration) or co-located with the light source (mono-static configuration) if the light is reflected by a reflector, providing path-averaged concentrations of multiple pollutants, simultaneously. Although the open-path ORS techniques have been used for over 20 years and are well-established, they are constantly improving and gaining use for large area-source monitoring that is not conducive to traditional point source testing methods. Improvements often include changes to technologies that improve detection limits or the type of compounds detected.

Another advantage of open-path measurements is the capability of monitoring pollutant concentrations from point source and fugitive emissions at or near the property boundary of a petroleum refinery operation. Fugitive emissions can occur from gaseous or vapor leaks in pressurized process equipment (e.g., valves, pipe connections, mechanical seals, or related equipment) and from other accidental releases. Fugitive emissions can also emanate from storage tanks used to store crude oil, intermediates generated during the refining processes, and product streams. These emissions are best monitored using open-path systems given the numerous potential sources, their distribution over large areas and the challenges with immediate detection and repair of the equipment that is the source of emissions.

The U.S. EPA has published a comprehensive assessment of various open-path ORS technologies, outlining the advantages and limitations of each measurement method[2]. Based on the advantages that open-path technologies provide over conventional air monitoring techniques, the SCAQMD staff recommends the use of open-path technology for implementing a fenceline air monitoring system required by PR 1180. In accordance with Rule 1180 Guidelines a refinery owner or operator ~~may demonstrate that~~has the option to use other air monitoring techniques and/or technologies (e.g., emerging technologies, such as, low cost VOC sensors) ~~could be used in place of open-path technology depending~~ based on the pollutant(s) that are monitored. For example, alternative or emerging monitoring technologies may be appropriate to cover areas along the perimeter of a refinery that are not suited for other monitors such as open-path technologies. In these instances, the refinery operator may propose alternative air monitoring technology(s). The refinery operator must demonstrate the proposed alternative air monitoring technology(s) will meet the requirements of PR 1180 and provide adequate sensitivity and adequate temporal and spatial coverage for the compounds being monitored.

[2] https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf

CHAPTER 2: SUMMARY OF PROPOSED RULE 1180

OVERVIEW

PROPOSED RULE 1180

OVERALL APPROACH

PR 1180 applies to petroleum refineries. The proposed rule requires petroleum refineries to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. PR 1180 also establishes a fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems. The proposed rule exempts petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil. PR 1180 implements Health and Safety Code §42705.6.

PROPOSED RULE 1180

The purpose of PR 1180 is to require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that collect and provide air quality information to SCAQMD and the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities. PR 1180 does not directly reduce emissions from the facilities, but will provide information that could be useful to address emissions reductions in the future, as well as to comply with and enforce certain existing rules, for example, leak detection requirements. As previously discussed, PR 1180 will establish fenceline air monitoring requirements for petroleum refineries. The proposed rule will require the submittal and approval of a fenceline air monitoring plan that provides detailed information about the fenceline air monitoring systems such as siting, wind data collection, maintenance procedures, temporary measures for equipment failures, quality insurance and auditing, and data reporting methods. Additionally, the proposed rule will set-forth requirements for the plan review process, notifications and recordkeeping. The proposed rule exempts petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil.

Purpose and Applicability – Subdivision (a) and (b)

The purpose of PR 1180 is to require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the SCAQMD and the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, which result from petroleum refinery emissions at or near the property boundaries of petroleum refineries and in nearby communities. PR 1180 applies to petroleum refineries. Based on analysis of compliance and permitting data, there are eight petroleum refineries in the SCAQMD jurisdiction that have been identified to meet the applicability of the proposed rule. These facilities located process crude oil into various products, such as gasoline, diesel fuel, aviation fuel and other fuel oils.

Definitions – Subdivision (c)

PR 1180 includes definitions of the following terms used in the proposed rule. Please refer to subdivision (c) of PR 1180 for the definitions:

- Community Air Monitoring System
- Fenceline Air Monitoring System
- Petroleum Refinery
- Real-Time
- Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines

Requirements

Subdivisions (d) through (i) establish requirements for fenceline air monitoring plan submittal, the fenceline air monitoring system, the air monitoring plan review process, notifications for planned and unplanned instrument downtime, equipment failures in the fenceline and community air monitoring system, recordkeeping, and exemptions. Table 1 of Proposed Rule 1180 (see Table 2-1 below) identifies the air pollutants to be addressed by the fenceline air monitoring plan.

Subdivision (d) – Plan Requirements

Eight months after adoption of PR 1180, petroleum refineries subject to the rule must submit to the Executive Officer a fenceline air monitoring plan in writing for establishing and operating a real-time fenceline air monitoring system. The proposed rule requires the fenceline air monitoring plan to provide detailed information including the following: equipment to be used for fenceline monitoring; siting and equipment specifications; wind measurements; procedures for air monitoring equipment maintenance and failures; procedures for implementing quality assurance by a qualifies independent party, including quality control and audits of the air monitoring systems. Additionally, the fenceline plan is required to include procedures for implementation including installation, operation, maintenance, quality assurance and fiscal responsibilities for the fenceline air monitoring system. The fenceline monitoring plan is also required to provide methods for continuous dissemination of data collected to the public as expeditiously as possible. In accordance with the Rule 1180 Guidelines fenceline air monitoring data would be disseminated by website displays that are user friendly and provide context to the air monitoring information that is collected.

The proposed rule requires the fenceline air monitoring plan to address continuous, real-time air monitoring for the air pollutants specified in Table 1 (reproduced below as Table 2-1) of PR 1180. The fenceline air monitoring plan shall be consistent with the criteria set forth in the Rule 1180 Guidelines. If certain pollutants are omitted from the plan the owner or operator of a petroleum refinery must provide an explanation in the fenceline air monitoring plan for not including real-time air monitoring for any pollutant(s) specified in Table 1 of PR 1180.

Table 2-1: Air Pollutants to be addressed by Fenceline Air Monitoring Plans

Refinery-Related Air Pollutants
Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3 Butadiene
Styrene

BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylenes)
Other Compounds
Hydrogen Sulfide
Carbonyl Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride+

+ If the facility uses hydrogen fluoride.

SCAQMD staff's review and approval of the fenceline air monitoring plan is subject to plan fees as specified in SCAQMD Rule 306.

The proposed rule requires the owner or operator of a petroleum refinery to submit an updated fenceline air monitoring plan to the Executive Officer as follows:

- 10 days after the date of any unplanned facility, equipment, process or administrative modification that could result in changes to an approved fenceline monitoring plan;
- 45 days before the date of implementation of any planned facility, equipment, process or administrative modification that could result in changes to an approved fenceline and air monitoring plan; or
- 60 days after the date of receiving new information that an approved fenceline air monitoring plan does not adequately measure any pollutant(s) identified in Table 2-1 above that are emitted from the petroleum refinery.

Failure to comply with the provisions for submitting an updated fenceline air monitoring plan outlined above will result in revocation of an approved fenceline air monitoring plan. If an approved plan is revoked the owner or operator of a petroleum refinery would be required to submit a new fenceline air monitoring plan to the Executive Office within 30 days after revocation of the approved plan. Submittal of the new fenceline air monitoring plan would be subject to the plan requirements of subdivisions (d) and (f) through (i). An updated implementation schedule would be subject to approval by the Executive Officer and would be required to be included in the new fenceline air monitoring plan but in no case shall be longer than 180 days.

Further, the proposed rule allows for the use of emerging technologies in a fenceline air monitoring plan. All fenceline air monitoring plans shall be consistent with the Rule 1180 Guidelines.

Subdivision (e) – Fenceline Air Monitoring System Requirements

Beginning no later than one year after a fenceline air monitoring plan is approved by the Executive Officer; the owner or operator of a petroleum refinery shall complete installation and begin operation of a real-time fenceline air monitoring system in accordance with the approved fenceline air monitoring plan. The fenceline air monitoring plan shall monitor for all pollutants identified in Table 1of PR 1180.

Subdivision (f) – Plan Review Process

The Executive Officer shall notify the owner or operator in writing whether the fenceline air monitoring plan is approved or disapproved. Determination of approval status for the fenceline

air monitoring plan shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in subdivision (d) – Plan Requirements and the Rule 1180 Guidelines.

If disapproved, the owner or operator shall resubmit the fenceline air monitoring plan within 30 calendar days after notification of disapproval of the plan. The resubmitted plan is subject to the plan fees specified in Rule 306. The resubmitted plan is required to include any information necessary to address deficiencies identified in the disapproval letter. The Executive Officer will either approve the revised and resubmitted fenceline and community air monitoring plan or modify the plan and approve it as modified. The owner or operator may appeal the fenceline air monitoring plan modified by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 – Plans.

The fenceline air monitoring plan shall be made available, by the Executive Officer, for public review upon completion of SCAQMD staff's initial review, but no less than 14 days prior to approval. SCAQMD staff will review and respond to public input accordingly. Staff will seek to make the fenceline air monitoring plans publicly available as soon as reasonably possible after submitted by the refiners, to allow a longer than 14-day comment period when feasible. Public comments will be considered, in writing, by the Executive Office in the decision regarding whether to approve, disapprove, or modify the fenceline air monitoring plans. ~~No later than 30 days after receipt of a fenceline air monitoring plan the SCAQMD staff will post the plan to the SCAQMD website for public viewing.~~

Subdivision (g) – Notifications

Upon installation and operation of a fenceline air monitoring system required by subdivision (e) the owner or operator of a petroleum refinery shall comply with the following notification requirements:

- Call 1-800-CUT-SMOG to notify the Executive Officer within 48 hours of planned maintenance activities, providing the name of the petroleum refinery, the name and location of the monitor and the date(s) of the occurrence.
- Call 1-800-CUT-SMOG to notify the Executive Officer within 2 hours of discovering that equipment described in the fenceline air monitoring plan subject to subdivision (d) failed to accurately provide real-time air monitoring information. The owner or operator is required to provide the name of the petroleum refinery, name and location of the air monitor, the date of the occurrence, and the reason that the real-time air monitoring information was not reported.

The owner or operator of petroleum refinery shall also submit a written notification to the Executive Office of any equipment failure that also results in a failure to accurately provide continuous, real-time air monitoring information as required by the approved fenceline and community air monitoring plan subject to subdivision (d) for 24-hours or longer. The written notification shall be submitted to the Executive Officer within 24 hours of discovering the equipment failure and shall include the following:

- An explanation of activities currently being pursued or taken to remedy the equipment failure;
- Estimated time needed to restore the fenceline air monitoring equipment to normal operating conditions that comply with the approved fenceline air monitoring plan; and

- Temporary air monitoring measures subject from the approved fenceline air monitoring plan to be implemented until the fenceline air monitoring system is restored to normal operating conditions.

The owner or operator of a petroleum refinery shall submit an updated fenceline air monitoring plan to the Executive Officer if an equipment failure results in a failure to accurately provide continuous, real-time air monitoring information for more than 30 days. In certain instances petroleum refineries that have an approved fenceline air monitoring plan that provides adequate temporary measures or contingency measures for periods beyond 30 days would not be required to submit an updated plan.

Subdivision (i) – Recordkeeping

The owner or operator of a petroleum refinery shall maintain records of all information required under this rule for at least five years and shall be made available to SCAQMD personnel upon request with at least the two most recent years kept onsite.

Subdivision (j) – Community Air Monitoring Fees

Pursuant to CA Health and Safety Code §42705.6 PR 1180 requires petroleum refineries to pay an installation fee ~~for refinery-related community air monitoring system~~ based on the fee schedule in Table 2 – Refinery-Related Community Air Monitoring System Fees, of PR 1180 (Table 2 has been reproduced as Table 2-2 below) ~~a rate of $0.0195 per annual barrels capacity~~. ~~The installation fee includes capital equipment cost, site preparation, data logging systems and labor (See Table 1-1 for details). The required installation fee is assessed on the petroleum refineries crude oil throughput capacity and calculated as follows:~~

~~Crude oil throughput capacity (barrels per year) x $0.0195 = Installation Fee~~

The installation fee for each facility was based on the cost to monitor for adequate coverage, facility size, location relative to nearby communities, and location to other affected facilities for the potential to share community monitoring. The evaluation resulted in one monitoring station would cost approximately $715,000, two monitoring stations would cost approximately $1.4 million, and the one facility anticipated to not need to be fully equipped would be half the cost of one station. These overall estimated cost needed to implement the community air monitoring system could change based on the final cost of actual equipment needed, number of stations required for adequate coverage for each affected community, and input during the upcoming development of the community air monitoring plan.

Table 2-2– Refinery-Related Community Air Monitoring System Fees

	Effective Dates and Fee Requirements	
Facility Name* and Location	No later than July 1, 2018, petroleum refineries shall make the following initial minimum payment required by paragraph (j)(2)	No later than January 30, 2019, petroleum refineries shall make the following final payment required by paragraph (j)(3)
Andeavor Corporation (Carson)	$429,078	$1,001,181
Andeavor Corporation (Wilmington)	$214,539	$500,591
Chevron U.S.A, Inc. (El Segundo)	$429,078	$1,001,181
Delek U.S. Holdings, Inc. (Paramount)	$107,269	$250,295
Phillips 66 Company (Carson)	$214,539	$500,591
Phillips 66 Company (Wilmington)	$214,539	$500,591
PBF Energy, Torrance Refining Company (Torrance)	$429,078	$1,001,181
Valero Energy (Wilmington)	$214,539	$500,591

*Based on the current facility names. Any subsequent owner(s) or operator(s) of the above listed facilities could be subject to this rule.

To assist with budget limitations, PR 1180 requires petroleum refineries to pay an initial minimum payment ~~of thirty percent of the fee~~ by no later than July 1, 2018 and the remaining balance of the installation fee by no later than January 30, 2019. The remaining balance shall be equal to the installation fee minus the initial minimum payment. Additionally, the annual operating and maintenance fees for the community air monitoring system are to be recovered pursuant to Rule 301–Permitting and Associated Fees. PR 1180 also requires that no later than January 1, 2025 and every five years thereafter, the Executive Officer shall conduct a refinery-related community air monitoring assessment to evaluate adequate coverage and/or need for equipment upgrades.

The following are the changes to the apportionment of the initial community air monitoring system costs to the individual petroleum refinery facility since the original proposal.

	Chevron	Torrance Refining	Valero-Wilmington	Andeavor-Wilmington	Andeavor-Carson	Philips 66-Carson	Philips 66 - Wilmington	Paramount Petroleum
Original Proposal	$1,914,608	$1,064,066	$604,988	$743,779	$1,831,333	$989,333		$355,875
Current Proposal	$1,429,330	$1,429,330	$714,665	$714,665	$1,429,330	$714,665	$714,665	$357,332
Change in Costs	-$485,278	$365,263	$109,677	-$29,114	-$402,003	$219,999	$219,999	$1,457

Subdivision (k) – Exemptions

PR 1180 exempts owners or operators of petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil are exempt from the requirements of the rule. For the purposes of this rule, maximum crude oil throughput capacities are based on information reported to the California Energy Commission (CEC) in accordance with the Petroleum Industry Information Reporting Act. The Petroleum Industry Information Act requires all refiners to submit weekly, monthly and annual data to the CEC. The CEC analyzes this data and provides an annual report that identifies California oil refinery locations and capacities that are available on their website.

CHAPTER 3: IMPACT ASSESSMENT

AFFECTED SOURCES
EMISSIONS IMPACT
CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)
SOCIOECONOMIC ASSESSMENT
DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727
COMPARATIVE ANALYIS

AFFECTED SOURCES

PR 1180 applies to petroleum refineries. Petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil are exempt from the requirements of PR 1180. Based on SCAQMD permits, there are eight petroleum refineries that would be affected by PR 1180.

The eight facilities affected by PR 1180 that have been identified by SCAQMD staff are as follows:

- Andeavor Corporation (formerly Tesoro), Carson Refinery, Carson, CA;
- Andeavor Corporation (formerly Tesoro), Wilmington Refinery, Wilmington, CA;
- PBF Energy, Torrance Refining Company (formerly Exxon-Mobil), Torrance, CA;
- Chevron U.S.A. Inc., Chevron El Segundo Refinery, El Segundo, CA;
- Phillips 66 Company, Carson, CA
- Phillips 66 Company, Wilmington, CA
- Valero Energy, Valero Wilmington Refinery, Wilmington, CA;
- Delek US Holdings, Inc. (formerly Alon USA and Paramount Petroleum Corporation), Paramount Refinery, Paramount, CA.

EMISSIONS IMPACT

PR 1180 does not directly reduce emissions from petroleum refineries. Indirect emissions benefits may be realized due to the potential for early detection of leaks and quick action to control such fugitive emissions.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, SCAQMD, as lead agency for the proposed project, has reviewed PR 1180 pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. SCAQMD staff has determined that it can be seen with certainty that there is no possibility that the implementation of PR 1180 may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. A Notice of Exemption will be prepared pursuant to CEQA Guidelines Section 15062 - Notice of Exemption. If the project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

SOCIOECONOMIC ASSESSMENT

A socioeconomic analysis has been conducted and released for public review and comment 30 days prior to the SCAQMD Governing Board Hearing on PR 1180, which is anticipated to be heard on December 1, 2017.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings
California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity
PR 1180 is needed to implement the requirements of California Health and Safety Code §42705.6 and further protect public health by requiring petroleum refineries to collect real-time data of refinery air pollutant emissions at or near their property boundaries, and to provide data as quickly as possible to the public. PR 1180 is needed to ensure petroleum refineries install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. The necessary fenceline air monitoring systems will monitor fugitive emissions that occur from gaseous or vapor leaks in pressurized process equipment (e.g., valves, pipe connections, mechanical seals, or related equipment), storage tanks used to store crude oil and from other accidental releases. Further, PR 1180 is needed to establish a fee schedule for petroleum refineries for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems that include equipment capable of measuring compounds emitted to the atmosphere from refinery processes.

Authority
The SCAQMD Governing Board has authority to adopt PR 1180 pursuant to the California Health and Safety Code Sections seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41700 and 42705.6.

Clarity
PR 1180 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency
PR 1180 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

Non-Duplication
PR 1180 will not impose the same requirements as or in conflict with any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD.

Reference
By adopting PR 1180, the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Section 42705.6 (non-vehicular air pollution) and Federal Clean Air Act Section 116 (Retention of State authority).

COMPARATIVE ANALYSIS

Health and Safety Code section 40727.2 requires a comparative analysis of the proposed rule with any Federal or District rules and regulations applicable to the same source. See Table 3-1 below.

Table 3-1 Comparison of PR 1180 with U.S. EPA - 40 CFR §63.658 and BAAQMD Regulation 12 Rule 15

Rule Element	PR 1180	US EPA 40 CFR §63.658	BAAQMD Regulation 12 Rule 15
Applicability	– Applies to petroleum refineries	– Petroleum refineries that are a major source as defined by section 112(a) of the Clean Air Act; and – Emit or have equipment containing or contacting one or more hazardous specified hazardous air pollutants	– Petroleum refineries and support facilities, including, hydrogen plants, sulfuric acid plants, or electrical generation plants that provide more than 50% of its production output to a petroleum refinery
Plan Requirements	– Eight months after adoption of PR 1180, petroleum refineries must submit to the Executive Officer a fenceline air monitoring plan in writing for establishing and operating a real-time fenceline air monitoring system – The fenceline air monitoring plan is to provide detailed information including the following: o Equipment to be used for fenceline monitoring; o Siting and equipment specifications; o Wind measurements; o Procedures for air monitoring equipment maintenance and failures; o Procedures for implementing quality assurance by a qualified independent party, including quality control and audits of the air monitoring systems – Additionally, the fenceline plan is required to include procedures for implementation including installation, operation, maintenance, quality assurance and fiscal responsibilities for the fenceline air monitoring system – The fenceline monitoring plan is also required to provide methods for continuous dissemination of data collected to the public as expeditiously as possible – The proposed rule requires the owner or operator of a petroleum refinery to submit an updated fenceline air monitoring plan to the Executive Officer as follows: o 10 days after the date of any unplanned facility, equipment, process or administrative	– Sampling locations must be determined in accordance with Section 8.2 of Method 325A o **Option 1**: Sampling locations based on area: o Facility w/a regular shape (i.e., circular, triangular, or square) or subarea of facility w/ an irregular shape (A = area of facility or subarea): o A ≤ 750 acres – measure angles of 30° from center point for total of 12 sampling sites o 750 < A ≤ 1,500 acres – measure angles of 20° from the center point for a total of 18 sampling sites o A > 1,500 acres – measure angles of 15° from the center point for a total of 24 sampling sites – Sampling sites not needed at the intersection of an inner boundary o **Option 2**: Sampling locations based on length of facility perimeter Facilities w/a perimeter length of: o P < 24,000 ft. – minimum of 12 sampling sites evenly spaced o P > 24,000 ft. – sampling sites spaced 2,000 ft. apart o Requires 1 co-located duplicate sample for every 10 field samples per sampling period and 2 field blanks per sampling period	– Air Monitoring Plan must include detailed information describing monitor siting locations – Air monitoring guidelines provide specific siting considerations for air monitors including the following: o Nearby structures, unobstructed fetch o Terrain, address how local terrain influences pollutant transport and dispersion – Monitors must cover populated areas within 1-mile of the refinery fence-line likely to be affected when the annual mean wind direction lies in an arc within 22.5 degrees of a direct line from the source to receptors 10% of the time or greater – Annual mean wind direction based on meteorological data

Rule Element	PR 1180	US EPA 40 CFR §63.658	BAAQMD Regulation 12 Rule 15
	modification that could result in changes to an approved fenceline monitoring plan; o 45 days before the date of implementation of any planned facility, equipment, process or administrative modification that could result in changes to an approved fenceline and air monitoring plan; or o 60 days after the date of receiving new information that an approved fenceline air monitoring plan does not adequately measure any pollutant(s) identified in Table 1 of PR 1180 (Table 2-1 in Staff Report) above that are emitted from the petroleum refinery – Failure to comply with the provisions for submitting an updated fenceline air monitoring plan outlined above will result in revocation of an approved fenceline air monitoring plan. If an approved plan is revoked the owner or operator of a petroleum refinery would be required to submit a new fenceline air monitoring plan to the Executive Office within 30 days after revocation of the approved plan – An updated implementation schedule would be subject to approval by the Executive Officer and would be required to be included in the new fenceline air monitoring plan but in no case shall be longer than 180 days	– Meteorological station required at or near facility that collects hourly average meteorological data – Optional site specific monitoring plan if the refinery believes that an off upwind source that is not captured by the rule is responsible for influencing the sampler measurements o Petroleum refineries may request approval from the EPA administration for a site-specific monitoring plan to account for off-site upwind sources and other onsite sources o The site-specific plan is required to include information such as identification of near-field sources, information about background sources, fenceline monitoring locations impacted by near-field sources, a description of data to determine near-field source concentration contributions for monitoring locations, and detailed description of alternative measurement methods – Corrective action plan required for continued exceedance of action levels or measures that require more than 45 days to implement	
Fenceline Air Monitoring System Requirements	– Beginning no later than one year after a fenceline air monitoring plan is approved by the Executive Officer; the owner or operator of a petroleum refinery shall complete installation and begin operation of a real-time fenceline air monitoring system in accordance with the approved fenceline air monitoring plan – The fenceline air monitoring plan shall monitor for all pollutants identified in Table 2-1 (of this Staff Report)	– By January 29, 2018 refineries are required to install fenceline air monitoring systems – Requires point monitors with sampling frequency of a 14-day sampling period w/the following exceptions o Decreased sampling frequency for facilities that demonstrate consistent results at or below 0.9µg/m^3 o Increased sampling frequency for root cause analyses triggered by the action levels for benzene concentration	– Within one year of the approval of an air monitoring the petroleum refinery owner or operator will ensure that a fenceline monitoring system is installed and operated in accordance with an approved air monitoring plan

Rule Element	PR 1180	US EPA 40 CFR §63.658	BAAQMD Regulation 12 Rule 15
		– Action level for benzene is 9 μ/m^3 on an annual average basis – Facilities are required to determine the Δc of benzene within 45 days of each sampling period o Δc of benzene for each 14-day sampling period is calculated by subtracting lowest sample results from the highest sample results of the sample pool o Δc of benzene on an annual average basis is required to be calculated with the 26 most recent 14-day sampling period – Root cause analysis must be initiated 5 days after determining that the action level has been exceeded and no later than 50 days after completion of the sampling period o Root causes analysis must determine the cause of the exceedance and appropriate corrective action (e.g., leak inspection using Method 21, optical gas imaging, etc.) – Root cause analysis and initial corrective action required 45 days after determining there was an exceedance	
Plan Review Process	– The Executive Officer shall notify the owner or operator in writing whether the fenceline air monitoring plan is approved or disapproved – Determination of approval status for the fenceline air monitoring plan shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in subdivision (d) – Plan Requirements and the Rule 1180 Guidelines – If disapproved, the owner or operator shall resubmit the fenceline air monitoring plan within 30 calendar days after notification of disapproval of the plan – The resubmitted plan is required to include any information necessary to address deficiencies	– The EPA administrator is required to approve site-specific monitoring plans within 90 days of receipt – If the EPA Administrator disapproves the plan for deficiencies the petroleum refinery owner or operator is provided 90 days to re-submit the plan – The plan is considered approved if the EPA administrator approves the plan in writing or fails to approve the plan in writing – Approval of the site-specific plan will be based on completeness, accuracy and reasonableness of the request	– Air monitoring plan subject to public review procedure for determining whether and air monitoring plan meets the applicable requirements of the rule including the following: o A preliminary 45-day review by the APCO to identify any deficiencies that need to be corrected o 45-day corrective action procedure to correct plan deficiencies o 45-day public comment period that requires written comments to be considered by the APCO o Final action required 45 days after the close of the public comment period

Rule Element	PR 1180	US EPA 40 CFR §63.658	BAAQMD Regulation 12 Rule 15
	identified in the disapproval letter. The Executive Officer will either approve the revised and resubmitted fenceline and community air monitoring plan or modify the plan and approve it as modified – The fenceline air monitoring plan shall be made available, by the Executive Officer, for public review no less than 14 days prior to approval. SCAQMD staff will review and respond to public input accordingly		o Public inspection procedures that require the APCO to post the final approved plan and notify members of the public
Notifications	– Upon installation and operation of a fenceline air monitoring system the owner or operator of a petroleum refinery shall comply with the following notification requirements: o Call 1-800-CUT-SMOG to notify the Executive Officer within 48 hours of planned maintenance activities, providing the name of the petroleum refinery, the name and location of the monitor and the date(s) of the occurrence o Call 1-800-CUT-SMOG to notify the Executive Officer within 2 hours of discovering that equipment described in the fenceline air monitoring plan failed to accurately provide real-time air monitoring information – The owner or operator of petroleum refinery shall also submit a written notification to the Executive Office of any equipment failure that also results in a failure to accurately provide continuous, real-time air monitoring information for 24-hours or longer – The written notification is required to be submitted to the Executive Officer within 24 hours of discovering the equipment failure and shall include the following: o An explanation of activities currently being pursued or taken to remedy the equipment failure; o Estimated time needed to restore the fenceline air monitoring equipment to normal operating	– Not applicable	– Not applicable

Rule Element	PR 1180	US EPA 40 CFR §63.658	BAAQMD Regulation 12 Rule 15
	conditions that comply with the approved fenceline air monitoring plan; and o Temporary air monitoring measures subject from the approved fenceline air monitoring plan to be implemented until the fenceline air monitoring system is restored to normal operating conditions – The owner or operator of a petroleum refinery is required to submit an updated fenceline air monitoring plan to the Executive Officer if an equipment failure results in a failure to accurately provide continuous, real-time air monitoring information for more than 30 days		
Recordkeeping	– The owner or operator of a petroleum refinery is required maintain records of all information required under this rule for at least five years and shall be made available to SCAQMD personnel upon request with at least the two most recent years kept onsite	– Submit sample results on a quarterly basis – EPA public release of benzene data on web page 30 days after quarterly reporting period ends	– Air monitoring Plan must describe how the refinery will provide the air monitoring data in a way that the public can readily access and understand – Air Monitoring Plan must provide a means for public to provide input toward the way data are displayed – Maintain records of all information required under the rule for a period of 5 years after the date of the records
Community Air Monitoring Fees	– Requires petroleum refineries to pay an installation fee for refinery-related community air monitoring system based on a rate of $0.0195 per annual barrels capacity – Requires petroleum refineries to pay an initial minimum payment of thirty-percent of the fee by no later than July 1, 2018 and the remaining balance of the installation fee by no later than January 30, 2019 – Annual operating and maintenance fees for the community air monitoring system are to be recovered pursuant to Rule 301–Permitting and Associated Fees	– Not applicable	– Not applicable

Rule Element	PR 1180	US EPA 40 CFR §63.658	BAAQMD Regulation 12 Rule 15
	– Requires that no later than January 1, 2025 and every five years thereafter, the Executive Officer shall conduct a refinery-related community air monitoring assessment to evaluate adequate coverage and/or need for equipment upgrades		
Exemptions	– Owners or operators of petroleum refineries that have a maximum capacity to process less than 40,000 barrels per day of crude oil are exempt from the requirements of the rule	– Not applicable	– Not applicable

REFERENCES

Bay Area Air Quality Management District, 2016. Regulation 12, Rule 15: Petroleum Refining Emissions Tracking.
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[http://www.baaqmd.gov/~/media/files/planning-and-research/public-hearings/2016/9-14-and-12-15/042016-hearing/1215-amg-041416-pdf.pdf?la=en]

U.S. EPA, 2015. AP-42: Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Chapter 5: Petroleum Industry.
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U.S. EPA, 2015. 40 CFR §63.658, Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards, Final Rule.
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APPENDIX A: RESPONSE TO COMMENTS

Comment Letter #1

OFFICE OF THE MAYOR
ALBERT ROBLES

CITY OF CARSON

May 8, 2017

Dan Garcia, Program Supervisor
(dgarcia@aqmd.gov)
South Coast Air Quality District
21865 Copley Drive
Diamond Bar, CA 91765

RE: SCAQMD Draft Rule 1180

Dear Mr. Garcia:

The adoption and implementation of SCAQMD's proposed Rule 1180 Refinery Fenceline and Community Monitoring would become one of the most important human health initiatives for the City of Carson. The City of Carson appreciates the opportunity to provide comments on the proposed Rule 1180 currently being developed regarding refinery fenceline and community monitoring to ensure that Rule 1180 can be a valuable tool to assist in reducing any future negative health impacts from refinery activities.

The City of Carson lies in an area of Los Angeles County that has substantial exposure to multiple refinery operation sources. Carson is within the air shed of three major refineries. Our community is severely disadvantaged and we appreciate the efforts on the part of the SCAQMD to implement a thorough and effective monitoring system of both fenceline and community pollution levels adversely affecting our residents.

The proposed rule should include effective action levels, monitoring of a range of pollutants and simultaneous monitoring within the community as well as at the fenceline. This will help ensure that the rule is capable of addressing all the adverse public health impacts that refineries have in our community.

According to the most recent version of CalEnvironScreen 2.0, nineteen of Carson's twenty-one census tracts are heavily impacted by exposure to pollution. Several of these census tracts are immediately adjacent to refineries in Carson. We attended the working group meeting on April 15, 2017, and in response, would like to provide comments on the preparation of the draft rule. Specifically, the City of Carson would like to ensure that (i) the draft rule 1180 contains provisions related to monitoring toxic pollutants in the community, as well as along the fencelines; (ii) that the rule contain action levels and procedures that should be performed should these action levels be exceeded; and (iii) that the public have accessibility to the data in a comprehensive real-time manner.

CITY HALL • 701 E. CARSON STREET • P.O. BOX 6234 • CARSON, CA 90749 • (310) 830-7600
WEBSITE: ci.carson.ca.us

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Community Monitoring

The establishment of monitors in our community, as well as the installation of fenceline monitors, is an important issue that should be included in the final rule. Pollutants can travel above a fenceline and are a community concern. The Richmond refinery in the Bay Area has monitors placed in the community, as well as along the refinery's fenceline. Monitors should be located near the closest residences, schools and parks. The locating at these sensitive areas would ensure that public exposure to refinery pollution does not exceed acceptable levels. 1-1

Action Levels

The Federal rule has an action level of 9 ug/m3 for benzene, requiring a "root cause analysis" if the action level is exceeded. While the gathering of pollutant data is important, requirements about measures to reduce the exposure levels if they exceed an action level should also be included in the draft rule. The draft rule 1180 should include action levels and specific actions to be taken if a refinery exceeds these levels. The levels should be based on acute, chronic and cancer levels already acceptable to OEHHA, such as the chronic exposure level for benzene of 3 ug/m3. 1-2

Additional Pollutants

While the Federal rule only addresses benzene exposure as a surrogate for other toxic pollutants, the BAAQMD rule includes a number of additional pollutants, including hydrogen sulfide, which are not necessarily surrogates of benzene. Additional pollutants that cause health effects, including diesel and other particulate emissions should also be part of the monitoring program. 1-3

Public Participation and Accessibility

The data gathered should be accessible to the public so that the public can know, in real-time or close to it, the monitoring results. The BAAQMD has these features for both the Richmond and Rodeo refineries and this is an important feature to provide information to the community. In addition, ensuring that the community has an opportunity to review the monitoring plans and provide input are important elements to ensure a robust and effective monitoring program. 1-4

The City of Carson looks forward to SCAQMD's adoption and implementation of Rule 1180 and the increased levels of air quality monitoring associated with the refineries. Ensuring that there is also monitoring of pollutants at the closest receptors in the community, effective pollutant reduction strategies and action levels for a wide range of pollutants, along with community access and participation will provide for an effective tool that protects the health of our community.

Sincerely,

Albert Robles
Mayor

Cc: City Council
Kenneth C. Farfsing, City Manager
Sunny Soltani, City Attorney
John Raymond, Community Development Director
Greg Chittick, Senior Engineer and Scientist, MRS

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1-1 Response: PR 1180 requires petroleum refineries to collect real-time data of refinery air pollutant emissions at or near their property boundaries, and to provide data as quickly as possible to the public. The proposed rule requires petroleum refineries to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. PR 1180 also establishes a fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems. In accordance with the Health and Safety Code §42705.6 the SCAQMD a refinery-related community air monitoring system will be implemented by the SCAQMD. Guidance for the refinery-related community air monitoring system will be developed in a public process that provides an opportunity for input from community members, industry stakeholders and other interested parties.

1-2 Response: The Rule 1180 Guidelines require a notification system to be designed that provides the public the ability to be notified via email, text message or other communication venues for the following: (1) data availability and release of periodic reports; (2) exceedance of an acute Reference Exposure Level (REL); and (3) monitoring system status. Notifications will inform the public when certain pollutants exceed acute RELs, or pose a potential health hazard, allowing the public to take proper actions to protect their health. The early notifications would also provide information to refinery operators to rapidly mitigate any undetected and/or accidental emissions.

A REL is an airborne concentration level of a chemical at or below which no adverse health effects are anticipated for a specified exposure duration as developed by OEHHA[1]. RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. RELs are designed to protect the most sensitive individuals in the population by the inclusion of margins of safety. Therefore, exceeding the REL does not automatically indicate an adverse health impacts and a REL is not the threshold where population health effects would first be seen. However, levels of exposure above the REL levels have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals (e.g., the very young, the elderly, pregnant women, and those with acute or chronic illnesses).

1-3 Response: PR 1180 requires fenceline air monitoring for benzene, hydrogen sulfide and sixteen other pollutants. Although PR 1180 does not require fenceline air monitoring for diesel and other particulate emissions the proposed rule does set-forth fee requirements for a community air monitoring system. Guidance for the community air monitoring system will be developed in a public

process and SCAQMD staff anticipates inclusion of measurements for additional emissions.

1-4 Response: Subdivision (d) of PR 1180 requires that fenceline air monitoring plans provide methods for continuous dissemination of data collected to the public as expeditiously as possible. Further, PR 1180 requires that the fenceline air monitoring plan to be made available, by the Executive Officer, for public review no less than 14 days prior to approval. SCAQMD staff will review and respond to public input accordingly. No later than 30 days after receipt of a fenceline air monitoring plan the SCAQMD staff will post the plan to the SCAQMD website for public viewing.

Comment Letter #2

WSPA
Western States Petroleum Association

Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Bridget McCann
Manager, Southern California Region

July 21, 2017

Mr. Daniel Garcia
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Via e-mail at: DGarcia@aqmd.gov

Re: **Comments on Proposed Rule 1180, Refinery Fenceline and Community Monitoring**

Dear Mr. Garcia:

Western States Petroleum Association (WSPA) appreciates this opportunity to provide comments on the South Coast Air Quality Management District's (SCAQMD or District) Proposed Rule 1180, Refinery Fenceline and Community Monitoring (PR 1180). WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in five western states including California. WSPA-member companies operate petroleum refineries and other facilities in the South Coast Air Basin which would be affected by PR 1180.

WSPA supports the use of demonstrated measurement technologies to provide refineries with additional information for achieving additional emissions reductions. We have also been supportive of the District's pilot studies for different "emerging" optical remote sensing (ORS) measurement technologies where the capabilities require verification to ensure they are not deployed in an inappropriate manner. WSPA member companies are deploying fenceline monitoring programs for benzene in accordance with the U.S. Environmental Protection Agency's (USEPA) Fenceline Monitoring Rule. That USEPA program for fenceline monitoring of benzene was designed by USEPA to help refineries identify leaks or other unintended releases and provide additional community protections and will be in place starting January 30, 2018.

With respect to the District's PR1180, WSPA offers the following comments and suggestions:

1. **Proposed Rule 1180 should be split into two different rules/phases: (1) fenceline monitoring. ; and (2) community monitoring. These rules/phases should be implemented on a sequential basis so the fenceline monitoring for a given site can inform specifications for the corresponding community monitor(s).** 2-1

WSPA recommends that PR 1180 should be divided into two different rules or phases, and those rules or phases should be implemented sequentially. Each of the facilities to be monitored has different spatial conditions, and proximity of neighboring communities will be different from one refinery to the next. Air quality information collected by a fenceline monitoring system can inform the specified pollutants of interest for a corresponding community monitoring site.

970 W. 190th Street, Suite 304, Torrance, California 90502
(310) 808-2146 Fax: (310)324-9063
bmccann@wspa.org www.wspa.org

Mr. Daniel Garcia
July 21, 2017
Page 2

2. The technical objectives for fenceline monitoring under PR 1180 need to be clearly defined.

The District should clearly define the technical objectives for the proposed rule. In the working group meetings, District Staff has mentioned a variety of technologies which could serve a variety of objectives. For fenceline monitoring under PR 1180, WSPA recommends that the objectives be similar to the fenceline monitoring required under Bay Area Air Quality Management District (BAAQMD) Rule 12-15. Those requirements are as follows:

- Fenceline Monitoring: Refineries would measure benzene, toluene, ethyl benzene, and xylenes (BTEX) and H2S concentrations at the fenceline with technology capable of measuring in the parts per billion (ppb) range. Measurement of SO2, alkanes or other organic compound indicators, 1, 3-butadiene, and ammonia concentrations could be considered as appropriate. 2-2
- Fenceline measurements should be continuous (e.g., 5 minute resolution) and provided to the public on a (nearly) real-time basis with appropriate quality assurance/quality control (QA/QC) measures for assurance of data accuracy.

3. The technical objectives for community monitoring under PR 1180 should be clearly defined.

As with the fenceline monitoring, District Staff has not provided stakeholders with a clear set of technical objectives for the community monitors which may be required under this rule. WSPA does not feel it appropriate for the District to require refineries to construct or operate community monitors. That function is clearly within the District's existing statutory authority and would be more readily accepted by the community if it was conducted by the local air district. We note that BAAQMD reached a similar conclusion under Rule 12-15.[1] 2-3

That said, WSPA strongly believes that any community monitors required under PR 1180 should be specific to the conditions of their individual location. Local land use, meteorology, and pollutant concentration information from refinery fenceline monitors can and should be used to determine where community stations are located and for which pollutants they monitor. In certain cases, it may be advantageous for more than one refinery to share a monitoring station. It may also be possible for one or more refineries to leverage an existing public monitoring station for certain pollutants of interest. Where feasible, such efficiencies should be allowed and encouraged under PR 1180, thereby avoiding unnecessary duplication of effort and cost.

4. The District should be clear in describing what pollutants will be required to be monitored in fenceline monitoring systems and community monitoring stations. The District should provide guidance on acceptable methodologies for such monitoring plans.

As allowed under the BAAQMD's comparable rule[2], WSPA thinks PR 1180 should be flexible enough to permit individual facilities to specify the monitored pollutants based on site-specific conditions. Pollutants of interest for community stations should not be required to include regional pollutants (e.g., ozone) or other pollutants which are unrelated to local refining activities. 2-4

WSPA supports the development of written District guidance (similar to BAAQMD) concerning acceptable methodologies or technologies, and other performance requirements. Such guidelines should be technology neutral to the extent possible.

[1] BAAQMD, DRAFT Air Monitoring Guidelines for Petroleum Refineries – Air District Regulation 12, Rule 15: Petroleum Refining Emissions Tracking, April 2016. See page 1.
[2] BAAQMD Rule 12-15 and BAAQMD Air Monitoring Guidelines for Petroleum Refineries – Air District Regulation 12, Rule 15: Petroleum Refining Emissions Tracking, August 2015.

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Mr. Daniel Garcia
July 21, 2017
Page 3

It would be difficult for facilities to begin developing their monitoring plans (after rule adoption) absent such guidance. Such guidelines should be provided to stakeholders for review and comment (via the Working Group) prior to the Governing Board's consideration of Rule 1180. 2-4 con't

5. **The time requirement for each facility to return a monitoring plan to the District after the rule is adopted should be at least 12 months.** 2-5

WSPA feels it is important that PR 1180 allow sufficient time for individual refineries to develop monitoring plans with appropriate input from their neighboring communities and other stakeholders. We recommend that this period be at least 12 months after rule adoption.

6. **The time requirement for each facility to install and implement a fenceline monitoring system should be at least 24 months after monitoring plan approval by the District.** 2-6

Fenceline monitoring systems will require technical specification, engineering design and procurement, construction of associated utilities and security infrastructure (as needed), construction of any needed structures, as well as the installation of the monitoring equipment. Depending the circumstances, individual facilities may need to pull permits from the local building department. These monitoring systems will also need to be configured with web-based systems for public data display. We recommend that 24 months after rule adoption is an appropriate timetable for these systems to be operationalized.

7. **For fenceline sampling of benzene, the District should work with USEPA to obtain approval for real-time benzene monitoring under PR 1180 to be used in lieu of the passive sampler technology specified under the USEPA's Fenceline Monitoring Rule.** 2-7

WSPA appreciates the opportunity to provide these inputs as part of the Working Group for PR 1180, and look forward to continuing our discussion in the future. If you have any questions, please contact me at (310) 808-2146 or by email at bmccann@wspa.org.

Sincerely,

cc: Patty Senecal, WSPA
Wayne Nastri, SCAQMD
Dr. Philip Fine, SCAQMD

970 W. 190th Street, Suite 304, Torrance, California 90502
(310) 808-2146 Fax: (310)324-9063
bmccann@wspa.org www.wspa.org

2-1 Response: PR 1180 has been revised to limit the scope of rule to fenceline air monitoring that requires petroleum refineries to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. Also, pursuant to the Health and Safety Code §42705.6, PR1180 includes provisions that ensure petroleum refineries are responsible for the costs of implementing a refinery-related community air monitoring system. The design, development, installation, operation and maintenance of the refinery-related community air monitoring system will occur through a future public process and be implemented by the SCAQMD.

2-2 Response: The technical objectives of fenceline air monitoring are clearly identified in subdivion (a) of PR 1180 that states the purpose of the rule is to require real-time fenceline air monitoring systems…, "that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities."

2-3 Response: See the discussion in response 2-1 pertaining to community air monitoring.

2-4 Response: In response to the commenter the SCAQMD staff developed Table 1of PR 1180 that clearly identifies air pollutants to be addressed by fenceline air monitoring plans. Further, SCAQMD staff developed and is proprosing approval of the Rule 1180 Guidelines.

2-5 Response: SCAQMD staff has extended the time to submit a fenceline air monitoring plan from six to eight months after the date of rule adoption. The Health and Safety Code §42705.6 requires that on or before January 1, 2020, the owner or operator of a petroleum refinery shall develop, install, operate and maintain a fence-line air monitoring system in accordance with district guidance. As a result, SCAQMD staff has a limited time to review the submitted plan, resolve any deficiencies identified during the plan review process and provide it for public review. Therefore, allowing facilities additional time to submit the fenceline air monitoring plan or implement the monitoring is not feasible.

2-6 Response: See response 2-5 above.

2-7 Response: Where applicable, SCAQMD staff will assist petroleum refineries seeking U.S. EPA approval for fenceline air monitoring systems that are proposed to comply with both PR 1180 and U.S. EPA requirements for fenceline monitoring of benzene (i.e., 40 CFR 63.658).

Comment Letter #3

From: KT B
Subject: Comments on First Draft of Rule 1118
Date: July 27, 2017 at 5:08:34 PM PDT
To: Daniel Garcia <dgarcia@aqmd.gov>
Cc: <wnastri@aqmd.gov>, <pfine@aqmd.gov>

Good afternoon Dan , et al,

I was reviewing the first draft of Rule 1118 dates July 26, 2017 and had some thoughts/suggestions/concerns I wanted to share with the SCAQMD team during this rule making process.

1. **Reduce the time between approval of monitoring plan to the installation of monitoring from 1 year to 6 months or less.** Section (e). Refining facilities are given 6 months to come up with a plan, can be denied a plan twice, can appeal the denial and then given 1 year to install. 3-1
This would drag out installation for up to 2 years + from point of Rule Adoption to monitoring in-place and data being collected. As a community member I would like to see installation and data collection begin no later then 1 year after Rule Adoption.

2. If Refineries miss deadlines for plan submittals, have over 2 denials of submitted proposed monitoring plan they are assessed fees specified in rule 306. 3-2
In my quick review of Rule 306 the fees seem very minimal. Review of plan is ~ $500 for first 5 hours and then hourly at $150/hr. I didn't see anything significant for late fees.
In Rule 1118 draft section (f) (2) it states "It is in violation of the rule for a petroleum refinery not to have an approved fence line and community air monitoring plan after the second denial."
What is the repercussion if refining facilities are in violation of this rule 1118? If it is the minimal fees associated with rule 306 (http://www.aqmd.gov/docs/default-source/rule-book/reg-iii/rule-306.pdf) I am concerned that would not be a clear incentive for refineries to abide by this new rule.

3. Independent third party oversight: Section (d)(2)(G): **Omit the word "potential" for the independent oversight.** It is a conflict of interest for the refinery to chose and 3-3
compensate the independent third party whom oversees. **Can the AQMD come up with a limited list of third party, independent professionals that refineries in the basin can chose from?**

4.Section (j)(1) - Exemptions: Could you please clarify and expand on the exemptions? The way I interpret it is that any facility can pay an in-lieu fee and not do any of this fence line and 3-4
community air-monitoring. I do not see a specific fee listed in rule 304. The idea of this rule 1118 is to collect the data, not give an option to refuse to collect the pollutant data and
instead use it for a different air quality project. **I feel strongly that there should be no exemptions.**

5.Table 1: Air Pollutants to be addressed: Include PM 10 with PM 2.5. **Why wouldn't all pollutants be monitored in the community *and* at the fence line?** 3-5
For instance Hydrogen Fluoride should be both fence line and community to detect as early as possible.

6. Suggested Rule 1118 additions:
- **Dissemination of data to public shall be in real-time and published alongside the action level thresholds in-place by EPA, OEHHA, CDC, etc.**
- **Actions to be taken and repercussions administered when acceptable thresholds are exceeded, beyond reporting to AQMD and OES.**
- Identify minimum number of monitors to be placed in the community based on facility through put and density of community. 3-6
Perhaps every public school and park within a X mile radius for refinery throughput of 150,000 BPD, a X mile radius for throughput of 100,000 BPD, X
radius for throughput of 50,000 BPD or less?

I generally am not available to attend working meetings due to my work schedule. Please consider this email to be my input, as a community stakeholder, into this rule making process.
Many thanks for your thoughtfulness in this process.

Sincerely,
Katie Baad, P.E.
Civil Engineer
Torrance Resident

3-1 Response: PR 1180 has been revised to require a more stringent timeline for developing the fenceline air monitoring than originally proposed by SCAQMD staff for PR 1180 (see response 2-5). The Health and Safety Code §42705.6 requires that on or before January 1, 2020, the owner or operator of a petroleum refinery shall develop, install, operate and maintain a fence-line air monitoring system in accordance with district guidance. The timeline is

designed not to jeopardize the time available for petroleum refineries to submit fenceline air monitoring plans, obtain necessary approvals and implement the fenceline air monitoring systems by January 1, 2020.

3-2 Response: If a refinery misses the deadline for plan submittals and/or has over two denials of the submitted proposed air monitoring plan, the Executive Officer can modify the plan and approve it as modified according to Subdivision (f) of PR 1180 that states: "The Executive Officer will either approve the revised and resubmitted fenceline air monitoring plan or modify the plan and approve it as modified."

3-3 Response: Each refinery shall provide the details of the independent third party oversight in their submitted fenceline air monitoring plans, which will be reviewed by the SCAQMD staff and approved only if it satisfies the requirements of the PR 1180. The refineries are therefore responsible for providing information on oversight details that will be extensively reviewed by SCAQMD staff to avoid potential conflict of interest.

3-4 Response: The community air monitoring fee exemption has been removed from PR 1180.

3-5 Response: A goal of the fenceline air monitoring is to measure the gaseous fugitive emissions that are emitted from leaking equipment. Fugitive emissions are emissions of gases or vapors from leaks and other unintended or accidental releases of emissions. Leaks from pressurized process equipment generally occur through valves, pipe connections, mechanical seals, or related equipment, usually originating from the process area. Fugitive emissions also occur from storage tanks. These tanks are used to store crude oil prior to refining, intermediates between refining processes, and refined product streams. Due to the large number of potential leak sources that are scattered over a wide area at large refineries and difficulties in detecting and repairing these leaks (which only becomes significant collectively), these emissions are best monitored over a large area or path, using the open-path systems. However, open-path monitors are limited to measuring gaseous compounds and are unable to measure PM concentrations. PM concentrations therefore have to be measured using point monitors. Moreover, the source of PM emissions from a refinery is related to combustion sources, in particular the diesel burning equipment and the refineries are only one of the many sources of PM in the affected communities.

3-6 Response: The dissemination of data to public is in fact in real-time or near-real-time depending on the monitoring equipment limitations.

As provided by state law, emergency response agencies such as local fire agencies, have the primary responsibility for scene management during an accidental release of emissions or other emergency incidents. The refinery

operators must identify the primary local agency that provide emergency preparedness and response services for each refinery, and outline the process to be developed to integrate with and augment the existing public alert systems and communication mechanisms to provide the public with timely alerts and public safety information during refinery upsets and accidental releases of pollutants and not to conflict or duplicate the first response alert systems in case of an accidental release of emissions.

The number of required community air monitoring stations required air monitoring equipment at each station is evaluated by the SCAQMD staff on a case by case basis. This is because an important consideration for air monitoring at individual refineries is that the candidate chemicals will differ based on each refinery processes, emission profiles, and location. For example, some candidate chemicals may be released in small amounts from individual refineries.

Each refinery is obligated to identify the facility's proximity to sensitive receptors affected by the refinery operation; for example providing distances from facility to closest sensitive receptors, including public schools. The design and location of the monitoring equipment for both fenceline and community air monitoring must be informed by the location of these sensitive groups. A metric purely based on distance to sensitive receptors would not take into account the meteorological factors that more accurately determine the transport pathway of refinery emissions.

Comment #4

Angela Kim

From: krishna Nand
Sent: Sunday, July 30, 2017 6:01 PM
To: Kevin Durkee
Cc: Daniel Garcia; Payam Pakbin; Krishna Nand
Subject: PR 1180, Definition of Petroleum Refinery, SIC 2911
Attachments: NAICS.pdf

Follow Up Flag: Flag for follow up
Flag Status: Flagged

Hi Kevin,

During the PR 1180 Working Group meeting on July 28, 2017, we had some discussions about the applicability of PR 1180 to all the facilities covered under SIC 2911. As you are aware, SIC has now been upgraded to NAICS and based on my information NAICS Code 324110 represents better the Petroleum Refineries. This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. 4-1

Please review the attached document and see if you would like to make any changes to the definition provided for petroleum refinery in the draft PR1180.

Thanks,
Krishna Nand

CLASS CODES

Blog - Latest News

You are here: Home / Lookup / NAICS 324110

NAICS Code 324110

Definition | Illustrative Examples | Cross Reference

Class Codes

NAICS 324110

in ◄ Go back to the NAICS code list / by admin

NAICS Code 324110 – Petroleum Refineries

Definition of **NAICS Code 324110**: This industry comprises establishments primarily engaged in refining crude petroleum into refined petroleum. Petroleum refining involves one or more of the following activities:

1. Fractionation;
2. Straight distillation of crude oil; and
3. Cracking.

Cross Reference Guide for Code 324110

What codes are similar to this classification that might be a more applicable code? The cross-reference guide below displays the codes for other similar industries. Please review to find the most applicable classification.

- Manufacturing asphalt paving, roofing, and saturated materials from refined petroleum–are classified in Industry 32412 [https://classcodes.com/lookup/naics-5-digit-industry-32412/] , Asphalt Paving, Roofing, and Saturated Materials Manufacturing;
- Manufacturing paper mats and felts and saturating them with asphalt or tar into rolls and sheets–are classified in U.S. Industry NAICS 322121, Paper (except Newsprint) Mills;
- Blending or compounding refined petroleum to make lubricating oils and greases and/or re-refining used petroleum lubricating oils–are classified in U.S. Industry NAICS 324191, Petroleum Lubricating Oil and Grease Manufacturing;
- Manufacturing synthetic lubricating oils and greases–are classified in U.S. Industry NAICS 325998, All Other Miscellaneous Chemical Product and Preparation Manufacturing;
- Recovering natural gasoline and/or liquid hydrocarbons from oil and gas field gases–are classified in Industry 21111 [https://classcodes.com/lookup/naics-5-digit-industry-21111/] , Oil and Gas Extraction;
- Manufacturing acyclic and cyclic aromatic hydrocarbons (i.e., petrochemicals) from refined petroleum or liquid hydrocarbons–are classified in Industry NAICS 325110, Petrochemical Manufacturing;
- Manufacturing cyclic and acyclic chemicals (except petrochemicals)–are classified in Industry 32519 [https://classcodes.com/lookup/naics-5-digit-industry-32519/] , Other Basic Organic Chemical Manufacturing;
- Manufacturing coke oven products in steel mills–are classified in Industry NAICS 331110, Iron and Steel Mills and Ferroalloy Manufacturing; and
- Manufacturing coke oven products in coke oven establishments–are classified in U.S. Industry NAICS 324199, All Other Petroleum and Coal Products Manufacturing.

Other Index Entries for NAICS 324110

The North American Industry Classification System contains multiple index entries that are each descriptive of the same code. The bulleted list below shows all applicable index entries (Current and former) that are associated with this classification. These index entries further elaborate on the scope of applicable industries that have already been defined at the top of this page.

- Acid oils made in petroleum refineries
- Aliphatic chemicals (i.e., acyclic) made in petroleum refineries
- Alkylates made in petroleum refineries
- Asphalt and asphaltic materials made in petroleum refineries
- Asphalt paving mixtures made in petroleum refineries
- Aviation fuels manufacturing
- Benzene made in petroleum refineries
- Butylene (i.e., butene) made in petroleum refineries
- Coke, petroleum, made in petroleum refineries
- Crude oil refining
- Crude petroleum refineries
- Cumene made in petroleum refineries
- Cyclic aromatic hydrocarbons made in petroleum refineries
- Diesel fuels made in petroleum refineries
- Ethylene made in petroleum refineries
- Fuel oils manufacturing
- Fuels, jet, manufacturing
- Gasoline made in petroleum refineries
- Heating oils made in petroleum refineries
- Hydraulic fluids made in petroleum refineries
- Jet fuels manufacturing
- Kerosene manufacturing
- Liquefied petroleum gas (LPG) made in refineries

- Lubricating oils and greases made in petroleum refineries
- Naphtha made in petroleum refineries
- Naphthenic acids made in petroleum refineries
- Oil (i.e., petroleum) refineries
- Oil additives made in petroleum refineries
- Oils, fuel, manufacturing
- Paraffin waxes made in petroleum refineries
- Petrochemical feedstocks made in petroleum refineries
- Petrochemicals made in petroleum refineries
- Petroleum coke made in petroleum refineries
- Petroleum cracking and reforming
- Petroleum distillation
- Petroleum jelly made in petroleum refineries
- Petroleum lubricating oils made in petroleum refineries
- Petroleum refineries
- Propane gases made in petroleum refineries
- Propylene (i.e., propene) made in petroleum refineries
- Refineries, petroleum
- Refinery gases made in petroleum refineries
- Road oils made in petroleum refineries
- Solvents made in petroleum refineries
- Still gases made in petroleum refineries
- Styrene made in petroleum refineries
- Tar made in petroleum refineries
- Toluene made in petroleum refineries
- Waxes, petroleum, made in petroleum refineries
- Xylene made in petroleum refineries

Suggested Insurance Conversion Table for NAICS Code 324110

Looking for an insurance classification other than the North American Industry Classification System? If a company falls within the industry defined on this page, then the class codes mentioned below may be applicable. Please note that the

4-1 Response: SCAQMD staff determined that neither code was adequate to capture fuel oil refineries, but not asphalt refineries. The proposed applicability includes all petroleum refineries defined as those permitted to processes petroleum, as defined in the Standard Industrial Classification Manual as Industry No. 2911. Furthermore, an owner or operator of a petroleum refinery that has a maximum capacity to process less than 40,000 barrels per day of crude oil is exempt from the requirements of this rule.

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Comment #5

Angela Kim

Sent: Monday, August 7, 2017 8:05 AM
To: Daniel Garcia
Subject: Comments on First Draft of Rule 1180

Good afternoon Dan , et al,

I was reviewing the first draft of Rule 1180 dated July 26, 2017 and had some thoughts/suggestions/concerns I wanted to share with the SCAQMD team during this rule making process.

1. Section (e).
Refining facilities are given 6 months to come up with a plan, can be denied a plan twice, can appeal the denial and then given 1 year to install.
This would drag out installation for up to 2 years + from point of Rule Adoption to monitoring in-place and data being collected. As a community member I would like to see
installation and data collection begin no later then 1 year after Rule Adoption. **Reduce the time between approval of monitoring plan to the installation of monitoring from 1 year to 6 months or less** 5-1

2. If a refinery misses the deadline for plan submittals and has over 2 denials of submitted proposed monitoring plan, they are assessed fees specified in rule 306.
In my quick review of Rule 306 the fees seem very minimal. Review of plan is ~ $500 for first 5 hours and then hourly at $150/hr. I didn't see anything significant for late fees.
In Rule 1180 draft section (f) (2) it states "It is in violation of the rule for a petroleum refinery not to have an approved fence line and community air monitoring plan after the second denial."
What is the repercussion if refining facilities are in violation of this rule 1180? If it is the minimal fees associated with rule 306 (http://www.aqmd.gov/docs/default-source/rule-book/reg-iii/rule-306.pdf) I am concerned that would not be a clear incentive for refineries to abide by this new rule. 5-2

3. Independent third party oversight: Section (d)(2)(G): **Suggest omitting the word "potential" for the independent oversight.** It is a conflict of interest for the refinery to chose and
compensate the independent third party whom oversees. **Can the AQMD come up with a limited list of third party, independent professionals that refineries in the basin can chose from?** 5-3

4.Section (j)(1) - Exemptions: Could you please clarify and expand on the exemptions? The way I interpret it is that any facility can pay an in-lieu fee and not do any of this fence line and
community air-monitoring. I do not see a specific fee listed in rule 304. The idea of this rule 1180 is to collect the data, not give an option to refuse to collect the pollutant data and
instead use it for a different air quality project. **I feel strongly that there should be no exemptions.** 5-4

5.Table 1: Air Pollutants to be addressed: Include PM 10 with PM 2.5. **Why wouldn't all pollutants be monitored in the community *and* at the fence line?**
For instance Hydrogen Fluoride should be both fence line and community to detect as early as possible. 5-5

6. Suggested Rule 1180 additions:
- **Dissemination of data to public shall be in real-time and published alongside the action level thresholds in-place by EPA, OEHHA, CDC, etc.**
- **Actions to be taken and repercussions administered when acceptable thresholds are exceeded, beyond reporting to AQMD and OES.**
- Identify minimum number of monitors to be placed in the community based on facility through put and density of community.
Perhaps every public school and park within a X mile radius for refinery throughput of 150,000 BPD, a X mile radius for throughput of 100,000 BPD, X
radius for throughput of 50,000 BPD or less? 5-6

I generally am not available to attend working meetings due to my work schedule. Please consider this email to be my input, as a community stakeholder, into this rule making process.
Many thanks for your thoughtfulness in this process.

Sincerely,

Katie Baad, P.E.
Civil Engineer
Torrance Resident

1

5-1 **Response:** Please see prior related response for 3-1.

5-2 **Response:** Please see prior related response for 3-2.

5-3 **Response:** Please see prior related response for 3-3.

5-4 **Response:** Please see prior related response for 3-4.

5-5 **Response:** Please see prior related response for 3-5.

5-6 **Response:** Please see prior related response for 3-6.

Comment Letter #6

Angela Kim

From: Ericsson Marianne
Sent: Wednesday, August 16, 2017 11:57 AM
To: Payam Pakbin
Cc: Olga Pikelnaya; Andrea Polidori; Mellqvist Johan
Subject: Rule 1180 - Fence Line Monitoring

Hello Payam!

We've followed the fence line rule monitoring development and would suggest one comment/addition to the proposed rule based on the work we did for SCAQMD in 2015 and are continuing to do in the Community Monitoring project. Our field work indicates that the emission characteristic of the six large refineries are quite different - see the report from Project 1 - and that therefore the design and location of a permanent fence line monitoring systems should take this into consideration. We would propose that as a part of the fence line monitoring plans each refinery should be asked to provide some emission pattern data as part of the proposed designs/locations of the fence line monitoring system and also of what compounds to monitor. 6-1
Please let us know if there is any additional input you'd like from us a this time!
Cheers
Marianne

Marianne Ericsson
FluxSense Inc.
113 W G Street # 757
San Diego, CA 92101

6-1 Response: SCAQMD staff addressed the need for emissions pattern data as part of the proposed fenceline air monitoring plan in the Rule 1180 Guidelines. Specifically, the fenceline air monitoring plan checklist on page 4 of the Rule 1180 Guidelines require a description of historical facility emissions patterns that must be supported by technical information, such as, dispersion modeling data.

Comment Letter #7

Angela Kim

From: KTB
Sent: Friday, August 25, 2017 8:10 AM
To: Daniel Garcia
Cc: Wayne Nastri; Philip Fine
Subject: Follow-up: Comments on First Draft of Rule 1180

Good Morning Dan,

I reviewed the updated rule language for 1180 (monitoring), dated August 18th, 2017. I feel that my comments have been addresses / clarified in the rule now and from my layperson perspective it seems thorough. Thank you! Overall I believe I was interpreting the "exemption" portion incorrectly. The only exemption a refinery will have is if the District has their own monitoring program then the Refinery can pay to participate in that one instead of doubling up with their own monitoring system. I think that is reasonable and advantageous because that puts the District in charge of the monitoring.

I understand the monitoring will now be real-time, continuous and available to the public.
My questions now become;
1. How does this information get quantified and relayed to the city?
2. How does this information (when thresholds are exceeded) translate to action items for the community? 7-1
3. What is the appropriate action for the community to take for each threshold exceedance? Keeping in mind the different effects for "sensitive groups". 7-2
4. Who is responsible for alerting the community?

When I met with Chief Dumais and Chief Serna of the Torrance Fire Department, my understanding was that they depend on the AQMD to give them direction when there is a health hazard to the community due to air quality and when an action needs to be taken. Does the AQMD have a direct line of communication to the city and a process to push this information out to the public in a timely manner? Who makes the decision when an action should be taken and what the appropriate action is? 7-3

Thank you,
Katie

---------- Forwarded message ----------
From: **KTB**
Date: Mon, Aug 7, 2017 at 8:04 AM
Subject: Comments on First Draft of Rule 1180
To: Daniel Garcia <dgarcia@aqmd.gov>

7-1 Response: The measurements from the fenceline air monitoring system shall reflect a commitment to quality data that is outlined in the air monitoring plan. Each refinery is responsible to develop a Quality Assurance Project Plan (QAPP) that outlines the QA/QC plan. The data quality that is required and how that relates to when data generated by the instrumentation is accepted, and how the data will be reviewed and managed by the refineries (e.g. data validation). The data is then available to general public and the City. Moreover, the refineries must provide access to the archived data and each refinery must develop quarterly data summary reports including relationship to health thresholds, data completeness, instrument issues, and quality control efforts that can be accessed by general public and the City representatives for decision making.

7-2 Response: The data dissemination website must offer an opt-in notification system that is integrated with the data collected by the air monitoring network that automatically generates and issues notifications to subscribers when pollutant levels are above specified thresholds pursuant to the approved air monitoring plan. Resources that should inform the thresholds include the National Ambient Air Quality Standards (NAAQS), California Ambient Air Quality Standards (CAAQS), and the acute, chronic or carcinogenic Reference Exposure Levels (RELs) as assessed by California Office of Environmental Hazard Assessment (OEHHA).

An REL is an airborne concentration level of a chemical at or below which no adverse health effects are anticipated for a specified exposure duration as developed by OEHHA. Exceeding the REL does not automatically indicate an adverse health impact. The REL is not the threshold where population health effects would first be seen. However, levels of exposure above the REL levels have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals (e.g., the very young, the elderly, pregnant women, and those with acute or chronic illnesses). OEHHA has developed acute RELs for assessing potential non-cancer health impacts for short-term, one-hour peak exposures to air pollutants including facility emissions. By definition, an acute REL is an exposure that is not likely to cause adverse health effects in a human population, including sensitive subgroups, exposed to that concentration for the specified exposure duration on an intermittent basis. Chronic RELs are developed for assessing non-cancer impacts from long-term exposure, at or below which no adverse health impacts are anticipated following long-term exposure. Long-term exposure for these purposes has been defined by U.S. EPA as at least 12% of a lifetime, or about eight years for humans. However, for assessment and reporting programs, such as those required by AB 2588, 1-year emissions assessments are typically used for modeling ambient conditions in nearby communities for long-term exposures. Therefore, exceeding these threshold is not linked with any specific action(s).

The refineries must also send out notifications in case of unusually high concentrations (e.g. once a major leak is detected). The concentration levels may significantly exceed the health thresholds in case of a refinery upset and/or accidental release of emissions. However, as provided by state law, emergency response agencies such as local fire agencies, have the primary responsibility for scene management during an accidental release of emissions or other emergency incidents. The refinery operators must identify the primary local agency that provide emergency preparedness and response services for each refinery, and outline the process to be developed to integrate with and augment the existing public alert systems and communication mechanisms to provide the public with timely alerts and public safety information during refinery upsets and accidental releases of

pollutants and not to conflict or duplicate the first response alert systems in case of an accidental release of emissions.

RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. RELs are designed to protect the most sensitive individuals in the population by the inclusion of margins of safety.

7-3 Response: As provided by state law, emergency response agencies such as local fire agencies, have the primary responsibility for scene management during an accidental release of emissions or other emergency incidents. The refinery operators must identify the primary local agency that provide emergency preparedness and response services for each refinery, and outline the process to be developed to integrate with and augment the existing public alert systems and communication mechanisms to provide the public with timely alerts and public safety information during refinery upsets and accidental releases of pollutants and not to conflict or duplicate the first response alert systems in case of an accidental release of emissions.

The SCAQMD Health Effects Officer will also provide contextual information and recommendations to the first responders and City officials in case of an accidental release of emissions.

Comment Letter #8

Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Catherine Reheis-Boyd
President

August 25, 2017

Mr. Daniel Garcia
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Via e-mail at: DGarcia@aqmd.gov

Re: WSPA Comments on Proposed Rule 1180, Refinery Fenceline and Community Monitoring

Dear Mr. Garcia:

Western States Petroleum Association (WSPA) appreciates this opportunity to provide comments on the South Coast Air Quality Management District's (SCAQMD or District) Proposed Rule 1180, Refinery Fenceline and Community Monitoring (PR 1180). WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in five western states including California. WSPA member companies operate petroleum refineries and other facilities in the South Coast Air Basin which would be affected by PR 1180.

WSPA supports the use of demonstrated measurement technologies to provide refineries with additional information for achieving additional emissions reductions. We have also been supportive of the District's pilot studies for different "emerging" optical remote sensing (ORS) measurement technologies, and we continue to advocate that the capabilities of ORS technologies be verified to ensure they are deployed and results used in an appropriate manner.

With respect to the District's PR1180, WSPA offers the following comments:

1. **The proposed schedule for PR1180 rulemaking needs to be adjusted to allow sufficient time for stakeholder review and comment on a complete PR1180 package, including the as-yet-unreleased Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines.**

Draft PR1180 and the Preliminary Draft Staff Report[1] make numerous references to the "Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines" which has yet to be released for public review. According to draft PR1180, these Guidelines will be used by the Executive Officer to evaluate PR1180 monitoring plans.

8-1

Such Guidelines must be provided to stakeholders for review and comment (via the Working Group) prior to the Governing Board's consideration of Rule 1180. Until the Guidelines are available, stakeholders cannot meaningfully evaluate the proposed PR1180 requirements. The rulemaking schedule for PR1180 needs to be adjusted to allow stakeholders sufficient time to review and comment on the complete PR1180 proposal, including the draft Guidelines. The currently proposed schedule for this rulemaking is inadequate in that regard.

[1] SCAQMD, Preliminary Draft Staff Report - Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring, August 2017.

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Mr. Daniel Garcia
August 25, 2017
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2. PR1180 needs to be coordinated with the air monitoring requirements of California Assembly Bill 617 to minimize duplicative or conflicting requirements for fenceline and/or community monitoring requirements.

California Assembly Bill 617 (AB 617) requires the California Air Resources Board (ARB) to prepare a plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems. That plan must be developed in consultation with stakeholders including, but not limited to, the Scientific Review Panel on Toxic Air Contaminants, the air districts, the Office of Environmental Health Hazard Assessment, environmental justice organizations, and affected industries. This plan is required to be completed on or before October 1, 2018. The bill also requires ARB and air districts to deploy new community air monitoring systems in certain, as-yet-undetermined, locations. AB 617 also authorizes air districts to require certain stationary sources to deploy fenceline monitoring systems or other specified real-time monitoring under certain circumstances.[2] 8-2

Given the significant overlap of monitoring objectives, WSPA recommends that PR1180 needs to be carefully coordinated with the monitoring requirements authorized by AB 617. That coordination should include both the technical monitoring requirements as well as the implementation schedule, and should be completed before Governing Board consideration of PR1180.

3. The PR1180 "Plan Requirements" includes reference to a number of air pollutants which are outside the stated purpose of the rule. Table 1 needs to be revised to focus solely on air pollutants which are associated with refinery operations.

8-3

The stated purpose of PR1180 is "…to require fenceline and community air monitoring systems that provide continuous air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals and other compounds at or near the property boundaries of petroleum refineries and in nearby communities."[3] However the current draft rule would require fenceline and (nearby) community monitoring for a number of regional and other air pollutants which are seemingly unrelated to refining operations. For example, the draft rule includes reference to the following: [4]

Community Air Monitoring
- Regional pollutants (e.g., ozone, $PM_{2.5}$, PM_{10})
- Speciated metal compounds (Nickel, Mercury, Copper, Vanadium, Lead)
- Black carbon and ultrafine particulate matter (UFP)

Fenceline Monitoring
- UFP.

The District has presented no basis for including these pollutants in Table 1, yet their inclusion could impose a permanent cost burden on the affected facilities to conduct continuous monitoring for them. While the draft rule potentially allows a facility to argue for case-by-case exclusion of a pollutant from its plan, approval of such exclusions would be solely at the discretion of the Executive Officer [5] and the criteria for such approvals has not yet been provided. This would cause an unfair cost burden for affected facilities.

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[2] California Assembly Bill 617.
[3] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (a) - Purpose.
[4] SCAQMD Proposed Rule 1180 (August 18, 2017), Table 1 – Air Pollutants to be Addressed by Fenceline and Community Air Monitoring Plans.
[5] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (d)(3).

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PR1180 Table 1 needs to be revised to limit the addressed air pollutants to those which are reasonably associated with refining operations.

4. The technical requirements for community monitoring must be clearly defined in the as-yet-unreleased Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines, including the criteria for excluding pollutants from an initial monitoring plan, or future revisions of that plan.

Community monitors required under PR1180 should be specific to the conditions of individual locations. Local land use, meteorology, and pollutant concentration information from fenceline monitors should be used to help determine where community stations are located and for which pollutants they monitor. In certain cases, it may be advantageous for more than one refinery to share a monitoring station. 8-4

PR1180 and the Guidelines should also be flexible to allow a facility to limit monitoring based on site-specific conditions. The current draft PR1180 suggests that the Guidelines will include criteria for exclusion of a Table 1 listed pollutant in an initial monitoring plan. However, the Guidelines should also include a clear process and criteria whereby a facility is allowed to later revise its monitoring plan to cease monitoring a pollutant if it is regularly undetected.

5. The time needed for a facility to install and implement a community monitoring station will be longer than for fenceline systems. Facilities need to be given at least 24 months after plan approval to complete installation and begin operation of community monitoring sites.

The current draft PR1180 would require facilities to complete installation and begin operation no later than one year after plan approval.[6] For community monitoring sites, this is an inadequate amount of time.

The time needed to develop off-site community monitoring stations will be considerably longer than that needed for onsite fenceline systems for several reasons. The offsite sites will take longer because (in most cases) they will require: (a) identifying sites in the community which could be viable in terms of both technical siting criteria as well as potential for obtaining site control; (b) securing control of the proposed site via purchase, lease or other legal agreement; (c) obtaining the necessary building and/or land use approvals from the applicable jurisdiction(s); (d) constructing any needed structures, utility and security infrastructure; and (e) installing and commissioning the monitoring systems into the station site. In the highly urbanized areas surrounding most Southern California refineries these activities can easily take two years under the best conditions. 8-5

In addition to bifurcating the schedules for the fenceline systems and community systems, we would also note that Section (e) should be revised to exclude a redundant (and potentially contradictory) reference to Table 1. We recommend the following revisions be made to Section (e).

(e) Fenceline and Community Air Monitoring System Requirements

(1) Beginning no later than one year after a fenceline and community air monitoring plan is approved by the Executive Officer, the owner or operator of a petroleum refinery shall complete installation and begin operation of a real-time fenceline ~~and community air monitoring~~ system in accordance with the approved fenceline and community air monitoring plan. ~~The fenceline and community air monitoring system shall monitor for all pollutants identified in Table 1. The location for siting of the community monitoring system.~~

(2) Beginning no later than 24 months after a fenceline and community air monitoring plan is approved by the Executive Officer, the owner or operator of a petroleum refinery shall complete installation and begin operation

[6] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (e) - Fenceline and Community Air Monitoring System Requirements.

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of a community air monitoring system in accordance with the approved fenceline and community air monitoring plan.

6. PR1180 should explicitly allow a facility to appeal decisions concerning the approval of its fenceline and community air monitoring plan to the Hearing Board.

Under PR1180, the Executive Officer would be authorized to approve a fenceline and community air monitoring plan submitted pursuant Rule 1180. The latest draft version of PR1180 would authorize the Executive Officer to unilaterally modify a facility's fenceline and community air monitoring plan in certain circumstances. The criteria for such approvals or modifications by the Executive Officer have not been presented to stakeholders. PR1180 should be revised to explicitly allow a facility to appeal Executive Officer decisions concerning its PR1180 monitoring plan to the Hearing Board 8-6

7. For fenceline sampling of benzene, the District should work with USEPA to obtain approval for real-time benzene monitoring under PR 1180 to be used in lieu of the passive sampler technology specified under the USEPA's Fenceline Monitoring Rule.

As the District is aware, refineries are deploying fenceline monitoring programs for benzene in accordance with the U.S. Environmental Protection Agency's (USEPA) Fenceline Monitoring Rule. The USEPA program for fenceline monitoring of benzene was designed by USEPA to help refineries identify leaks or other unintended releases and provide additional community protections and will be in place starting January 30, 2018. 8-7

The District has indicated that PR1180 required monitoring would, in part, serve the same purpose.[7] Given this overlapping purpose, the District should aggressively work with USEPA to obtain approval for real-time benzene monitoring under PR 1180 to be used in lieu of the passive sampler technology specified under the USEPA's Fenceline Monitoring Rule.

WSPA appreciates the opportunity to provide these inputs as part of the Working Group for PR 1180, and look forward to continuing our discussion in the future. If you have any questions, please contact me at this office or Bridget McCann at (310) 808-2146 or by email at bmccann@wspa.org.

Sincerely,

cc: Wayne Nastri, SCAQMD
Dr. Philip Fine, SCAQMD
Bridget McCann, WSPA

[7] SCAQMD, PR1180 PDSR, see page 1-1. "…information provided by a fenceline and community monitoring system could provide petroleum refineries with real-time information that could complement existing leak detection programs to identify and resolve leaks more expeditiously."

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8-1 Response: The SCAQMD Governing Board's Stationary Source committee recommended postponing adoption of PR 1180 by one month, until December 1, 2017, to address the requirements of AB 1647, which was signed into law by the Governor on October 8, 2017 and to allow additional stakeholder input. SCAQMD staff revised the Rule 1180 Guidelines based on stakeholder input and removed the requirements for refineries to conduct community air monitoring, as per AB 1647. Thus, the need to address community air monitoring in the Rule 1180 Guidelines or the refinery air monitoring plans.

8-2 Response: SCAQMD staff has worked to address consistency of the rule with both AB 617 and AB 1647, however, the State's plan for AB 617 is not expected to be finalized until October 1, 2018. Staff will continue to work with the State to ensure that efforts are not duplicated. Due to the requirements of AB 1647 that refineries install and operate fenceline monitoring by January 1, 2020 and that the Districts install and operate community monitoring by the same date, a delay to have all the State guidance in place prior to adopting the rule will not allow adequate time for plan submittal, review and the installation and operation of the fenceline air monitoring system by that deadline.

8-3 Response: Table 1 has been revised to be limited to pollutants that petroleum refineries must address in their fenceline air monitoring plans and to remove requirements for community monitoring by the refineries. Ultrafine Particles are no longer required at the fenceline in Table 1 of PR 1180. Furthermore, each refinery can substantiate removal of species, due to measurement difficulties or lack of their influence from the refineries, subject to concurrence by the SCAQMD Executive Officer upon approval of each plan.

8-4 Response: The refinery Rule 1180 Guidelines no longer addresses planning of the community monitoring, but do address the pollutants to be measured at the fenceline and guidelines for locating those instruments. The rule allows for reassessment of the air monitoring plan every five years, or sooner if the refinery has additional information or process changes.

8-5 Response: Please see response for 2-5.

8-6 Response: Paragraph (f)(2) of PR 1180 requires that prior to approval, the Executive Officer shall make the fenceline air monitoring plan available for public review for no less than fourteen (14) days. The facility owner or operator is not precluded from submitting comments on the modified plan during the public review process. Also, pursuant to Regulation V, facilities may appeal decisions concerning the approval of its air monitoring plan to the Hearing Board.

8-7 Response: SCAQMD staff anticipates that the refineries will need to meet the passive sampling requirements of the federal rule to meet the initial requirements and

deadlines of that rule. Staff will work with the refineries and U.S. EPA to demonstrate that the ~~open-path~~ fenceline monitoring technologies (e.g., open-path monitors) can meet those requirements, likely based on comparison of the data collected from both technologies. Also, see prior related response 2-7.

Comment Letter #9

Angela Kim

From: Ashley Hernandez
Sent: Wednesday, September 6, 2017 2:33 PM
To: Daniel Garcia
Subject: Rule 1180 comment Communities for a Better Environment

I am Ashley Hernandez, Wilmington resident and Youth Organizer for Communities for a Better Environment. Thanks much for the important work. Much better refinery monitoring is very important to Wilmington community members, who suffer from many health impacts known to be caused or made worse by oil refineries. In general, please ensure that regulations clearly require that refineries are required to detect spikes in emissions, and can't rely on longer averaging times, also require complete spacial coverage to detect not only plumes at ground level, but also from high stacks. We need to ensure community access to emissions data, and also on the cause of releases. This should not be considered Confidential Business Information. 9-1

We also want to make sure that you require monitoring a full set of harmful chemicals that are emitted in significant levels. Your slideshow shows that only two sulfur compounds are required - H2S (Hydrogen Sulfide) & (SO2) Sulfur Dioxide , but there are a number of other sulfur compounds emitted in significant quantities by oil refineries. For instance, the TRI (Toxic Release Inventory) reports that refineries emit thousands of pounds of carbon disulfide and carbonyl sulfide every year in our community, but these are not required to be monitored according to your slideshow. We urge you to double check the Toxic Release Inventory and other databases to make sure that chemicals that refineries are emitting in significant quantities are required to be monitored, and that you also have a system to detect unknown chemicals, and come back and determine what they are. 9-2

A few other important issues are to require backup parts, to also including video monitoring, to include some independent mobile monitoring systems, and to require that the monitoring plans be updated at least every few years, with public input. We also plan to submit written comments on the Draft Regulation & the Guidelines with more detailed comments, and we highly recommend you hold your next workgroup meeting in Wilmington in the evening with Spanish translation. 9-3

Best,
Ashley Hernandez
Wilmington Youth Organizer
Communities for a Better Environment

9-1 Response: As stated in the guidance document: "Continuous air monitoring at or near the property boundaries of petroleum refineries can significantly improve rapid detection and communication of potential hazardous releases to

refinery operators, responders, and the public in addition to providing long-term data be used to determine trends in emissions (e.g., diurnal, seasonal routine emissions variations). Therefore, the fenceline monitoring shall be operated continuously with a required time resolution of five-minute averaging when feasible. High time resolution monitoring reduces the chance of pollutant hot spots being undetected over the measured area and can provide real-time emissions information to refinery personnel and the nearby communities. If achieving the desired time-resolution is not feasible, refinery operators shall provide rationale in the air monitoring plan for any proposed time resolutions greater than five-minute averaging (e.g., based on the equipment employed, the number of paths covered by each ~~open-path~~fenceline air monitoring system, or other operational limitations)."

9-2 Response: SCAQMD staff has revised the PR 1180 rule and the Rule 1180 Guidelines to include requirement for measuring carbonyl sulfide.

9-3 Response: Each refinery must describe in detail the considerations and steps taken in the event of an equipment failure or during extended maintenance activities until the fenceline air monitoring system is restored to normal operating conditions.

Staff is working with the MATES V Advisory Group to plan refinery-related measurements that will help to inform planning for the measurements under the PR 1180.

Pursuant to subdivision (d) of the PR 1180, the owner or operator of a petroleum refinery shall submit an updated fenceline monitoring plan to the Executive Officer sixty days after the date of receiving information that an approved fenceline air monitoring plan does not adequately monitor for coverage for any pollutant(s) identified in Table 1 of the PR 1180 emitted from the petroleum refinery.

Comment Letter #10

OFFICE OF THE MAYOR
ALBERT ROBLES

CITY OF CARSON

SCAQMD Draft Rule 1180 Mayor Testimony/Letter

September 6, 2017

Dr. William A. Burke
Chairman, SCAQMD Governing Board
SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

Re: SCAQMD Draft Rule 1180 Critical Issues

Dear Chairman Burke,

The adoption and implementation of SCAQMD's proposed Rule 1180 "Refinery Fenceline and Community Air Monitoring" is long overdue and is one of the most important initiatives for the City of Carson.

The City of Carson is a severely impacted community with regard to air quality, and needs the SCAQMD to implement thorough and effective monitoring of both fenceline and community pollution levels that adversely affect our residences.

The City of Carson lies within an area of Los Angeles that has substantial exposure to multiple refinery operations, including the Tesoro Refinery, which will soon be the largest refinery on the west coast, and the Phillips 66 refinery, both of which are located within Carson. A SCAQMD study released earlier this year demonstrated that emissions may actually be up to 12 times higher than what is currently estimated and that, in the SCAQMD's own words, there "may be a discrepancy between measured and reported inventory emissions." 10-1

This "discrepancy" translates directly into a substantial increase in health risk for Carson residents. We need the SCAQMD to show that they care about Carson residents and to have our two refineries be the first to implement fenceline monitoring and ensure that community monitoring is conducted within the City of Carson.

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WEBSITE: ci.carson.ca.us

Though Rule 1180 provides for extensive data gathering, the rule does not provide for mechanisms to utilize the data to reduce the health risks to our residents. Health Risk Assessments should be required to be updated based on the new actual data in a timely matter. Mechanisms to reduce this health risk, either through community programs or refinery modifications, should also be considered. 10-2

The City of Carson looks urges SCAQMD's immediate adoption and implementation of Rule 1180 and volunteer Carson to serve as the first test pilot for execution. Ensuring that there is also effective placement of community monitors and an extensive reduction in the health impacts of these very large sources within our City is critical to the environment and the health and safety of our residents. Furthermore, efforts should go beyond just monitoring and include a robust mitigation program to substantially reduce health impacts to our heavily impacted community. 10-3

Sincerely,

Albert Robles
Mayor

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10-1 Response: PR 1180 requires petroleum refineries to install a fenceline air monitoring system no later than one year after approval of fenceline air monitoring plan. Further, Health and Safety Code §42705.6 requires petroleum refineries to develop, install, operate and maintain a fenceline monitoring system by January 1, 2020. Health and Safety Code §42705.6 also requires the SCAQMD to develop, install, operate and maintain a refinery-related community air monitoring system by January 1, 2020.

10-2 Response: PR 1180 could help inform refinery leak detection and repair programs and other refinery compliance efforts that could help minimize community impacts.

10-3 Response: PR 1180 is scheduled for a public hearing on December 1, 2017. Additionally, fenceline air monitoring plans required by PR 1180 are subject to a public review process. Further, development of the refinery-related community air monitoring will be developed in a public process.

Comment Letters #11

Western States Petroleum Association
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Bridget McCann
Manager, Southern California Region

September 12, 2017

Mr. Daniel Garcia
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Via e-mail at: DGarcia@aqmd.gov

Re: Additional Comments on Proposed Rule 1180, Refinery Fenceline and Community Monitoring, and the Preliminary Draft Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines

Dear Mr. Garcia:

Western States Petroleum Association (WSPA) appreciates this opportunity to provide comments on the South Coast Air Quality Management District's (SCAQMD or District) Proposed Rule 1180, Refinery Fenceline and Community Monitoring (PR 1180), and the recently released preliminary draft Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines. WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in five western states including California. WSPA member companies operate petroleum refineries and other facilities in the South Coast Air Basin which would be affected by PR 1180 and the associated guidelines.

We have reviewed the latest version of PR 1180 (8/18/17), the preliminary draft staff report, and the preliminary draft version of the Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines. We appreciate that District Staff have made some adjustments to the proposal based on comments from WSPA and other stakeholders, but there remain a number of significant unresolved issues with the proposal. As such, we offer the following additional comments.

1. **PR 1180 needs to be coordinated with the air monitoring requirements of California Assembly Bill 617 to minimize duplicative or conflicting requirements for fenceline and/or community monitoring.**

2. **The proposed schedule for Governing Board consideration of PR 1180 needs to be adjusted to allow completion of the District Staff's technical work and adequate time for stakeholder review and comment on a finalized PR 1180 package. The proposed schedule for PR 1180 consideration at the November Governing Board meeting does not provide sufficient time for stakeholder inputs and technical work is not yet complete.**

3. **The PR 1180 "Plan Requirements" continues to include references to a number of air pollutants which are outside the stated purpose of the rule. Table 1 in the draft rule and the preliminary draft guidelines needs to be revised to focus solely on air pollutants which are associated with refinery operations.**

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4. **Accidental release prevention and planning for acutely hazardous materials is regulated under the California Accidental Release Prevention (CalARP) Program and the Federal Risk Management Program (RMP). The District is not responsible for these programs and has not coordinated the PR 1180 proposal with the Certified Unified Program Agencies (CUPAs) and/or first responders. To avoid potential conflicts with these programs, all references to hydrogen fluoride (HF) should be removed from PR 1180 and the associated guidelines.**

5. **Warning or alert systems for accidental releases are beyond the scope of this rule. The District is not responsible for the CalARP or RMP programs and has not coordinated with CUPAs or first responders. All references to warning or alert systems should be removed from PR 1180 and the associated guidelines.**

6. **Facilities need to be given at least 24 months after plan approval to complete installation and begin operation of community monitoring sites. PR 1180 and the preliminary draft guidelines fail to recognize that the installation and implementation of community monitoring stations will (typically) be longer than for fenceline systems.**

7. **The Rule 1180 Refinery Fenceline and Community Air Monitoring Plan Guidelines need to be revised to more clearly detail the technical requirements and to match the PR 1180 requirements. Extraneous statements which implicitly expand the scope should be removed.**

8. **PR 1180 must explicitly allow a facility to appeal decisions concerning the approval of its fenceline and community air monitoring plan to the Hearing Board. Additionally, only one revision is allowed before the Executive Officer unilaterally adopts SCAQMD's changes to a refinery's plan. Either more time should be allowed for a refinery to address SCAQMD comments or the Monitoring Guidelines will need to be more detailed so that it is very clear exactly what the SCAQMD is expecting to be in the Monitoring Plans.**

9. **For fenceline sampling of benzene, the District should work with USEPA to obtain approval for real-time benzene monitoring under PR 1180 to be used in lieu of the passive sampler technology specified under the USEPA's Fenceline Monitoring Rule.**

Our more detailed comments follow.

1. **PR 1180 needs to be coordinated with the air monitoring requirements of California Assembly Bill 617 to minimize duplicative or conflicting requirements for fenceline and/or community monitoring.**

California Assembly Bill 617 (AB 617) requires the California Air Resources Board (ARB) to prepare a plan regarding technologies for monitoring criteria air pollutants and toxic air contaminants and the need for and benefits of additional community air monitoring systems. That plan must be developed in consultation with stakeholders including, but not limited to, the Scientific Review Panel on Toxic Air Contaminants, air districts, the Office of Environmental Health Hazard Assessment, environmental justice organizations, and affected industries. This plan is required to be completed on or before October 1, 2018. (This date contrasts with November 3, 2018, which will be the date refineries must submit their Monitoring Plans if Rule 1180 is adopted on November 3, 2017 as currently projected.) The bill also requires ARB and air districts to deploy new community air monitoring systems in certain, as-yet-undetermined, locations. The bill also authorizes air districts to require certain stationary sources to deploy fenceline monitoring systems or other specified real-time monitoring under certain circumstances.[1]

[1] California Assembly Bill 617.

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Mr. Daniel Garcia
September 12, 2017
Page 3

PR 1180 would significantly overlap with the monitoring objectives laid out in AB 617. To date, District Staff has not explained how PR 1180 would coordinate with AB 617 activities to avoid potential duplications and/or conflicts. WSPA strongly recommends that PR 1180 be coordinated with ARB and the monitoring requirements authorized by AB 617, and that coordination should include both the technical monitoring requirements, as well as the implementation schedule. That coordination should be complete prior to the Governing Board considering adoption of PR 1180. 11-1 con't

2. **The proposed schedule for Governing Board consideration of PR 1180 needs to be adjusted to allow completion of the District Staff's technical work and adequate time for stakeholder review and comment on a finalized PR 1180 package. The proposed schedule for PR 1180 consideration at the November Governing Board meeting does not provide sufficient time for stakeholder inputs and technical work is not yet complete.**

PR 1180 and the Preliminary Draft Staff Report[2] included numerous references to the "Rule 1180 Fenceline and Community Air Monitoring Plan Guidelines" which were finally released to the public as a "preliminary draft" on August 25, 2017. Those guidelines would be used by the Executive Officer to evaluate PR 1180 monitoring plans and quite simply, the rule cannot be implemented without the guidelines. 11-2

Given the importance of the guidelines in order to comply with the proposed rule, it is critical that stakeholders be afforded adequate time for review and comment via the Working Group prior to the Governing Board's consideration of the rule. As noted, the draft guidelines were only released on August 25th and then revised on August 29th. Due to the very late release, Working Group members were not provided time for meaningful review prior to the August 29th Working Group meeting. Based on initial feedback provided, the District is likely to receive numerous comments from stakeholders which will need to be addressed before the consideration of the Governing Board. For all of these reasons, the rulemaking schedule for PR 1180 should be adjusted.

3. **The PR 1180 "Plan Requirements" continues to include references to a number of air pollutants which are outside the stated purpose of the rule. Table 1 in the draft rule and the preliminary draft guidelines need to be revised to focus solely on air pollutants which are associated with refinery operations.**

The stated purpose of PR 1180 is "…to require fenceline and community air monitoring systems that provide continuous air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals and other compounds at or near the property boundaries of petroleum refineries and in nearby communities." [3] However the current draft rule would require fenceline and (nearby) community monitoring for a number of regional and other air pollutants for which direct, nearfield exposure would be seemingly unrelated to a nearby refinery. For example, the draft rule includes reference to the following: [4] 11-3

Community Air Monitoring

- Regional pollutants (e.g., , $PM_{2.5}$, PM_{10}, NOx, SOx,)
- Speciated metal compounds (Nickel, Mercury, Copper, Vanadium, Lead)
- Black carbon and ultrafine particulate matter (UFP)

[2] SCAQMD, Preliminary Draft Staff Report - Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring, August 2017.
[3] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (a) - Purpose.
[4] SCAQMD Proposed Rule 1180 (August 18, 2017), Table 1 – Air Pollutants to be Addressed by Fenceline and Community Air Monitoring Plans.

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Fenceline Monitoring

- Black carbon
- NOx and SOx

The District has yet to present a technical basis for including these pollutants in Table 1; however their inclusion could impose a permanent cost burden on the affected facilities to conduct continuous monitoring for them. While the draft rule theoretically allows a facility to argue for case-by-case exclusion of a pollutant from its plan, approval of such exclusions would be solely at the discretion of the Executive Officer [5] and criteria for such exclusions has not been provided. The preliminary draft guidelines document further confused the concept, which currently suggests:

> *"Chemical compounds associated with health risk and those measured at other ambient air monitoring locations (e.g. criteria pollutants) should be included in the community monitoring plan, even if those compounds are not emitted by the refinery."* [6] [Emphasis added]

Other inappropriate expansions of pollutants that would require monitoring include:

> (d)(3) – "Explanations for not including continuous, real-time air monitoring for any of the pollutants specified in Table **or any other pollutants emitted by the petroleum refinery** must be consistent with the criteria set forth in the Rule 1180 Fenceline and Community Air Monitoring Guidelines."

11-3 con't

> (d)(5(C) - *"Sixty days after the date of receiving new information about pollutants identified in Table 1 or additional pollutants emitted from the petroleum refinery would result in modifications to an approved fenceline and community air monitoring plan."*

WSPA believes that such an expansive (almost limitless) expectation is beyond the scope of this rule and would cause an unfair and open-ended cost burden for the affected facilities. Table 1 in PR 1180 and the associated guidelines document, needs to be revised to limit the addressed air pollutants to only those which are reasonably associated with refining operations. Further, after one-year of receiving non-detects for any Table 1 pollutant, refineries should be able to amend their Monitoring Plans to eliminate that constituent.

4. **Accidental release prevention and planning for acutely hazardous materials is regulated under the California Accidental Release Prevention (CalARP) Program and the Federal Risk Management Program (RMP). The District is not responsible for these programs and has not coordinated the PR 1180 proposal with the Certified Unified Program Agencies (CUPAs) and/or first responders. To avoid potential conflicts with these programs, all references to hydrogen fluoride (HF) should be removed from PR 1180 and the associated guidelines.**

11-4

Facilities using hydrogen fluoride (HF) or other acutely hazardous materials are already subject to regulation under the California Accidental Release Prevention (CalARP) program and the Federal Risk Management Plan (RMP) program. These programs, which are administered by CUPAs with oversight from the U.S. Environmental Protection Agency (USEPA), are designed to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. This is accomplished by requiring businesses that handle more than a threshold quantity of a regulated substance listed in the regulations to develop a Risk Management Plan (RMP). Where

[5] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (d)(3).
[6] SCAQMD, Rule 1180 Refinery Fenceline and Community Air Monitoring Plan Guidelines, "preliminary draft" version posted to website on August 29, 2017, page 10.

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appropriate to the potential hazard, facilities handling such hazardous materials are required to operate emissions monitoring and alert systems, which are coordinated with CUPAs and first responder agencies. This is the existing situation for refineries handling modified hydrofluoric acid (MHF) above threshold quantities.

At present, PR 1180 and the associated guidelines seemingly fail to recognize that HF is already actively regulated through the CUPAs under the CalARP and RMP programs, and instead proposes deployment of entirely new HF monitoring and alert systems. Staff has not explained to the Working Group how such new PR 1180 requirements would be coordinated or integrated with existing CUPA requirements, or how SCAQMD would reconcile its newly proposed role with the existing jurisdiction of the CUPAs and/or first responders. We see this as ill-advised and outside the appropriate scope of the rule. 11-4 con't

We strongly recommend the removal of all references to HF from PR 1180 and the associated guidelines. In the alternative, the District could develop an informational pamphlet and/or webpage for the public to overview the existing HF monitoring and alert systems, and provide relevant contact information for the responsible CUPA and/or first responder agencies.

5. **Warning or alert systems for accidental releases are beyond the scope of this rule. The District is not responsible for the CalARP or RMP programs and has not coordinated with CUPAs or first responders. All references to warning or alert systems should be removed from PR 1180 and the associated guidelines.**

Accidental releases are already regulated by the CUPAs under the CalARP and RMP programs which require physical and human systems to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize damage if releases do occur, and to satisfy community right-to-know laws. Where appropriate, this includes procedures and systems for warning/alerting the public, first responder agencies, etc. 11-5

The current PR 1180 proposal suggests that facilities would be required to provide a "warning/alert system for communities near refineries in case of an accidental release of emissions" as part of the PR 1180 monitoring plan, but technical specifications and communication objectives are not specified. PR 1180 and the preliminary draft guidelines also fail to explain how such a PR 1180 requirement for a warning/alert system would be coordinated or integrated with the existing CUPA requirements, nor has SCAQMD reconciled such a newly proposed role with the existing jurisdiction of the CUPAs and/or first responders under Federal and State law. This is clearly not well considered and should be deemed beyond the appropriate scope for PR 1180.

For these reasons, all references to warning or alert systems should be removed from PR 1180 and the associated guidelines.

6. **Facilities need to be given at least 24 months after plan approval to complete installation and begin operation of community monitoring sites. PR 1180 and the preliminary draft guidelines fail to recognize that the installation and implementation of community monitoring stations will (typically) be longer than for fenceline systems.** 11-6

The current draft PR 1180 would require facilities to complete installation and begin operation no later than one year after plan approval.[7] For community monitoring sites, this is an inadequate amount of time. The time needed to develop off-site community monitoring stations will be considerably longer than that needed for onsite fenceline systems for several reasons.

[7] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (e) - Fenceline and Community Air Monitoring System Requirements.

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Offsite stations will take longer because they will require: (a) identifying sites in the community which could be viable in terms of both technical siting criteria as well as potential for obtaining site control; (b) securing control of the proposed site via purchase, lease or other legal agreement; (c) obtaining the necessary building and/or land use approvals from the applicable jurisdiction(s); (d) constructing any needed structures, utility and security infrastructure; and (e) installing and commissioning the monitoring systems into the station site. As a practical matter, facilities are unlikely to execute long-term site control until they have received Executive Officer approval of their PR 1180 monitoring plan. Therefore, the significant work needed to control, permit, construct and operationalize these stations is going to take a considerable amount of time. In the highly urbanized areas surrounding most Southern California refineries, it is unrealistic to require completion in less than a year. Two years is a more realistic timetable.

In addition to bifurcating the schedules for the fenceline systems and community systems, we would also note that Section (e) should be revised to exclude a redundant (and potentially contradictory) reference to Table 1. We recommend the following revisions be made to Section (e): 11-6 con't

(e) Fenceline and Community Air Monitoring System Requirements

(1) Beginning no later than one year after a fenceline and community air monitoring plan is approved by the Executive Officer, the owner or operator of a petroleum refinery shall complete installation and begin operation of a real-time fenceline ~~and community air monitoring~~ system in accordance with the approved fenceline and community air monitoring plan. ~~The fenceline and community air monitoring system shall monitor for all pollutants identified in Table 1. The location for siting of the community monitoring system.~~

(2) Beginning no later than 24 months after a fenceline and community air monitoring plan is approved by the Executive Officer, the owner or operator of a petroleum refinery shall complete installation and begin operation of a community air monitoring system in accordance with the approved fenceline and community air monitoring plan.

7. The Rule 1180 Refinery Fenceline and Community Air Monitoring Plan Guidelines need to be revised to more clearly detail the technical requirements and to match the PR 1180 requirements. Extraneous statements which implicitly expand the scope should be removed.

The Rule 1180 guidelines were released to stakeholders as a "preliminary draft" on August 25th, and later revised on August 29th. This first version of the guidelines provided only limited specifics on the Staff's technical expectations for monitoring instrumentation, performance standards, and reporting. These guidelines are essential to the implementation of PR 1180, so it is imperative that the technical details be worked through the Working Group and incorporated into the guidelines document before the rule is presented to the Governing Board for adoption. The latest version of the guidelines are incomplete in that regard.

We also note that certain aspects of the preliminary draft guidelines appear to expand the scope and requirements of PR 1180. For example, the preliminary draft guidelines suggest that facilities would be required to re-demonstrate the appropriateness of their SCAQMD-approved community monitoring sites every five years. 11-7

> *"Once this has been accomplished, only periodic assessments need to take place to confirm that those relationships and correlations remain valid. The Air Monitoring Plan must contain rationale for determining when gradient studies will be repeated, based on time, process or emission source changes or other relevant parameters. At a minimum, gradient assessment studies must be repeated every five years to ensure correlations and relationships remain valid with the permanent monitoring location(s)."*[8]
> [Emphasis added]

[8] Rule 1180 Refinery Fenceline and Community Air Monitoring Plan Guidelines, "preliminary draft" version posted to website on August 29, 2017, page 9.

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This suggests that facilities could be required to relocate community stations based on gradient assessment studies every five years. Such requirements have not been discussed with stakeholders and would represent a significant undertaking and expense if required. We do not believe the District regularly re-demonstrates the appropriateness of its monitoring stations, and such a requirement under this rule would be excessive. The above statement, and any other expansive statements, need to be scrubbed from the guidelines to ensure consistency with the rule. 11-7 con't

8. **PR 1180 must explicitly allow a facility to appeal decisions concerning the approval of its fenceline and community air monitoring plan to the Hearing Board. Additionally, only one revision is allowed before the Executive Officer unilaterally adopts SCAQMD's changes to a refinery's plan. Either more time should be allowed for a refinery to address SCAQMD comments or the Monitoring Guidelines will need to be more detailed so that it is very clear exactly what the SCAQMD is expecting to be in the Monitoring Plans.** 11-8

Under PR 1180, the Executive Officer would be authorized to approve a fenceline and community air monitoring plan submitted pursuant to Rule 1180. The latest draft version of PR 1180 [9] would authorize the Executive Officer to unilaterally modify a facility's fenceline and community air monitoring plan in certain circumstances. The criteria for such approvals or modifications by the Executive Officer have not been presented to stakeholders. PR 1180 needs to be revised to explicitly allow a facility to appeal Executive Officer decisions concerning its PR 1180 monitoring plan to the Hearing Board.

9. **For fenceline sampling of benzene, the District should work with USEPA to obtain approval for real-time benzene monitoring under PR 1180 to be used in lieu of the passive sampler technology specified under the USEPA's Fenceline Monitoring Rule.**

As the District is aware, refineries are deploying fenceline monitoring programs for benzene in accordance with the USEPA Fenceline Monitoring Rule. The program for fenceline monitoring of benzene was designed by USEPA to help refineries identify leaks or other unintended releases and provide additional community protections and will be in place starting January 30, 2018. 11-9

The District has indicated that PR 1180 required monitoring would, in part, serve the same purpose.[10] Given this overlapping purpose, the District should aggressively work with USEPA to obtain approval for real-time benzene monitoring under PR 1180 to be used in lieu of the passive sampler technology specified under the USEPA's Fenceline Monitoring Rule.

WSPA members appreciate the opportunity to provide these comments as part of the Working Group for PR 1180, and look forward to continuing our discussion in the future.

If you have any questions, please contact me at (310) 808-2146 or by email at bmccann@wspa.org.

Sincerely,

[9] SCAQMD, Proposed Rule 1180 (August 18, 2017).
[10] SCAQMD, PR1180 PDSR, see page 1-1. "…information provided by a fenceline and community monitoring system could provide petroleum refineries with real-time information that could complement existing leak detection programs to identify and resolve leaks more expeditiously."

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cc: Wayne Nastri, SCAQMD
Dr. Philip Fine, SCAQMD
Michael Krause, SCAQMD
Patty Senecal, WSPA

11-1 Response Please see response for 8-2.

11-2 Response Please see response for 8-1.

11-3 Response Please see response for 8-3.

11-4 Response Two refineries are affected by Rule 1180 currently use HF and must consider fenceline monitoring of HF. Staff maintains that because of the highly toxic nature of HF, there is public interest in tracking levels crossing the fenceline. In the Rule 1180 Guidelines, staff acknowledges that near-process HF measurements are likely more important and allows the refineries to report these measurements in lieu of fenceline measurements. Furthermore, the affected refineries can outline their existing process, measurements, and safeguards in the air monitoring plan to demonstrate why fenceline HF measurements are unnecessary as part of the fenceline air monitoring plan and system.

11-5 Response The rule is focused on providing real-time data and the refinery will provide a mechanism for the public to sign up for notices that RELs or other approved metrics are exceeded at the facility's fenceline. This data access can also provide additional information to the emergency responders and existing alert systems should such concerns arise, but is not a substitute for decision process of those responsible for the existing warning systems.

11-6 Response See related 2-5 and 8-6.

11-7 Response The Rule 1180 Guidelines have been revised to ensure consistency with the rule and to remove references to the planning of community monitoring and other related extraneous statements.

11-8 Response Please see response 8-6.

11-9 Response: Please see responses 2-7 and 8-7.

Comment Letter #12

OFFICE OF THE MAYOR
ALBERT ROBLES

CITY OF CARSON

From: Office of the Executive Officer Date: 9/19
Phil → Kruse
Wayne
For your info. ✓ handling ✓
signature, cc:

September 13, 2017

Honorable Dr. William A. Burke, Chairman
SCAQMD Governing Board
SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Rule 1180 - Request Adoption

Dear Chairman Burke,

The adoption and implementation of SCAQMD's proposed Rule 1180 "Refinery Fenceline and Community Air Monitoring" is long overdue and is one of your most important initiatives for the City of Carson. After five public meetings hosted by the SCAQMD, now is the time to act.

The City of Carson is a severely impacted community with regard to air quality, and needs the SCAQMD to immediately implement thorough and effective monitoring of both fenceline and community pollution levels that adversely affect our residents.

The City of Carson has substantial exposure to multiple refinery operations including the Tesoro Refinery, which will soon be the largest refinery on the west coast, the Phillips 66 refinery, and others located just outside City limits. A SCAQMD study released earlier this year demonstrated that emissions may actually be up to 12 times higher than what is currently estimated and that, in the SCAQMD's own words, there "may be a discrepancy between measured and reported inventory emissions."

This "discrepancy" translates directly into a substantial increase in health risk for Carson residents. *We need the SCAQMD to show that they care about Carson residents and to have our two refineries be the first to implement fenceline monitoring and ensure that community monitoring is conducted within the City of Carson.*

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WEBSITE: ci.carson.ca.us

Though Rule 1180 provides for extensive data gathering, the rule does not provide any mechanisms to utilize the data to reduce the health risks to our residents. As new data is collected, Health Risk Assessments should be updated. In turn, mechanisms to reduce health risks, either through community programs or refinery modifications, should also be considered. 12-1

The City of Carson urges SCAQMD's immediate adoption and implementation of Rule 1180 and volunteers Carson to serve as the first test pilot for execution. Ensuring that there is also effective placement of community monitors and an extensive reduction in the health impacts of these very large sources within our City is critical to the environment and the health and safety of our residents. Furthermore, efforts should go beyond just monitoring and include a robust mitigation program to substantially reduce health impacts to our heavily impacted community. 12-2

Sincerely,

Albert Robles
Mayor

CC: Vice-Chairman Ben Benoit, SCAQMD
Board Member Marion Ashley, SCAQMD
Board Member Joe Buscaino, SCAQMD
Board Member Michael Cacciotti, SCAQMD
Board Member Sheila Kuehl, SCAQMD
Board Member Dr. Joseph K. Lyou, SCAQMD
Board Member Larry McCallon, SCAQMD
Board Member Judy Mitchell, SCAQMD
Board Member Shawn Nelson, SCAQMD
Board Member Dr. Clark E. Parker, Sr., SCAQMD
Board Member Dwight Robinson, SCAQMD
Board Member Janice Rutherford, SCAQMD
Executive Officer Wayne Nastri, SCAQMD
Kenneth C. Farfsing, City Manager, City of Carson
Sunny Soltani, City Attorney, City of Carson
John Raymond, Director of Community Development, City of Carson
Saied Naaseh, Planning Manager, City of Carson
Richard Rojas, Senior Planner, City of Carson

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12-1 Response: See response 10-1.

12-2 Response: See response 10-2.

12-3 Response: See response 10-3.

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Comment Letter #13

September 15, 2017

Mr. Wayne Nastri
Executive Officer
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: ***SCAQMD rulemaking schedules for Proposed Rule 1180 and other rules***

Dear Mr. Nastri:

We are writing to express our concerns regarding recent rulemaking activities. The accelerated rulemaking schedules for several proposed rules have resulted in an abridged process that makes it difficult for stakeholders to provide timely comments. In many instances, the shortened timelines for rule development does not allow for staff's technical documents to be provided in a timely manner, which results in stakeholders not having time to sufficiently review documents prior to working group meetings or workshops. While Proposed Rule 1180 is a current example of this concern, this has also been the District's approach on several other recent rulemakings (e.g., Rule 1401, Rule 1430, 1469, and 1407).

The rulemaking process is a critically important and impactful authority exercised by the District, taking control measure concepts (generally outlined in the Air Quality Management Plan (AQMP) or Clean Communities Plan) and translating them into proposed rule language. This process involves extensive research on technology, meetings with affected industries to determine feasibility and alternatives, public task force and workshop meetings, in-depth analyses of environmental, social and economic impacts, and thorough review by the appropriate Governing Board committees. With respect to stakeholder involvement, the District recently described it as follows:

> *This extensive process of public and policymaker participation encourages consensus in development of rule requirements so that affected sources have an opportunity for input into the rules that will regulate their operations. Once the requirements are developed, the proposed rule, along with an Environmental Assessment and a socioeconomic report, is presented to SCAQMD's Governing Board at a public hearing. Public testimony is presented and considered by the Board before any rule is adopted.*[1]

[1] See SCAQMD Budget & Work Program, Fiscal Year 2017-2018, page 8.

Historically, the District staff collected information, developed a technical proposal with supporting analyses, and engaged industry and public stakeholders on the technical content of the proposal before progressing to the Governing Board committees and finally a public hearing. Recently this process has been severely shortened.

For example, Proposed Rule 1180 is being presented to the Stationary Source Committee on Friday September 15, despite District Staff not yet completing the revisions of the technical guidelines that are the heart of the rule requirements. District Staff acknowledged at the Public Workshop on September 6th that the guidelines will be significantly revised, and another Working Group meeting has been scheduled for September 21st. However, Proposed Rule 1180 is being considered for set hearing on Friday, September 15 by the Stationary Source Committee with no final draft rule language, final draft staff report, revisions of the preliminary draft guidelines still pending, and all prior to the consideration of the scheduled working group on September 21. 13-1

Proposed Rule 1180 involves a number of complex technical and stakeholder issues which deserve to be considered in a deliberate manner. Such issues have been further complicated with the recent passage of Assembly Bill 617, which requires the Air Resources Board (ARB) and the air districts to develop community air monitoring plans and to deploy new community air monitoring systems. Given the considerable overlap with the intended Proposed Rule 1180 scope and the AB 617 program, PR 1180 should be revised to exclude new community monitoring, as the clear intent of AB 617 was for that work to be done by air districts following guidance issued by ARB. 13-2

With respect to the rulemaking schedule, the District's recent approach is moving faster than can be supported by the Staff's technical work. We respectfully request that District Staff revise the Proposed Rule 1180 rulemaking schedule to: 1) align it with the ability of the SCAQMD staff to provide the revised technical documents and rule language to the stakeholders in a timely manner; and 2) allow a reasonable period of time for stakeholders to review and provide appropriate recommendations and comments on all of the technical issues. 13-3

We strongly recommend the District do the same thing for other pending and future rulemakings. Thank you for your consideration of these comments.

Best regards,

California Independent Marketers Association
California Metals Coalition
California Small Business Alliance
Regulatory Flexibility Group
Southern California Air Quality Alliance
The Los Angeles Business Federation (BizFed)
Western States Petroleum Association

13-1 Response: SCAQMD Stationary Source Committee extended the PR 1180 Public Hearing by one month for a December 1, 2017 Public Hearing.

13-2 Response: In response to AB 617 and, more directly, AB 1647, staff has removed requirements for community monitoring conducted by petroleum refineries. AB 1647, however, requires a more stringent timeline for both fenceline and community air monitoring than originally proposed by SCAQMD staff for PR 1180 (see response 2-5). Further delay in the rulemaking schedule for PR 1180 could jeopardize the time available for petroleum refineries to submit fenceline air monitoring plans, obtain necessary approvals and implement the fenceline air monitoring systems by January 1, 2020.

13-3 Response: See response 13-2 above.

Comment Letter #14

California Council for Environmental and Economic Balance
101 Mission Street, Suite 1440, San Francisco, California 94105
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

September 21, 2017

Mr. Dan Garcia
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Submitted electronically to dgarcia@aqmd.gov

RE: Proposed Rule 1180: Refinery Fenceline & Community Monitoring, 8/18 Draft

Dear Mr. Garcia,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we provide here our comments on Proposed Rule 1180: Refinery Fenceline and Community Monitoring (PR 1180). CCEEB is a coalition of business, labor, and public leaders that advances strategies for a sound economy and a healthy environment. We have many members that operate facilities in the air basin. Additionally, CCEEB is an active stakeholder in the Bay Area and was involved in the development of the Bay Area Air Quality Management District's Regulation 12, Rule 15, which has been used as a model for PR 1180. CCEEB is also an active participant at the state Air Resources Board and will be heavily engage in implementation of AB 617, including the statewide plan for community monitoring.

CCEEB appreciates the discussion from the fifth and most recent working group meeting, and we look forward to reviewing the September 21 revision of the draft rule and accompanying guidelines. Below, we offer some initial questions for clarification and recommendations regarding the draft rule, including the following:

- **AB 617 Interaction**: Following the passage of AB 617, it is important that PR 1180 be harmonized with that law and not conflict with it or create duplicative requirements. We would like more information on the interaction of PR 1180 with AB 617, and how PR 1180 systems will be harmonized with the future state community monitoring program. AB 617 monitoring needs to be designed so that costs are transparent and equitable across all sources contributing to community air pollutant concentrations.

- **AB 1647 and MATES V Interaction**: CCEEB agrees with the revised approach proposed by staff to align AB 1647 requirements with the community monitoring

components of PR 1180. We commit to working with the District on how to develop equitable cost recovery for community monitoring across all District efforts.

- **Implementation Schedule must be realistic.** Based on real-world experience with BAAQMD Rule 12-15, we believe the implementation schedule in PR 1180 is overly ambitious. We urge the District to allow sufficient time for planning and deployment.

- **First responders must manage emergency warning.** CCEEB agrees that PR 1180 monitoring should augment, not duplicate or replace, the existing emergency preparedness and public alert system at emergency response agencies. Whether and how PR 1180 data gets incorporated into these systems should be directed by the appropriate emergency response agencies, not through District guidance.

- **Clear Source Identification and Communication** – PR 1180 guidelines require facilities to prepare and implement detailed public outreach and education programs to help assist with the interpretation and understanding of real-time data, including its limitations. CCEEB recommends that the District spearhead this work, developing communication templates that can be tailored to the needs of each refinery. As new monitoring systems are deployed (e.g., AB 617, AB 1647, etc.), proper source identification will be a critical component of data communication and interpretation.

What follows is a more detailed discussion of each point.

Interaction with AB 617 Community Monitoring

AB 617 requires an air district to implement a community monitoring system for any community identified by the state Air Resources Board (ARB) as part of its statewide community monitoring plan and in accordance with ARB guidance. ARB has until October 1, 2018 to develop its plan and identify priority communities, with additional communities added to the list each year thereafter. 14-1

Presumably, many if not all refinery communities will eventually be prioritized by ARB under AB 617. While AB 617 does allow air districts to mandate that *facilities* in these priority communities implement fenceline monitoring, the task of community monitoring remains firmly with the air district, not the facility. CCEEB asks for greater clarity about how the District will harmonize the community monitoring system requirements of PR 1180 into AB 617 plans, including how it will reconcile potentially misaligned goals and objectives between the two programs (i.e., PR 1180 narrowly focuses on exposures related to refinery operations, whereas AB 617 looks more broadly at cumulative air impacts from all sources), and how it will establish an

equitable cost recovery program, recognizing that PR 1180 facilities represent only a portion of emissions being measured under AB 617. 14-1 con't

Interaction with AB 1647 and MATES V Community Monitoring

AB 1647 requires *the District* to deploy community monitoring systems in refinery communities no later than January 1, 2020. Because of this, we support the approach to align community monitoring originally proposed in PR 1180 so that it is consistent with AB 1647, should the governor sign it. Additionally, District work on MATES V should be harmonized with PR 1180 and any AB 1647 monitoring program. 14-2

Implementation Schedule for Plans and System Deployment

PR 1180 would require facilities to submit both fenceline and community monitoring plans within one year of rule adoption; facilities then would have an additional year to deploy these systems and begin operation, including public dissemination of real-time data. CCEEB believes this is an overly ambitious schedule, and asks that additional time be given, particularly for the planning stage. BAAQMD Regulation 12, Rule 15 provides a good example of timing issues that can arise by mandating an overly ambitious implementation schedule. Like PR 1180, BAAQMD Rule 12-15 required refineries to submit fenceline monitoring plans within one year of rule adoption (*i.e.*, April 20, 2017). After recognizing the practical challenges involved with implementing fenceline monitoring, the BAAQMD ultimately extended the deadline by almost five months. (The plans are currently undergoing public review and may not be finalized until year-end.)

In contrast, PR 1180 would require not only implementation of fenceline monitoring within one year, but *also* attempt to implement community monitoring plans in that same time period. District staff recognize that community monitoring poses significant *additional* challenges, as described in the draft guidelines: "Even after detailed and careful determination of where a site should ideally be located, practical limitations such as availability of and access to property, access to power, and security and liability issues may impact the ability to meet the ideal." Facilities and the District must further consider community input, especially in terms of site selection, which may not be representative of the maximum exposure to refinery emissions and typical long-term concentrations, as called for in the guidelines.[1] 14-3

CCEEB asks staff to consider lengthening the plan deadline by at least six months and the deployment deadline by at least 12 months. We believe this is a more realistic implementation schedule that properly accounts for the many variables and practical challenges involved, as dictated by the District's monitoring guidelines. We commit to working with staff on a feasible implementation schedule that also takes into account mandated deadlines under AB 1647. In terms of exemptions in which facilities contract

[1] For example, a community could place a higher priority on sensitive receptors like schools and healthcare facilities, even if these locations are shown to have lower concentrations of refinery-associated emissions or be located in areas that make source identification less certain.

with the District to plan, operate, and manage community monitoring systems,[2] we ask for greater clarity about if and how the District will meet these same deadlines, and what, if any, compliance risk there is for facilities should District implementation fall short. We would also like to understand how cost recovery would be affected should the District modify its community monitoring system at a later date beyond the original contracted scope of work with a facility. 14-3 con't

Using Fenceline Monitoring Systems for Emergency Warning

PR 1180 guidelines require facilities to develop and manage an opt-in notification system that *automatically* issues alerts when pollutant levels are particularly high or pose potential health hazards. These alerts must include both computer-based communications as well as non-computer based communications (e.g. reverse 911 and automated phone calls). The guidelines also require facilities to "outline how fenceline measurements will be incorporated into the existing state-mandated emergency response program that is triggered by an accidental release of air contaminants."[3] 14-4

CCEEB believes emergency notifications and alerts go beyond the intent of this rule. Emergency response agencies are charged with primary responsibility over area-wide emergency alerts, and we believe that any use of fenceline monitoring data must be directed and managed by the appropriate emergency response agencies. This avoids creation of a competing alert system, which could be confusing to local residents, and minimizes the potential for interference with emergency response plans outside the authority of the District.

Identifying Contributing Sources to Community Concentrations

PR 1180 guidelines set forth a number of goals for facility public outreach and education, including:

- "Developing multiple communication venues to ensure widespread access to environmental information and to appeal to the various communication preferences (e.g., text messages, email, website, etc.) among the end users;
- "Promoting access to and awareness of the measurements and use of the real-time air pollution data through an active outreach and education program;
- "Developing contextual material to assist interpretation and understanding of the real-time data and its limitations;
- "Designing an effective outreach and education program, providing valuable information for better public decision making to reduce the exposure to air pollutants, particularly for more sensitive community members;
- "Identifying a designated refinery personnel to address SCAQMD's and public questions about monitoring equipment and readings."

14-5

[2] PR 1180, subsection (j)(1).
[3] Page 21.

CCEEB recommends that District staff develop educational templates and other contextual aids that can be tailored to the unique attributes of each facility. The District should also explore managing shared communication platforms that consolidate monitoring data and provide consistent, uniform data display and data interpretation. We believe this approach will be more credible and understandable to public users, while also being more efficient in that each facility does not have to reinvent the communications "wheel." 14-5 con't

Our understanding from discussion at the September 15 Stationary Source Committee meeting is that the public hearing for PR1180 is being postponed until December. CCEEB supports extending the rulemaking schedule to allow adequate time for public discussion on these and other issues, and for consideration of as-of-yet unreleased staff analysis, including socioeconomic analysis. We look forward to continuing to work with staff on rule development through the working group and other public forums, and appreciate the opportunity to submit these initial comments. In the meantime, please contact me at janetw@cceeb.org or 415-512-7890 ext. 111 should you have any questions or wish to discuss our comment further. Thank you.

Sincerely,

Janet Whittick
CCEEB Policy Director

cc: Dr. Philip Fine, SCAQMD
Mr. Michael Krause, SCAQMD
Mr. Gerald Secundy, CCEEB
Mr. Bill Quinn, CCEEB
Ms. Kendra Daijogo, The Gualco Group, Inc.

14-1 Response: SCAQMD staff responded to the summarized comment in detailed responses 14-2 through 14-6 below.

14-2 Response: SCAQMD staff is continuing to meet with CARB staff to monitor and inform the AB 617 plan development and the State's overall strategy. PR 1180 does not require refineries to conduct monitoring in nearby communities. Staff has also incorporated relevant elements from the Draft CARB/CAPCOA Refinery Air Monitoring Assessment and the Draft OEHHA Analysis of Refinery Chemical Emissions and Health Effects released in September 2017 in PR 1180 for consistency.

14-3 Response: Staff is working with the MATES V Advisory Group to plan refinery-related measurements that will help to inform planning for the measurements under the PR 1180.

14-4 Response: See responses 2-1 and 2-15.

14-5 Response: Each refinery monitoring plan must describe how real-time data will be made available to the public and to emergency systems. The Rule 1180 Guidelines are designed for emergency response agencies to determine how to use that data. The opt-in system described in the guidelines is designed to inform the public about real-time measurement conditions and other relevant information (e.g., availability of quarterly reports).

14-6 Response: With the AB 1647 requirement for the District to conduct the refinery-related community monitoring, the District will take the lead in the display of that data and related outreach. With the development of the State plan for AB 617 and AB 1647, it is possible that a State clearinghouse will be employed for measurements and outreach, as well. Refinery data systems should be planned to allow transmittal of real-time data to such systems, but until those systems are available, each refinery will be required to provide an interface for real-time and historical fenceline air monitoring data and other reagent information with the public, as well as with SCAQMD and other agencies.

Comment Letter #15

Angela Kim

From: Julia May
Sent: Monday, October 23, 2017 3:08 PM
To: Daniel Garcia
Subject: FYI - 1000 meter path length was problematic at Unocal / P66 in Rodeo - NorCal

Follow Up Flag: Follow Up
Flag Status: Flagged

Hi Daniel – I am going through your current Guidelines for Rule 1180. One specific issue I noted was that Optical Sensing systems up to 1000 m was identified as acceptable in your Guidance doc. Back in the '90s through early 2000s, I was on a Fenceline Monitoring committee in the Bay Area, set up by Contra Costa County for review of specs & QA/QC for Unocal/Phillips 66 Rodeo refinery fenceline monitoring. We initially accepted a 1000-meter pathlength (probably based on the same EPA citation you provided). However over time, this length proved problematic. The long averaging length makes small but high-concentration plumes look exactly like large but low-concentration plumes. **This is an inherent issue with ORS systems, but at 1000 meters, it becomes more exaggerated.** 15-1

I believe you should make a note in your guidelines that shorter pathlengths would improve detection limits, and that pathlengths shorter than 1000 meters may be necessary. That would allow you some flexibility in your review of the refinery plans.

Thanks - Let me know what you think.

Julia May
Senior Scientist
Communities for a Better Environment (CBE)

15-1 Response: SCAQMD staff has revised the Rule 1180 Guidelines to exclude reference to a path length of 1,000 meters for fence line air monitoring systems and will determine the appropriate path length on a case by case basis. The determination will be made based on factors such as equipment specifications and siting conditions submitted fenceline air monitoring plans submitted by petroleum refineries.

Comment Letter #16

Angela Kim

From:	Julia May
Sent:	Monday, October 23, 2017 3:40 PM
To:	Daniel Garcia
Cc:	Ashley Hernandez; Jesse Marquez
Subject:	more on 1000 meter path length problems, EPA also acknowledges
Follow Up Flag:	Follow Up
Flag Status:	Flagged

Hi Daniel – I also noted that in another EPA document you cited [https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf] identified problems with longer path lengths in many instances (such as FTIR multiple compounds limiting path length greater than 400-500 meters), and UV DOAS typically at 500 meters. [*"Infrared beam has a limited range and may not be sensitive enough to meet ambient data quality objectives. Maximum path length is on the order of 400–500 meters"* at p. 25]

Therefore it would be very problematic for the AQMD guidelines to allow up to 1000 meter pathlengths, when (although possible in limited cases when monitoring few or one chemical), it is not generally advisable for monitoring larger numbers of chemicals and with FTIR and probably UV DOAS and other equipment. We understand that there is a trade-off – with lower path lengths, more equipment would be necessary, but we would really not want to see problems that went through trouble-shooting 15 years ago rear their heads again unecessarily. 16-1

Thanks much! – love to hear your thoughts on this.

Julia May / CBE

16-1 Response: See related response 15-1.

Comment Letter #17

A Few CBE Comments for 10/24/2017 AQMD Workgroup Meeting for Rule 1180

Thank you for the thoughtful rule & guidelines development. CBE urges in summary these changes:

1. **Oil Refineries report major Carbonyl Sulfide releases in LA and throughout the country; monitoring should be required.** (Also see details next page.) 17-1
2. **The Public Review process for the monitoring plans, which come out later, needs to ensure serious public input, currently left out.**[1] The regulation should expand Monitoring Plan review, changes, and approval, to include meaningful public comment, seriously considered by the AQMD. At this time we have no idea what refineries will propose for equipment, siting, quality assurance, chemicals monitored, etc. By comparison, Bay Area Regulation 12, Rule 15 includes expanded public review of monitoring plans, and at *minimum* so should the South Coast. 17-2
3. **Additional key issues:**
   a. All significant reported Toxic Release Inventory (TRI) chemicals should be required to be reported, as well as metals, ultrafine particulate matter, total sulfur, and methane.[2]
   b. Optical Sensing pathlength of 1000 meters is too long as a general rule. According to the U.S. EPA: *"Infrared beam has a limited range and may not be sensitive enough to meet ambient data quality objectives. Maximum path length is on the order of 400–500 meters"*[3] Other systems may be able to meet long pathlengths; all systems should prove pathlengths to support tightest detection limits, not averaging detection over long beam.
   c. Mobile monitoring should be required at regular intervals to identify any gaps in spacial distribution of fixed monitoring systems. The AQMD and Swedish scientists were able to identify a major source of air emissions emanating from a leaking underground refinery pipeline during the FluxSenses study, using mobile monitoring. This hidden source of large concentrations of VOCs emitted to atmosphere was unexpected, and underlines the need for use of a combination of fixed and mobile monitoring techniques. 17-3
   d. Monitoring which can measure flux (emissions over time, rather than just air concentrations) should also be required. The District proved the importance of such techniques in the Fluxsense study, which identified much higher VOC and benzene emissions than previously inventoried. This could be carried out by the District.
   e. The regulation should add a follow-up public review and comment period on efficacy of monitoring plans, the regulation, and guidelines a year after equipment is operating, also because local plans and statewide regulations are evolving.
   f. The District should lay out the community monitoring planning process and timeline, so that the public can be assured that the fenceline and community monitoring systems will be complementary. CBE supports the new plan of the AQMD will take over the community monitoring, based on recent legislation.
   g. The District should require addressing leaks and other emissions identified.

CBE will also supplement this set of comments after the workgroup meeting. **Also, more details on Carbonyl Sulfide is as follows:**

Julia May, Senior Scientist, CBE, julia@cbecal.org , 10/24/17 1 CBE

Oil Refineries are a major source of Carbonyl Sulfide — monitoring should be required

- **The 2015 Toxic Release Inventory showed Oil Refineries were the top 5 sources of LA County Carbonyl Sulfide releases:[4] Tesoro Corp: 29,525 lbs, Phillips 66 Co.: 18,300 lbs,** Valero Energy Corp: 4,528 lbs, Chevron Corp: 2,100 lbs, ExxonMobil Corp: 230 lbs.
- *Carbonyl sulfide is produced as an impurity in natural gas and refinery gases, from combustion of sulfur-containing fuels…"*[5] **Animals studies showed nervous system effects can occur** after short-or long-term exposure.[6] Carbonyl sulfide & Hydrogen Sulfide can be present together.
- **Refinery TRI Air Emissions, 2008 – 2012 (pounds per year)[7], showed Carbonyl Sulfide one of the top 20 Oil Refinery Air Pollutants, & reported at higher totals than H2S.** (This was mainly because refineries reported *no* H2S previous to 2012, rectified in 2012, but this in itself shows refinery reporting is not always complete, requiring better monitoring, particularly of known major emissions.)

#	Pollutant	2008	2009	2010	2011	2012	2008 - 2012
1	Ammonia	6,034,156	5,107,768	5,571,721	5,506,313	5,201,647	**27,421,605**
2	Sulfuric Acid	6,063,101	4,834,199	4,991,899	5,318,020	4,934,749	**26,141,968**
3	n-Hexane	3,208,544	2,736,911	2,953,131	3,073,976	3,021,475	**14,994,037**
4	Toluene	2,837,234	2,530,059	2,439,882	2,321,161	2,340,640	**12,468,975**
5	Propylene	3,062,746	2,217,611	1,922,824	1,988,014	1,868,551	**11,059,746**
6	Xylene	2,304,116	2,150,418	1,954,175	1,774,063	1,724,788	**9,907,560**
7	Hydrogen Cyanide	425,604	522,013	497,466	2,370,572	4,571,718	**8,387,372**
8	Benzene	1,745,957	1,461,587	1,472,636	1,380,688	1,310,264	**7,371,133**
9	Hydrochloric Acid	954,102	931,277	882,751	1,057,322	791,839	**4,617,292**
10	Ethylene	1,030,137	842,123	704,859	644,610	685,221	**3,906,951**
11	Methanol	598,292	570,991	720,457	763,278	790,821	**3,443,839**
12	Cyclohexane	644,829	716,626	647,985	544,871	619,019	**3,173,329**
13	Ethyl Benzene	584,748	545,074	520,443	463,843	445,264	**2,559,372**
14	1,2,4-Trimethylbenzene	557,684	531,272	485,132	404,984	399,946	**2,379,017**
15	Carbonyl Sulfide	468,182	343,388	318,112	325,063	283,822	**1,738,566**
16	Hydrogen Sulfide	0	0	0	0	1,553,583	**1,553,583**
17	Methyl Isobutyl Ketone	325,178	250,765	218,207	298,421	254,650	**1,347,220**
18	Hydrogen Fluoride	384,679	377,030	340,807	70,677	52,978	**1,226,171**
19	Naphthalene	227,933	188,410	190,243	185,466	272,509	**1,064,561**
20	1,3-Butadiene	95,351	90,005	92,273	213,475	225,674	**716,778**
	TOTAL – Top 20	**31,552,572**	**26,947,526**	**26,925,001**	**28,704,817**	**31,349,158**	
	TOTAL – All 181 Pollutants	**32,989,365**	**28,113,014**	**28,079,051**	**29,895,369**	**32,571,386**	

ENDNOTES:

[1] The draft regulation states only that the draft monitoring plan will be made available for public review, before the Executive Officer approves it: *"A fenceline and community air monitoring plan that is submitted pursuant to the requirements of subdivision (d) shall be made available, by the Executive Officer, for public review no less than fourteen (14) days prior approval."*

[2] Methane monitoring should be included in the fenceline monitoring system, as the Phillips 66 Rodeo system has been performing for years. As previously commented by CBE, methane is now known to strongly contribute to smog formation (in addition to being a potent greenhouse gas).

[3] https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf at p. 25

[4] http://ec2-52-202-150-226.compute-1.amazonaws.com/tri/tri.php?database=tri&reptype=f&reporting_year=2015&first_year_range=&last_year_range=&facility_name=&parent=&combined_name=&parent_duns=&facility_id=&city=&county=Los+Angeles&state=CA&zip=&naics=&primall=&chemcat=&corechem=n&casno=&casno2=&chemname=carbonyl+sulfide&detail=-1&datype=T&rseq=y&sortp=D

[5] ATSDR ToxGuide for Carbonyl Sulfide, U.S. Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry December 2016, https://www.atsdr.cdc.gov/toxguides/toxguide-114-carbonyl_sulfide.pdf

[6] https://www.atsdr.cdc.gov/phs/phs.asp?id=1428&tid=67

[7] Refinery Air Emission Metrics, Jess A. McAngus, P.E., & Erin Valley, Spirit Environmental, LLC, Highest 20 TRI Air Emissions, 2008 – 2012 (pounds per year), Table 1, https://spiritenvironmental.com/assets/img/images/files/Refinery_Air_Emission_Metrics.pdf

17-1 Response: SCAQMD staff has revised the PR 1180 rule and the Rule 1180 Guidelines to include requirement for measuring carbonyl sulfide.

17-2 Response: The fenceline air monitoring plan will be made available, by the Executive Officer, for public review upon completion of SCAQMD staff initial review but no less than 14 days prior to approval.

17-3 Response: a) The proposed air pollutants in PR 1180 are developed in accordance with the OEHHA report on "Analysis of Refinery Chemical Emissions and Health Impacts". In this report OEHHA in collaboration with ARB has developed information on chemicals emitted from refineries in California and their health effects. Methane and ultrafines particles are not included in this list and therefore are not required for the fenceline air monitoring. While total sulfur measurements are not required for the fenceline air monitoring, the toxic sulfur compounds with highest emissions from refineries, namely hydrogen sulfide and carbonyl sulfide, are required to be measured at the fenceline of the refineries. Lastly, the ~~open-path~~ fenceline measurement technologies can measure gaseous compounds. The concentration levels of toxic metals are measured at the community air monitoring station, and measurement of these constituents will help determine if refineries add significant concentrations to nearby urban environments.

b) SCAQMD staff has revised the Rule 1180 Guidelines to exclude reference to a path length of 1,000 meters for fence line air monitoring systems and will determine the appropriate path length on a case by case basis. The determination will be made based on factors such as equipment specifications and siting conditions submitted fenceline air monitoring plans submitted by petroleum refineries.

c) The fenceline air monitoring system must be designed to capture such unintended major source of air emissions from leaking equipment. However, since ~~the open-path~~ fenceline air monitoring technologies can only measure the path averaged concentrations, other methodologies may be required to

pinpoint the source of leaking emissions. This include mobile surveys, surveys using handheld devices, dispersion modeling techniques, etc.

d) That is not the objective of PR 1180. The technical objectives of fenceline air monitoring are clearly identified in subdivision (a) of PR 1180 that states the purpose of the rule is to require real-time fenceline air monitoring systems…, "that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities."

e) The data dissemination websites designed and operated by refineries must include details of how the public can report experiences and provide comments and feedback for improvement of the website and other data dissemination tools, and the monitoring activities in general, as clearly indicated in the guidance document.

f) The SCAQMD is committed to the timeline set forth for the development of fenceline air monitoring plans and its installation and implementation, as required by AB 1647. SCAQMD staff has worked to address consistency of the rule with both AB 617 and AB 1647, however, the State's plan for AB 617 is not expected to be finalized until October 1, 2018. Staff will continue to work with the State to ensure that efforts are not duplicated. Due to the requirements of AB 1647 that refineries install and operate fenceline monitoring by January 1, 2020 and that the Districts install and operate community monitoring by the same date, a delay to have all the State guidance in place prior to adopting the rule will not allow adequate time for plan submittal, review and the installation and operation of the fenceline air monitoring system by that deadline.

g) If and once a leak is identified based on fenceline air monitoring measurements the refineries must address those concerns as required by the Leak Detection and Repair (LDAR) program.

Comment Letter #18

California Council for Environmental and Economic Balance
101 Mission Street, Suite 1440, San Francisco, California 94105
415-512-7890 phone, 415-512-7897 fax, www.cceeb.org

October 30, 2017

Mr. Dan Garcia
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765
Submitted electronically to dgarcia@aqmd.gov

RE: Proposed Rule 1180: Refinery Fenceline & Community Monitoring, Oct. 24 Draft

Dear Mr. Garcia,

On behalf of the members of the California Council for Environmental and Economic Balance (CCEEB), we provide here additional comments on Proposed Rule 1180: Refinery Fenceline and Community Monitoring (PR 1180). CCEEB is a coalition of business, labor, and public leaders that advances strategies for a sound economy and a healthy environment.

We appreciate the progress staff has made on the revised draft rule, and have only two remaining recommendations:

- One-time fees to cover costs from installation of community monitoring stations should be restructured and moved to Rule 306 – Plan Fees. Fees should be assessed per station rather than crude oil throughput.
- Facilities need more time to develop fenceline monitoring plans. CCEEB recommends extending the deadline by at least two months, and further refining the District guidelines to add greater specificity about what would be required.

Move Fees to Rule 306

At the October 24 working group meeting, staff unveiled a new funding proposal to cover District expenses for installing community monitoring stations. Fees would be based on crude oil throughput capacity and charged at $0.02 per annual barrel, starting March 1, 2019. 18-1

CCEEB has concerns about the proposed per-barrel approach, as it may not be the most suitable metric to estimate costs, as it does not adequately relate to factors that drive monitoring costs, such as:

- Meteorology

- Co-location of and cost sharing by regulated facilities
- Ability to leverage existing monitoring stations
- Pollutants to be measured at each community monitoring station
- Other differences in siting and installation costs

CCEEB recommends that both installation costs and ongoing operating costs be moved to Regulation 3. Assuming Regulation 3 could be amended early in 2018, the District would have time to assess and collect fees by March 1, 2019, as proposed in PR 1180. This additional time could be used by staff to further develop its community monitoring plan, with input from local communities and affected facilities. This information could, in turn, be used as to inform decisions about cost allocation, assessing fees based on costs per station for each facility. 18-1 con't

Extend Time for Developing Fenceline Monitoring Plans

AB 1647 imposes a statutory deadline of January 1, 2020 for the installation of fenceline monitoring systems. Currently, the proposed rule allows only six months for refineries to submit plans, and six months for District review and approval. CCEEB believes this is too short, and asks that the planning period be extended by three months, for a total of nine months from rule adoption, and that District review time be shortened to three months. Experience in the Bay Area on Rule 12-15 illustrates the time and technical challenges involved in designing monitoring systems. Bay Area facilities ultimately needed more than 16-months for plans, which are still undergoing public review and not yet final. 18-2

To expedite the review of monitoring plans, CCEEB encourages staff to further refine District guidelines and include specific details about what would be required. Upfront work done now to provide clear guidance will greatly ease questions during the planning and review stages.

Thank you for the continued consideration of our comments on PR 1180. Please contact me should you have any questions or wish to discuss our comments further (janetw@cceeb.org or 415-512-7890 ext. 111).

Sincerely,

Janet Whittick
CCEEB

cc: Bill Quinn, CCEEB

18-1 Response: The installation fee established in PR 1180 is based on cost related to site preparation, monitoring equipment, equipment siting, data logging systems and labor. These costs were developed based on SCAQMD staff's prior and ongoing monitoring projects in the basin. SCAQMD staff evaluated various metrics to ensure that the costs for a refinery-related community air

monitoring system would be shared in a reasonably equitable manner and are limited to the amounts necessary for compliance with Health and Safety Code §42705.6. Specifically, SCAQMD staff performed an analysis of metrics based on petroleum refinery-related emissions levels and operational activity levels measured in annual crude oil throughput capacity. These metrics were used to apportion the costs of a refinery-related community air monitoring system. Further, through the Working Group process the SCAQMD staff provided its analysis of these metrics and recommendation to the public for review.

SCAQMD staff is proposing to address the ongoing operation and maintenance cost for community air monitoring to Rule 301 as suggested by the commenter. However, given the rapidly approaching compliance dates required by Health and Safety Code §42705.6 the SCAQMD staff is proposing inclusion of the initial cost to install the community air monitoring system in PR 1180. Deferring these cost to a future rulemaking process would hinder the SCAQMD staff's ability to implement the requirements of Health and Safety Code §42705.6 pertaining to refinery-related community air monitoring.

18-2 Response: Based on stakeholder concerns the SCAQMD staff revised PR 1180 to provide petroleum refineries eight months instead of six months as originally proposed. SCAQMD staff is unable to extend the deadline to submit a refinery fenceline air monitoring plan beyond eight months because the plan review process must provide adequate time for staff review of the plan, public review of the plans, and implementation of the fenceline air monitoring system.

Comment Letter #19

PARAMOUNT PETROLEUM

AltAir Paramount

14700 Downey Avenue
Paramount, CA 90723-1418
(562) 531-2060

October 19, 2017 VIA MAIL AND EMAIL

Mr. Daniel Garcia
South Coast Air quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Comments on Proposed Rule 1180, Refinery Fenceline and Community Monitoring

Dear Mr. Garcia:

Paramount Petroleum (Paramount) appreciates this opportunity to comment on the Proposed Rule 1180. Paramount represents two refineries: Paramount Petroleum refinery and Edgington Oil refinery.

As mentioned in previous correspondence, the Edgington refinery is not currently in operation and the Paramount refinery is currently producing renewable fuels from animal fats and vegetable oils. The Renewable fuels are blended with commercial petroleum products in tankage and shipped via truck or pipeline. Both facilities currently maintain their permits to operate as a refinery. Recognizing that the District must now work within the confines of the new state legislated bills, AB 617 and AB 1647, Paramount understands that any permitted refinery may now be subject to fenceline monitoring requirements. We also understand in general that the Districts will be responsible for the determination of the need and location of community monitoring systems.

In light of the current operating status of Paramount's facilities, Paramount requests that the District consider language that is found within current District rules, including Rule 1118, section (f)(3), which allows existing non-operating facilities to provide a letter notifying the EO of start-up of operations, which then initiates the requirement to comply with the rule. It is not unusual for federal regulations to have similar clauses. Similar language should be considered for a facility that is not operating petroleum refining units.

19-1

This language will protect facilities from major expenditures to monitor essentially de minimis or nonexistent emissions. Assuming the fenceline monitoring and the community monitoring will be segregated, the language would not preclude cost recovery from the refineries should the District or the California Air Resources Board determine that community monitoring is required in the area. Paramount works closely with its community and understands that its neighbors may prefer the verification of a safe environment.

Paramount appreciates this opportunity to participate in this working group and submit comments for your review. I can be reached at (562) 748-4613 or by email at kgleeson@ppcla.com.

Sincerely,

Kathryn Gleeson
Manager, Environmental Compliance

CC: Mr. Wayne Nastri, via email
Mr. Michael Krause, via email

19-1 Response: Staff anticipates that the Edgington Refinery will qualify for the exemption in PR 1180 due to its capacity of less than 40,000 barrels per day. Staff does not anticipate an exemption for the Paramount Refinery, due to its permitted capacity. Since the refinery's fenceline air monitoring plan can be based in part on the chemicals used or emitted by the process of the refinery,

Paramount may choose to propose and justify why the pollutants, methods, or spatial extent of fenceline monitoring can be reduced, or that different pollutants may be more significant to measure.

Comment Letter #20

PARAMOUNT PETROLEUM

AltAir Paramount

Subsidiary of Delek US

14700 Downey Avenue Paramount, CA 90723-1418 (562) 531-2060

August 29, 2017

Mr. Daniel Garcia
South Coast Air quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Subject: Comments on Proposed Rule 1180, Refinery Fenceline and Community Monitoring

Dear Mr. Garcia:

Paramount Petroleum Corporation (Paramount) appreciates this opportunity to comment on the proposed Rule 1180 (Rule). Paramount represents two refineries: Paramount Petroleum Corporation (Paramount) and Edgington Oil Company, LLC (Edgington). Based on the draft rule issued on August 18, 2017, both refineries would be subject to the rule because their AQMD permitted capacities are greater than 10,000 barrels per day.

Neither the Paramount refinery nor the Edgington refinery is subject to the federal fenceline monitoring requirements due to their lower level of emissions. Edgington is a small asphalt refinery with only atmospheric and vacuum distillation and no downstream hydroprocessing or hydrocracking units. The Paramount refinery is not currently processing crude oil but is producing renewable fuels using animal fats and vegetable oils as the feedstock. The resulting products do not contain the toxics being proposed for monitoring[1] other than Hydrogen Sulfide, which is primarily controlled by an incinerator that converts the H2S to SOX, followed by a SOX scrubber that has a permit limit of 20 ppm SOX, corrected to 0% oxygen. The SOX scrubber is continuously monitored for compliance. Because the operation requires heaters and boilers, there are also Nitrogen Oxides (NOX). The process heater is controlled with an SCR that has a permit limit of 5 ppm NOX. Both heater and boilers are continuously monitored for NOX and SOX per RECLAIM requirements.

Based on the above facts regarding the two refineries, Paramount has the following comments regarding the proposed rule:

- The District has mentioned that they did not intend to include small asphalt refineries. The 10,000 barrel per day definition is too restrictive to cover other small asphalt refineries with no downstream hydroprocessing or hydrocracking units following atmospheric and vacuum distillation. In this mode of operation, the process would not generate the air toxics that are associated with the more complex processes. 20-1

[1] Monitoring data can be provided upon District request

- Consideration is requested for Rule applicability based on the current mode of operation. As previously mentioned, Paramount's current operation is renewable fuels. Although there are petroleum products on site for blending and shipping with the renewable products, the operating units only process animal and vegetable feedstock and therefore do not generate the toxic components created by petroleum processing. Current operation considerations can be based on either the feedstock and products being produced or the actual throughput, rather than permitted capacity of the refinery. In the case of a renewable fuel operation, the process should be exempt. In the case of a current operation involving low throughput, emission rates are significantly less than the typical refinery and the economics of the facility would be adversely affected by being required to implement full perimeter monitoring, recording and reporting. Of course, when the operation changes, the rule may then be applicable. 20-2

- Paramount is also in agreement with comments submitted by others, including the exclusion of the monitoring of NOX and SOX, which are already monitored at the stack, making fenceline monitoring redundant. 20-3

Paramount appreciates this opportunity to participate in this working group and submit comments for your review. I can be reached at (562) 748-4613 or by email at kgleeson@ppcla.com.

Sincerely,

Kathryn Gleeson
Manager, Environmental Compliance

20-1 Response: Staff anticipates that the Edgington Refinery will qualify for the exemption in PR 1180 due to its capacity of less than 40,000 barrels per day in the updated rule language.

20-2 Response: Staff does not anticipate an exemption for the Paramount Refinery, due to its permitted capacity. Since the refinery's fenceline air monitoring plan can be based in part on the chemicals used or emitted by the process of the refinery, Paramount may choose to propose and justify in their monitoring plan how the pollutant in Table 1 of PR 1180, the sampling methods, or spatial extent of fenceline monitoring can be tailored to the facility, or that different pollutants may be more significant to measure.

20-3 Response: While NOx and SOx are measured at many refinery stacks, some processes may not be monitored. Sampling of NOx and SOx at the fenceline helps to delineate refinery emissions from other emissions and better asses the refinery impacts to the community.

Comment Letter #21

Western States Petroleum Association
Credible Solutions • Responsive Service • Since 1907

Bridget McCann
Manager, Southern California Region

October 30, 2017

Mr. Daniel Garcia
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Via e-mail at: DGarcia@aqmd.gov

Re: 4th Comment Letter on Proposed Rule 1180 Refinery Fenceline and Community Monitoring and the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines

Dear Mr. Garcia:

Western States Petroleum Association (WSPA) appreciates this opportunity to provide comments on the South Coast Air Quality Management District's (SCAQMD or District) Proposed Rule 1180, Refinery Fenceline and Community Monitoring (PR 1180), and the revised version of the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines. WSPA is a non-profit trade association representing companies that explore for, produce, refine, transport and market petroleum, petroleum products, natural gas and other energy supplies in five western states including California. WSPA member companies operate petroleum refineries and other facilities in the South Coast Air Basin which would be affected by PR 1180 and the associated guidelines.

WSPA has reviewed the latest version of PR 1180 (dated October 26, 2017), the revised version of the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines (dated October 25, 2017), and the Refinery Related Community Air Monitoring Cost Estimate. We appreciate that District staff has continued to make adjustments to the PR1180 proposal based on comments from WSPA and other stakeholders, but there remain significant unresolved issues with this proposal that must be addressed before the PR 1180 is brought to the Governing Board for consideration. In summary, and as further detailed below, these include the following:

1. **The PR 1180 "Plan Requirements" continues to include references to air pollutants which are outside the stated purpose of the rule.** This includes requirements to measure certain pollutants at fenceline locations when the detection of refinery-related contributions is highly questionable. Table 1 in the draft rule and the preliminary draft guidelines needs to be revised to focus solely on air pollutants which are associated with refinery operations.

2. **The Rule 1180 Refinery Fenceline and Community Air Monitoring Plan Guidelines need to be revised to more clearly detail the technical requirements and to match the PR 1180 requirements.** Extraneous statements which implicitly expand the scope should be removed.

3. **Community Air Monitoring Fees should be removed from PR1180 and addressed under a separate Regulation III rulemaking.** The cost basis for the proposed fees were just released to the public, and have not been fully reviewed or considered by stakeholders. Furthermore, Staff has not presented adequate justification for the costs to demonstrate they are limited to "refinery-related" costs as required

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under AB 1647. WSPA also believes that initial costs of community monitoring should be divided by monitoring station and apportioned to each facility by use.

4. **PR 1180 must explicitly allow a facility to appeal decisions concerning the approval of its fenceline air monitoring plan to the Hearing Board.**

5. **Accidental release prevention and planning for acutely hazardous materials is regulated under the California Accidental Release Prevention (CalARP) Program and the Federal Risk Management Program (RMP).** The District is not responsible for these programs and has not coordinated the PR 1180 proposal with the Certified Unified Program Agencies (CUPAs) and/or first responders. To avoid potential conflicts with these programs, all references to hydrogen fluoride (HF) should be removed from PR 1180 and the associated guidelines.

Provided below are more detailed comments regarding these key unresolved issues. WSPA incorporates by reference its verbal and written comments that it has previously submitted related to PR 1180.

1. **The PR 1180 "Plan Requirements" continues to include references to air pollutants which are outside the stated purpose of the rule.**

Table 1 in the draft rule and the preliminary draft guidelines need to be revised to focus solely on air pollutants which are associated with refinery operations.

The stated purpose of PR 1180 is to require real-time fenceline air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals and other compounds at or near the property boundaries of petroleum refineries and in nearby communities. [1] However, the current draft rule would require fenceline monitoring for a number of air pollutants for which direct, nearfield exposure would be seemingly unrelated to a nearby refinery. The AB 1647 requirement for fenceline monitoring is strictly limited to refinery-related pollutants.[2] 21-1

For example, the draft rule and the guidelines continue to include reference to black carbon (BC), nitrogen oxides (NOx), and sulfur dioxide (SO_2). For each of these pollutants, the likely contributor to fenceline locations would be emissions from mobile sources; not the refinery. This is due to the subject facilities often being surrounded by some of the county's busiest roadways and freeways. The rationale presented in the guidelines for BC monitoring, which is tied to indirect quantification of diesel particulate matter, essentially confirms that fact in stating: "The DPM contribution to PM in areas where the affected refineries are situated are **expected to be high due to high total truck trips from the ports of Los Angeles and Long Beach for goods movement as well as presence of other industrial activities in the region.**"[3] [Emphasis added] As for NO_X and SO_2, refinery-related emissions of these pollutants are already monitored and reported continuously at the point sources using CEMS. Therefore, refinery-related contributions for these pollutants are already known to a high degree of precision.

PR 1180 and the Guidelines should be revised to exclude BC, NOx and SO_2. Further, after one-year of receiving non-detects for any Table 1 pollutant, refineries should be able to amend their Monitoring Plans to eliminate that constituent.

2. **The Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines still requires significant revisions to more clearly detail the technical requirements and to match the PR 1180 requirements.** 21-2

[1] SCAQMD Proposed Rule 1180 (August 18, 2017), Section (a) - Purpose.
[2] AB 1647 as codified at California Health & Safety Code (CHSC) Section 42705.6.
[3] SCAQMD, Draft Guidelines, page 11.

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Contradictory and extraneous statements which confuse or implicitly expand the scope should be removed.

We appreciate the District's efforts to improve the Guidelines, a revised version of which was released on October 25th. While certain improvements have been made, the document continues to include a number of issues which need to be addressed, as these guidelines are essential to the implementation of PR 1180. So, it is imperative that the technical details be fixed before the rule is presented to the Governing Board for adoption. The latest version of the guidelines is incomplete in that regard.

Perhaps the most significant problem with the document is the confusing statements concerning the use of open-path instruments. As explained by the District, the purpose of the plan-based approach for implementing the rule is supposed to allow facilities to tailor the fenceline monitoring plan to site-specific conditions. This includes the selection of monitoring technologies. Based on current technologies many (perhaps all) facilities will likely opt for open-path technologies for fenceline monitoring of those pollutants where the technology is applicable. However, open-path technologies may not be applicable for certain pollutants or certain physical conditions. The revised Guidelines are confused as to whether open-path technologies are required in all circumstances or not at all. For example:

21-2 con't

- Page 7 appears to require open-path instruments:

  "The air monitoring **plan must provide specification about the open-path instruments selected** for a fenceline air monitoring system… The selected open-path instruments should be able to record and store the measured spectral absorption and associated average concentrations of measured pollutants for retrospective investigations."[4] [Emphasis added]

- Page 9 appears to contradict that requirement:

  "Unless it is demonstrated in the fenceline air monitoring plan that an alternative measurement technique (e.g. point monitors) can be effectively utilized. **Automated gas chromatographs (Auto-GCs) are the best point monitor option to measure select VOC pollutant concentrations** semi-continuously at a monitoring site."[5] [Emphasis added]

  That position is seemingly reversed later in the same paragraph:

  "Other methods for continuous measurement of speciated VOCs include (but not limited to) in-situ FTIR systems and quantum cascade laser instruments that can effectively measure selected VOCs simultaneously with high time resolution. The use of these measurement techniques can potentially provide real-time and continuous air quality data, however, a substantial number of auto-GC units (or other point monitors) would need to be deployed to achieve sufficient spatial coverage along the property boundary or fenceline of a petroleum refinery."

- On page 10, the guidelines again suggest that open-path technologies are required:

  "Aldehydes… should be measured continuously at the fenceline of the refineries using open-path technologies."[6] "Analytical methods for BTEX compounds in air include absorption traps and subsequent separation by gas chromatography (GC) with detection by flame ionization optical absorption or mass chromatography, as well as automatic-GC monitors. Optical methods such UV-DOAS and OP-

[4] SCAQMD, PR1180 Guidelines, page 7.
[5] SCAQMD, PR1180 Guidelines, page 9.
[6] SCAQMD, PR1180 Guidelines, page 10.

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FTIR monitors are more advanced techniques for measurement, however, UV-DOAS instruments are particularly more sensitive in detection of BTEX compounds at low concentrations and with good time resolution compared to OP-FTIR instruments."

- Later on page 12, the guidelines finally (correctly) acknowledges that open-path technologies will need to be supplemented with other technologies:

  "Based on the advantages that open-path technologies provide over conventional air monitoring techniques, the SCAQMD staff recommends the use of open-path technology, when applicable, for implementing a fenceline air monitoring system required by Rule 1180. In certain instances a refinery owner or operator may demonstrate that other air monitoring techniques and/or technologies (e.g., emerging technologies) could be used in place of open-path technology depending on the pollutant(s) that are monitored."[7]

21-2 con't

Additionally, the "Chemical Species of Interest" discussion within the draft Guidelines[8] continues to include references to air pollutants which are outside the scope of the rule. PR1180 clearly limits the pollutants required in the Fenceline Monitoring Plan to those included in the Table 1 list, but the draft Guidelines discussion is extremely confusing. References to other lists and/or emissions thresholds (e.g., 10,000 lbs per year) have not been previously discussed with the Working Group by Staff. As such, this discussion should be completely removed from the Guidelines in order to avoid potential confusion amongst stakeholders concerning the actual rule requirements.

We recommend that further revision of the guidelines is necessary to remove contradictory and extraneous representations and/or statements which confuse or implicitly expand the scope. Due to the essential role of the Guideline for implementing the rule, such corrections are necessary before the Governing Board considers adoption of PR 1180.

3. **Community Air Monitoring Fees should be removed from PR1180 and addressed under a separate Regulation III rulemaking.**

The cost bases for the proposed fees were just released to the public, and stakeholders have not had adequate time to review the cost bases for these proposed fees. Furthermore, Staff has not presented adequate justification for the costs to demonstrate they are limited to "refinery-related" costs as required under AB 1647. WSPA also believes that initial costs of community monitoring should be divided by monitoring station and apportioned to each facility by use.

21-3

AB 1647 specifically states:

> *To the extent a refinery-related community air monitoring system is intentionally utilized by a district to monitor emissions from sources under its jurisdiction other than a petroleum refinery, the district shall ensure the costs of the system are shared in a reasonably equitable manner.*

WSPA strongly believes this provision for refinery-related community monitoring fees should be removed from PR1180 to allow more thoughtful estimation and stakeholder review of the District's likely costs for refinery-related community monitoring instead of just rushing to a judgement. Furthermore, these fees would be more appropriately addressed under a Regulation III rulemaking.

[7] SCAQMD, PR1180 Guidelines, page 11.
[8] SCAQMD, PR1180 Guidelines. Page 6-7.

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WSPA also believes that initial costs of community monitoring should be divided by monitoring station and apportioned to each facility by use. The District recently proposed the use of eight (8) community air monitoring stations to adequately provide coverage of refinery-related emissions, or as described approximately one monitoring station per facility included in PR 1180.[9] 21-3 con't

The initial costs of the community air monitoring stations should be divided by the number of stations (8) and paid for by the facility the monitoring station will be providing service for.

4. PR 1180 must explicitly allow a facility to appeal decisions concerning the approval of its fenceline air monitoring plan to the Hearing Board.

Under PR 1180, the Executive Officer would be authorized to approve a fenceline air monitoring plan submitted pursuant to Rule 1180. The latest draft version of PR 1180 [10] would authorize the Executive Officer to unilaterally modify a facility's fenceline air monitoring plan in certain circumstances. The criteria for such approvals or modifications by the Executive Officer have not been presented to stakeholders. PR 1180 needs to be revised to explicitly allow a facility to appeal Executive Officer decisions concerning its PR 1180 monitoring plan to the Hearing Board. 21-4

5. Accidental release prevention and planning for acutely hazardous materials is regulated under the CalARP Program and the Federal RMP.

The District is not responsible for these programs and has not coordinated the PR 1180 proposal with the CUPAs and/or first responders. All references to HF should be removed from PR 1180 and the associated guidelines to avoid potential conflicts with these programs.

Facilities using hydrogen fluoride (HF) or other acutely hazardous materials are already subject to regulation under the California Accidental Release Prevention (CalARP) program and the Federal Risk Management Plan (RMP) program. These programs, which are administered by CUPAs with oversight from the U.S. Environmental Protection Agency (USEPA), are designed to prevent accidental releases of substances that can cause serious harm to the public and the environment, to minimize the damage if releases do occur, and to satisfy community right-to-know laws. This is accomplished by requiring businesses that handle more than a threshold quantity of a regulated substance listed in the regulations to develop a Risk Management Plan (RMP). Where appropriate to the potential hazard, facilities handling such hazardous materials are required to operate emissions monitoring and alert systems, which are coordinated with CUPAs and first responder agencies. This is the existing situation for refineries handling modified hydrofluoric acid (MHF) above threshold quantities. 21-5

At present, PR 1180 and the associated guidelines fail to recognize that HF is already actively regulated through the CUPAs under the CalARP and RMP programs, and instead proposes deployment of entirely new HF monitoring and alert systems. Staff has yet to explain to the Working Group how new PR 1180 requirements would be coordinated or integrated with existing CUPA requirements, or how SCAQMD would reconcile its newly proposed role with the existing jurisdiction of the CUPAs and/or first responders. We see this as ill-advised and outside the appropriate scope of the rule. The District has also failed to address the practical limitations of HF monitor technology, including the issues with false positive readings. Requiring real-time presentation of such data, which may be faulty, to the public should also be reconsidered.

We strongly recommend the removal of all references to HF from PR 1180 and the associated guidelines.

[9] SCAQMD Proposed Rule 1180 Cost Analysis Summary for a Refinery-Related Community Air Monitoring System
[10] SCAQMD, Proposed Rule 1180 (October 26, 2017).

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WSPA members appreciate the opportunity to provide these comments as part of the Working Group for PR 1180. We look forward to continuing to work collaboratively and openly with the District, and continuing our discussion with District Staff to develop a rule that is based on sound science and technology. If you have any questions, please contact me at (310) 808-2146 or by email at bmccann@wspa.org. 21-5 Con't

Sincerely,

cc: Wayne Nastri, SCAQMD
Dr. Philip Fine, SCAQMD
Michael Krause, SCAQMD
Patty Senecal, WSPA

21-1 Response: Staff is seeking to address several pollutants of concern from several refineries and to allow comparisons with community monitoring and other ambient stations in the region. The reporting of NOx, SOx and BC from the fenceline will allow better assessment of the community measurements than emissions reporting alone. The pollutants described in Table 1 of the rule and in the guidelines, address some criteria pollutants and other toxic or hazardous air pollutants as listed in the recent (September 2017) OEHHA report "Analysis of Refinery Chemical Emissions and Health Effects." Also, most of the pollutants in Table 1 of PR 1180 will likely be inherently measured by the ~~open-path~~ monitoring technologies that are likely to be utilized at fencelines. Refineries must address the pollutants listed in Table 1 of PR 1180, but can provide justification in their fenceline air monitoring plans why some should not be reported.

21-2 Response: Staff has updated the Rule 1180 Guidelines base on comments, consistency the rule, and as additional information becomes available, including CARB information related to the implementation AB 617 and AB 1647. As such, staff has removed pollutants to be address by community monitoring from Table 1. Staff anticipates that open-path instrumentation will best meet the fenceline air monitoring requirements of the rule in most, but not in all~~,~~ cases. However, the rule and the guidelines have left room for the refineries to propose alternative methods that address the requirements of the rule.

21-3 Response: See response to 18-1

21-4 Response: SCAQMD Rule 221 provides a facility with the right to appeal the Executive Officer's approval of a plan. Inclusion of a similar provision within PR 1180 would be duplicative.

21-5 Response: See response 11-4 above.

Comment Letter #22

Angela Kim

From: Julia May <julia@cbecal.org>
Sent: Monday, October 30, 2017 5:32 PM
To: Michael Krause; Daniel Garcia
Cc: Ashley Hernandez; Alicia Rivera
Subject: Rule 1180 brief comments

Good afternoon gentlemen -- Since you asked for comments by today on the new versions of the rules & guidance documents that came out the last couple days, and since we cannot yet finish our more formal letter on this fast moving timeline, we wanted to send this email. We will send a fuller comment letter soon. First, we really appreciate the District staff's engaging with us on these important issues, and that you held a workgroup meeting in Wilmington. We hope to be able to strongly support the regulation with these changes. We highlighted the two top changes below in our discussions last week, and these remain key concerns with the new rule & guidance language:

1) Public Process for future development of Fenceline Monitoring Plans: A meaningful public input process at that future point is essential, because we will not know what the refineries propose until the monitoring plan are finished, many months after this rule is adopted. **We are hoping the District can go ahead with small language changes that would make a big difference,** *so that the public can have access to the draft refinery fenceline monitoring plans as soon they are submitted to the AQMD*. (This would allow the public the time needed to review these very technical documents.) We understand that you may still want to keep the *formal* public comment period to 14 days before the Executive Officer decides whether to approve or not, but providing access to the plans earlier would make a big difference.

   It is also essential to us that language be added, that the *Exec. Officer will consider recommendations of the public in his decision*. (This may be intended by the rule, but the current draft does not mention any language like this – it just states the public can review the document 14 days before he approves the plan.) 22-1

2) Regarding additional chemicals of concern. We proposed that at a minimum, Carbonyl Sulfide should be required to be monitored, and that in general the District should include chemicals reported to the TRI, and address total sulfur and metals. We noticed that the District recently added to the Guidance document that additional chemicals may be of importance, including those emitted at over 10,000 lbs./year.

   Please note that even if one refinery does not emit over 10,000 lbs of a particular chemical such as carbonyl sulfide, in Wilmington, there are 5 oil refineries in or on its border, that emit together far more than 10,000 lbs of toxics that are not currently on the mandatory monitoring list. For instance: In 2015, Tesoro reported to the TRI 29,525 lbs (over 10,000), Phillips 66 reported 18,300 lbs (more than 10,000 in its 2 facilities, but apparently less than 10,000 total for one Phillips facility), and Valero reported: 4,528 lbs. (less than 10,000). But each facility contributed to the high total of nearby refineries, just for this one chemical. 22-2

   What is probably even more important than their individual emissions, is their collective high concentration of emissions in a small area. I also noted that the compound carbon *di*sulfide (similar to

1

carbony*l* sulfide) was also emitted at over 20,000 lbs by refineries according to the OEHHA document. In addition to hydrogen sulfide, these 3 chemicals are all neurotoxins, attacking the same body system, and have cumulative impacts together, which would greatly benefit by monitoring. We are unsure whether your new guidance document language is meant to address such important neurotoxins emitted in total over 10,000 lbs, or whether that is for each refinery, for each individual chemical, and would love to talk to you more. 22-2 con't

Thank you again – I believe if these issues are addressed, we will be able to strongly support the regulation. It seems like we are close to finding solutions in the language that work for everybody. **Please let us know your decision.**

We feel that the District has made big pushes forward on monitoring issues in the recent years, through the recent Fluxsense study, the new Refinery Fenceline Monitoring regulations & District Community Monitoring Plan, planned new flare monitoring, and the special refinery monitoring project being planned through the MATES program. These should significantly help improve big gaps in current monitoring systems, and we look forward to them.

Julia May
Senior Scientist
Communities for a Better Environment (CBE)

22-1 Response: A public review and comment period will be included for the refinery fenceline air monitoring plans submitted to the District, and staff will strive to make information publicly available as soon as is reasonable possible. The Executive Office approval process inherently includes public and other stakeholder comments in the decision making.

22-2 Response: With the inclusion of Carbonyl Sulfide in the Draft OEHHA Analysis of Refinery Chemical Emissions and Health Effects released in September 2017, staff has added this compound to the list of pollutants to be addressed in PR 1180, listed in Table 1. The 10,000 pounds values in the previous version of the Rule 1180 Guidelines was not meant to be a threshold for all pollutants, but an example that would need to be justified in the air monitoring plan. Staff intends to consider combined impacts of the refineries in the assessment of fenceline air monitoring plans.

Comment Letter #23

SCAQMD staff received comments from CARB's Office of Emergency Response, Monitoring & Laboratory Division noted directly on PR 1180 and the Rule 1180 Guidelines. SCAQMD has provided responses to CARB's comments below.

Rule Comments

(Page numbers refer to the page number of the October 26, 2017 version or PR 1180 and comment numbers are listed in order for that page as marked in the comment document. The comment document is attached to the end of this staff report.)

23-Page 2-1
Response: CARB has suggested ideas the refineries can consider in temporary air monitoring systems, as required in their air monitoring plans.

23-Page 2-2
Response: Staff added the local response agencies to PR 1180, per CARB suggestion.

23-Page 3-1
Response: This suggestion is already accomplished under Section (7) and a change to the Rule 1180 Guidelines does not necessarily mean the air monitoring plan need to change.

23-Page 4-1
Response: The Rule 1180 Guidelines discuss the consideration of automated notification of outages, for consideration to include in the air monitoring plan.

23-Page 5-1
Response: This suggestion could have worked as well, but Section (g) is notification of failures, while (3) is what is required when failures exceed 30 days.

23-Page 6-1
Response: Refineries with multiple locations are often grouped together by owner (e.g., for Tesoro and Philips). For the purpose of this rule, staff has considered these refineries to be separate, since they require different fenceline and community monitoring. As a result, staff finds that 8 refineries with maximum capacity over 40,000 barrels per day of crude oil will be included.

Rule 1180 Guidelines Comments

(Page numbers refer to the comment page numbers as marked in the comment document and comment numbers related to the comment marks on the guideline page immediately before. The comment document is attached to the end of this staff report.)

23-Page 1-1
Response: The Rule 1180 Guidelines issue date has been updated in the current version of the guidelines.

23-Page 3-1
Response: Staff has corrected "real-time" in the current version of the Rule 1180 Guidelines.

23-Page 3-2
Response: Staff has added the suggested text modification in the current version of the Rule 1180 Guidelines.

23-Page 3-3
Response: Staff has deleted the reference to metals in the text of the current version of the Rule 1180 Guidelines, per CARB suggestion.

23-Page 3-4
Response: Staff has incorporated the text suggested by CARB in the Rule 1180 Guidelines.

23-Page 3-5
Response: Staff has suggested in the Rule 1180 Guidelines that refineries use the measurements to inform their leak detection and repair efforts. This could be considered further in the future.

23-Page 4-1

Response: Staff has included text in the Rule 1180 Guidelines suggesting the air monitoring plans proposed to provide notification and web information when measurements exceed known health and safety values, such as the OEHHA REL thresholds.

23-Page 4-2

Response: While this is not a priority of the air monitoring plan requirements, it would be helpful for the communities and can be provided by the refineries for information to their local community.

23-Page 5-1

Response: Staff does not think that they will get industry support for providing likely unplanned release scenarios, although the plan does ask them to assess their emissions, including processes likely to have fugitive emission.

23-Page 5-2

Response: Please see response for 23-Page 4-2.

23-Page 6-1

Response: This bullet item already includes levels of routine or known emissions sources, but staff thinks it is unlikely that the refineries could provide unplanned release emissions.

23-Page 7-1

Response: Please see response for 23-Page 4-2.

23-Page 9-1

Response: Staff believes that the most recent guidelines allow flexibility for process unit measurements to be substituted for fenceline measurements in the plan. Further efforts with process measurements and continuous leak detection can be considered in the future.

23-Page 12-1

Response: Staff could consider amendments in the future to require the use measurement data to inform leak detection and repair. The refineries with gain form this effort, as well as the community, but rule language would need to be drafted based on further experience with the measurements.

23-Page 13-1

Response: Please see response for 23-Page 9-1.

23-Page 15-1

Response: While no monitoring system will be ideal for all fenceline measurements under all conditions, the Rule 1180 Guidelines to allow the flexibility for the refineries to propose and justify point or emerging measurement methods that can be considered in the plan review. The required wind measurements will be critical to determining potential emissions sources.

23-Page 15-2

Response: Please see response for 23-Page 9-1.

23-Page 17-1

Response: It is unlikely that industry would support or provide information on likely unplanned release scenarios, however, they will be identifying process lines in their air monitoring plans.

23-Page 19-1

Response: Staff agrees that a statewide standard for the data format would aid in AB 617 implementation efforts, as well as those of this rule and AB 1647.

23-Page 21-1

Response: Per the CARB suggestion, staff incorporated language in the Rule 1180 Guidelines to include providing data to the communities, industry, local responders, and air districts.

23-Page 21-2

Response: Please see response for 23-Page 4-2.

23-Page 22-1

Response: Please see response for 23-Page 4-2.

23-Page 23-1

Response: Please see response for 23-Page 4-2.

23-Page 23-2

Response: Please see response for 23-Page 19-1.

23-Page 26-1

Response: Staff has added references to the CARB/CAPCOA REAMAR reports and the OEHHEA report.

Comment Letter #24

From: Willard Smith
Sent: Sunday, October 29, 2017 8:07 PM
To: Daniel Garcia
Cc: Carl Kamme; Hakan Tornevik; Lars Henriksson
Subject: Comments on Current Draft of Rule 1180

Dan,

I have some comments regarding the most current Working Group Meeting update for Rule 1180.

1) Based on our experience setting up monitoring networks elsewhere, a 6-month timeframe to submit a monitoring plan is probably not long enough for a refinery and its consultant(s) to put together an acceptable plan. Such a plan would or should require emissions inventory verification and updating; background monitoring and modeling; and other tasks of which some were outlined in the latest "Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines." All of these tasks take time to properly develop. 24-1

2) Within the rulemaking process, SCAQMD should provide some way (procedures, requirements) of ensuring all air quality monitoring instruments or systems to be used in the fenceline and community monitoring programs are indeed capable of measuring the specified pollutants at the MDL's required. 24-2

3) SCAQMD should consider requiring an independent systems audit of each fenceline and community monitoring station at least once every 18 months to ascertain the condition of the station and the level of operation and maintenance. 24-3

4) An independent performance audit should be conducted of each station every 2 years to ensure the station continues to be in compliance with all applicable QA procedures. However, if the community monitoring stations are operated by SCAQMD personnel, the requirement of systems audits can be waived. 24-4

5) The independent auditing should be conducted by ISO17025-certified teams selected by SCAQMD. 24-5

Best Regards,

Willard (Will) J. Smith, PE, QEP, BCEE
AQM Resources, LLC
1121 McClellan Street
Schenectady, New York 12309
518 253 9348

1

24-1 Response: See response 2-5 above.

24-2 Response: The Rule 1180 Guidelines set-forth criteria for an approvable fenceline air monitoring plan that are outlined on page two (2) of the guidelines. The criteria include a summary of instrument specifications, detectable pollutants, minimum and maximum detection limits for all air monitoring instruments. Depending on the pollutants emitted by a facility and the type of equipment that is proposed to measure specific pollutants a petroleum refinery may be required to have more than one type of fenceline air monitoring equipment. Therefore, it is foreseeable that various minimum

detection limits would be proposed as part of a fenceline air monitoring plan relative to the equipment that is selected for the fenceline air monitoring system.

24-3 Response: Subparagraph (d)(2)(E) of Proposed Rule 1180 requires fenceline air monitoring plans to provide detailed information about procedures for implementing quality assurance by a qualified independent party, including quality control and audits of the fenceline air monitoring systems. Further, the page 17 and 18 of the Rule 1180 Guidelines provide guidance on a developing a Quality Assurance Project Plan (QAPP) that shall address independent systems and performance audits. The QAPP must be developed using the U.S. EPA Guidance for Quality Assurance Project Plans. However, given the variation in equipment that could be proposed as part of a fenceline air monitoring plan the frequency of audits should not be pre-determined to ensure an effective QAPP. The frequency of audits should be specific to the equipment that is selected for a fenceline air monitoring system. Guidance for a refinery-related community air monitoring system will be developed and addressed in a public process separate from PR 1180.

24-4 Response: See response 24-3 above.

24-5 Response: Subparagraph (d)(2)(E) of Proposed Rule 1180 requires fenceline air monitoring plans to provide detailed information about a qualified independent party for the audits of the fenceline air monitoring systems. The qualification of these independent parties will be evaluated on a case-by-case basis during the fenceline air monitoring plan review. This evaluation is based on the independent party's qualifications and expertise, in particular for auditing fenceline monitors selected in each fenceline air monitoring plan.

Comment Letter #25

November 9, 2017

Michael Krause, Planning & Rules Manager
Daniel Garcia, Program Supervisor
South Coast Air Quality Management District
mkrause@aqmd.gov, dgarcia@aqmd.gov

Re: Strong Support for SCAQMD Rule 1180 -- Refinery Monitoring, if the District commits to clarified Public Review of future Refinery Monitoring Plans

Dear Messrs. Krause and Garcia,

As a coalition of over a dozen Environmental Justice and Environmental organizations, Health Advocates, and refinery community members, including many impacted by refinery emissions needing monitoring and pollution prevention, we thank you for consideration of previous comments and the following comments on Regulation 1180 (Refinery Fenceline and Community Air Monitoring).[1] The District has made a big push forward on monitoring in recent years, through the ground-breaking Fluxsense study, Rule 1180 development, and through plans for Community Monitoring, optical sensing of flares, and the new refinery study through MATES. These should significantly improve big gaps in refinery monitoring.

We understand that Rule 1180 is entirely new, and the District and refiners have had to develop expertise on a tight timeline in response to new U.S. EPA requirements,[2] to AB1647 (Muratsuchi),[3] and anticipating requirements pursuant to AB 617.[4] This effort deserves a troubleshooting period, allowing a spirit of problem-solving, but also needs to ensure there will be room for such public input in the future, when the real details of the Refinery Monitoring Plans meet the light of day.

So our first and biggest concern is that we set up an adequate public process for review of the actual Refinery Plans, when they are submitted to the AQMD next year. Currently the District includes language in the rule as follows: *"A fenceline air monitoring plan that is submitted pursuant to the requirements of subdivision (d) shall be made available, by the Executive Officer, for public review no less than fourteen (14) days prior to approval."* 25-1

[1] Available at: http://www.aqmd.gov/home/regulations/rules/proposed-rules#1180
[2] In December 2015, U.S. EPA promulgated final rulemaking in 40 CFR Part 63.658 for fenceline monitoring of benzene at refineries and related surrounding areas.
[3] AB 1647, Petroleum refineries: air monitoring systems, https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1647
[4] The Rule 1180 SCAQMD Staff Report states: *"SCAQMD staff has worked to address consistency of the rule with both AB 617 and AB 1647, however, the State's plan for AB 617 is not expected to be finalized until October 1, 2018. Due to the requirements of AB 1647 that refineries install and operate fenceline monitoring by January 1, 2020 and that the Districts install and operate community monitoring by the same date, a delay to have all the State guidance in place prior to adopting the rule will not allow adequate time for plan submittal, review and the installation and operation of the fenceline air monitoring system by that deadline."*, p. A-28

1

This language is problematic for several reasons – it is too short a review period, it assumes the Executive Officer will approve the plan after this period, and it does not provide for the Executive Officer to actually consider the public comments.

CBE previously made comments about these problems, and the District ultimately included the following response in its Staff Report:

> 22-1 Response: A public review and comment period will be included for the refinery fenceline air monitoring plans submitted to the District, and staff will strive to make information publicly available as soon as is reasonable possible. The Executive Office approval process inherently includes public and other stakeholder comments in the decision making. (p. A-76)

This is a helpful first step, and we appreciate the intention of the District to inherently include the public, and to strive to provide plans sooner. However, this general intent needs to be strengthened.

There are many ways to solve this problem; modifying the regulation language is preferred. However, other means may be sufficient, for instance, through a Board Resolution accompanying the draft rule adoption hearing, and presentation of this intent by staff at the Board hearing. **We propose the following resolutions:**

> **Whereas** the Refinery Monitoring Plans will not be prepared until after rule adoption, and are therefore not currently available for public review, staff will strive to make them publicly available as soon as reasonably possible after submitted by the refiners, to allow a longer than 14-day comment period when feasible.

25-1 Con't

> **Whereas** the staff report finds that the Executive Office approval process inherently includes public and other stakeholder comments in the decision making, these comments will be considered, in writing, by the Executive Office in the decision regarding whether to approve, disapprove, or modify the Refinery Monitoring Plans.

This kind of language through a resolution would clarify the District's intent as expressed in the staff report, without risking delaying rule adoption. Since staff provides such information to the public regularly, this resolution language should not be controversial. It allows the District considerable flexibility, but assures the public it can support the regulation now, despite great uncertainty about what plans the refiners will submit later, since a reasonable public input process will be set in place. Please let us know if you can agree with this approach. If so, we can strongly support the regulation.

While the Air District has made strong efforts in its Guidance and rulemaking and we are sure the District plans rigorous review of the Refinery Monitoring Plans, it would be counterproductive if the community is left out of serious review of these monitoring plans while in draft form. We appreciated Mr. Nastri's mention at the California Air Resources Board (CARB) October 26th meeting (webcast[5]) that the District plans to include local organization stakeholders and listen to community input on

[5] For instance, starting at time: 57:40, CARB Boardmember Gioia asked Districts how they would get input from and seriously address community stakeholder concerns in monitoring; this was followed by Mr. Nastri and others responding. During this meeting in general Chair Nichols, many other Board members, CARB staff, and the public commented repeatedly on the need to address community concerns and include serious community input into monitoring system design. Webcast is available at: http://cal-span.org/unipage/index.php?site=cal-span&owner=CARB&date=2017-10-26&target=

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monitoring as part of AB617 efforts. Since Regulation 1180 Refinery Monitoring is likely to be considered part of the District's response to AB617 monitoring requirements, it will be key to allow full public review of the Refinery Monitoring Plans, as soon as they are available to the District.

We will especially appreciate being notified as soon as the District receives the draft plans from the refiners, because time will be short to evaluate and comment. (We are also considering asking the refiners to help us by engaging them directly on their monitoring plans ahead of time, as we believe it will benefit refiners if they can write plans that residents who live up against the refineries will support.)

The kinds of issues we wish to see addressed in the plans in detail, are to ensure that:

- **Spatial coverage is adequate to protect impacted neighborhoods**;
- **But path lengths of remote sensing beams are not so long that they average-out spikes in emissions,** or don't adequately detect chronically present chemicals at lower but still significant levels;
- **That types of monitors proposed are the best for achieving the best detection limits** for the particular chemicals required to be detected (for instance, Ultra Violet is much better for detecting BTEX, but Infrared is better for others, and certain chemicals like H2S which can be smelled at extremely low levels can require dedicated equipment); we are concerned that some refiners may be tempted to cut corners and lump too many chemicals into one system that cannot adequately detect the full list; 25-1 Con't
- **And that Quality Assurance plans, and backup and calibration equipment are complete,** in order to achieve accurate information, and minimize monitoring downtime (among other concerns).

CBE, CFASE, and many other communities have years of hands-on experience with many monitoring technologies including high-tech optical remote sensing of multiple organic gases, low-tech bucket brigade sampling, PM monitoring, and others. We know what can go wrong with design and quality assurance; but also, what can go right. Therefore, we urge you to respect the community knowledge, and provide us with adequate review and input on the Refinery Monitoring Plans as proposed in our Resolution language. We will be more than happy to support plans that meet the necessary requirements, and certainly need the District's in-house efforts to ensure plans are adequate. All the new monitoring focus regionally and statewide will require such partnership.

Secondly, we heartily thank you for adding the chemical Carbonyl Sulfide, a neurotoxin emitted by South Coast refiners at almost 55,000 lbs in 2015, to the list of chemicals which must be monitored, and look forward to the District ensuring that this is included in monitoring plans.[6] 25-2
This chemical is one of the top 20 toxins emitted by oil refineries nationwide. This was an important rule change, which helps address cumulative exposure to neurotoxins due to refinery emissions of

[6] 2015 Toxic Release Inventory, Carbonyl Sulfide releases from Oil Refineries, LA County, 54,684 lbs total, Individual refineries: Tesoro: 29,525 lbs, Phillips 66: 18,300 lbs, Valero: 4,528 lbs, Chevron: 2,100 lbs, ExxonMobil: 230 lbs, http://ec2-52-202-150-226.compute-1.amazonaws.com/tri/tri.php?database=tri&reptype=f&reporting_year=2015&first_year_range=&last_year_range=&facility_name=&parent=&combined_name=&parent_duns=&facility_id=&city=&county=Los+Angeles&state=CA&zip=&naics=&primall=&chemcat=&corechem=n&casno=&casno2=&chemname=carbonyl+sulfide&detail=-1&datype=T&rsei=y&sorto=D

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hydrogen sulfide, carbonyl sulfide, and others, which can be emitted at the same time. We greatly appreciate the District's responsiveness to our comments regarding this key chemical. 25-2 Con't

Third, we also thank the District for removing, per our previous comments, the generalized reference to a thousand-meter pathlength, and again, look forward to the District ensuring that beam pathlengths will not be too long when draft plans are published. It is known that this is too long for certain technologies, such as FTIR (infrared range) equipment,[7] and we believe the District agrees and thus removed this reference. 25-3

Fourth, we support the District's approach to fund the Community Monitoring near refineries on a basis of the amount of crude oil throughput at each refinery. This makes sense, as large crude oil throughput means larger refineries, both geographically and in the number of units emitting air pollution. 25-4

Last, we suggest that our following concerns be considered during future rulemaking and District monitoring efforts: 25-5

- **Ensure that all Toxic Release Inventory Chemicals emitted cumulatively by refineries at significant levels are monitored in the future.** For example, another neurotoxin, carbon *di*sulfide, is also emitted in large quantities, though not reported at quantities as large as hydrogen sulfide and carbon*yl* sulfide. In the future, these chemicals should also be included in monitoring requirements, as should a mix of other toxic sulfur compounds and other chemicals emitted by oil refineries at the same time.
- **Ensure monitoring in the future near refineries of ultrafine particulate matter**, since the California Air Resources Board and others have found that these may be a particularly harmful subset of particulate matter, and that near-source is where most exposure occurs. Stationary sources were listed as causing about a third of emissions, with oil refineries listed as one of the main stationary sources.[8]
- **Ensure monitoring of metals in the future near refineries.** We are concerned that metals emissions from oil refineries is rarely carried out, despite presence of a variety of metals in crude oil and refinery processing.
- **Ensure that mobile monitoring efforts are carried out by the District, to ensure that the spatial distribution of fixed refinery monitoring equipment does not miss important emissions points.** [9]

[7] FTIR (Fourier Transform Infra Red), U.S. EPA identified problems with longer path lengths in many instances, and stated that for FTIR, for multiple compounds, path length should be limited to no greater than 400-500 meters, and typically 500 meters for UV DOAS, although perhaps longer in particular UV DOAS cases. [*"Infrared beam has a limited range and may not be sensitive enough to meet ambient data quality objectives. Maximum path length is on the order of 400–500 meters."*] at p. 25, https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf

[8] California Air Resources Board (CARB) website, 2003: *"Recent evidence has indicated that ultrafine particles may be a particular concern due to their higher potential to cause detrimental health effects."* https://www.arb.ca.gov/research/pmr/pmr-sum1.htm Also, CARB Resources Board presentation, 2003, *Ultrafine Particulate matter, Public Health Issues and Related Research*, January 31, 2003, p. 4, available at: https://www.arb.ca.gov/research/health/healthup/jan03.pdf , also p. 3.

[9] The AQMD and Swedish scientists were able to identify a major source of air emissions emanating from a leaking underground refinery pipeline during the FluxSense study, using mobile monitoring. This hidden source of large concentrations of VOCs emitted to atmosphere was unexpected, and underlines the need for use of a combination of fixed and mobile monitoring techniques.

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We also want to emphasize appreciation to you and all the staff for working with the community collaboratively, and holding community workshops to improve the regulation.

In conclusion, we will strongly support this rule if the District can correct the public input process for review of the Refinery Monitoring Plans next year. We look forward to your response.

Sincerely,

Julia May, Senior Scientist, and Ashley Hernandez, Wilmington Youth Organizer,
Communities for a Better Environment (CBE)

Magali Sanchez-Hall, Wilmington Resident

Sherry Lear, Co-Organizer, 350 South Bay Los Angeles

Jack Eidt, Co-Founder, SoCal 350 Climate Action

David Petit, Senior Attorney, Natural Resources Defense Council (NRDC)

Oscar Espino-Padron, Associate Attorney, Earthjustice

Marta A. Segura, M.P.H., Mom, EJ and Climate Diva, LALCV- Chair of Diversity, Board Member,
Center for Biological Diversity

Jesse N. Marquez, Executive Director, Coalition For A Safe Environment (CFASE)

Drew Wood, Executive Director, California Kids IAQ, Wilmington

Ricardo Pulido, Executive Director, Community Dreams, Wilmington

Pastor Alfred Carrillo, Apostolic Faith Center

Pastor Anthony Quezada, (American Legion Post 6, Long Beach)

Anabell Romero Chavez, Wilmington Improvement Network, Board Member

Joe R. Gatlin, Vice President (NAACP, San Pedro-Wilmington Branch # 1069)

Dr. John G. Miller, MD, President, San Pedro & Peninsula Homeowners Coalition

Modesta Pulido, Chairperson, St. Philomena Social Justice Ministry, Carson

Jim Stewart, PhD, Vice Chair, Sierra Club Angeles Chapter Climate Change Committee

Cc.
Wayne Nastri, Executive Officer
Dr. Phillip Fine, Deputy Executive Officer
Susan Nakamura, Assistant Deputy Executive Officer

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25-1 Response: SCAQMD staff has incorporated language in the Resolution in Attachment E to address the commenters concerns. The resolution language developed to address the comments concerns written as follows:

*"…**WHEREAS,** SCAQMD staff will provide the fenceline air monitoring plans for public review as soon as reasonably possible after submittal by the refinery and for no less than 14 days prior to approval, and*

***WHEREAS**, SCAQMD staff will consider, in writing, public and other stakeholder comments in the decision making to approve, disapprove, or modify the Refinery Monitoring Plans; and…"*

25-2 Response: Comment noted.

25-3 Response: Comment noted.

25-4 Response: Comment noted.

25-5 Response: SCAQMD staff encourages the commenter to participate in future public rulemaking and air monitoring efforts.

Comment Letter #26

OFFICE OF THE MAYOR
ALBERT ROBLES

CITY OF CARSON

November 13, 2017

Dr. William A. Burke
Chairman, SCAQMD Governing Board
SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

Re: City of Carson Comments on the Proposed SCAQMD Draft Rule 1180

Dear Mr. Burke,

The adoption and implementation of SCAQMD's proposed Rule 1180 "Refinery Fenceline and Community Air Monitoring" is long overdue and may become one of the SCAQMD's most important health initiatives in the City of Carson. The City of Carson has been following the development of this Rule very closely since Workshop #1, and encourages the SCAQMD Governing Board to immediately adopt the Rule and implement it in as expeditious a manner as possible.

Our City Council, in the October 17, 2017 meeting, discussed Rule 1180 and unanimously passed a motion reaffirming the importance of Rule 1180; demanding the Rule's immediate implementation; requesting that the refineries within the City of Carson be the first to implement; ensuring that the Rule have triggers for mitigation of pollutant exceedances; and requesting that the SCAQMD have a meeting in Carson to inform Carson residences of this and other SCAQMD activities. The motion also directed staff, in addition to sending a letter to the SCAQMD, copy our representatives in Congress, State Legislature, and the LA County Board of Supervisors.

The City of Carson is a severely impacted community with regard to air quality, and is host to two large refineries, which are the largest source of air pollution in our City and among the top polluters in the State.

We strongly support the recent changes in draft Rule 1180 to implement the fenceline monitoring program plan adoption within 6 months of rule adoption. Further, we encourage the SCAQMD to shorten the timeline for actual implementation of the monitoring equipment. The health and safety of Carson's 100,000 residences is of the utmost importance and any delay in the implementation of an effective system is not acceptable. 26-1

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WEBSITE: ci.carson.ca.us

City of Carson Comments on the Proposed SCAQMD Draft Rule 1180 Page 2

While we understand the need to coordinate AB1647 requirements, the removal of the community monitoring requirements in Rule 1180 should not produce any delay in the implementation of the fenceline monitoring. In addition, due to the heavily impacted areas within the City of Carson, we request that the City of Carson be selected as a location for a community monitoring station and that the SCAQMD work with City of Carson staff in identifying the specific locations for this community monitoring station. Air monitoring for the health and safety of the nearby residences and sensitive areas is a critical component of reducing the impacts to public health from these very large air pollutant sources and should be implemented as rapidly as feasible. 26-2

While draft Rule 1180 provides for extensive data gathering, the Rule does not provide for mechanisms to utilize the data to reduce the health risks to our residents. The Federal Rule includes requirements for a root-cause analysis if benzene levels exceed a threshold level (9 ug/m3), and the BAAQMD Rule requires the updating of the refinery Health Risk Assessments in a timely matter. The City requests that these same requirements be added to the draft Rule 1180. Without these measures, the draft Rule 1180 does not have any mechanisms that would allow for an actual reduction in the health risk, either through community programs or refinery modifications. The draft guidelines that accompany draft Rule 1180 require a notification system to "*allow for the public to take proper actions to protect their health*" but draft Rule 1180 makes no requirements on the refineries to take proper action to control the source of these emissions. These elements should be required and added to draft Rule 1180. 26-3

The City of Carson is also requesting that the SCAQMD have a public meeting in the City of Carson to inform our 100,000 residences of the contents and purpose of Rule 1180, informing them of the notification system requirements and generally ensuring that the concerns of the City of Carson in regard to air quality impacts of these refineries are being finally addressed. 26-4

The City of Carson urges SCAQMD's immediate adoption and implementation of Rule 1180 and volunteers Carson to serve as the first location for a pilot test for implementation of the monitoring programs. Ensuring that there are also effective and timely placement of community monitors and adding pollutant triggers along with health risk assessment updates to draft Rule 1180 language will be a significant step towards the City's goal for an extensive reduction in the health impacts of these very large sources within our City. Furthermore, efforts should go beyond monitoring and include a robust mitigation program to substantially reduce emissions and the associated health impacts to our heavily impacted community. 26-5

In closing, I want to remind the SCAQMD Governing Board, that while the City of Carson has two of the largest air polluting stationary sources in the region, namely the Phillips 66 and the Tesoro/Andeavor refineries; and these sources have been repeatedly and regularly cited by the SCAQMD for air emissions violations, including being the site of dangerous explosions and significant SCAQMD financial sanctions, to date nothing (or at the very best very minimal) has been done by the SCAQMD in the City of Carson to address our 100,000 residents' concerns vis-à-vis the refineries, but the surrounding communities enjoy the largeness of the SCAQMD, i.e., earlier this year the City of Torrance received a "SCAQMD grant" of over one million dollars for its one and only refinery, and the City of Long Beach also received a "SCAQMD grant" of over one million dollars and the City of Long Beach does not have any refineries or any comparable large air polluting stationary sources. **As such, we believe that the time has finally come for the City of Carson to be treated fairly, equitably and receive its "SCAQMD grant" even if it's just in the** 26-6

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City of Carson Comments on the Proposed SCAQMD Draft Rule 1180 Page 2

form of us being the first mandated beneficiaries of Rule 1180 as outlined above. Please, because if not now when!!!

Sincerely,

Albert Robles
Mayor

cc: Mayor Pro Tem Lula Davis-Holmes
Councilmember Elito Santarina
Councilmember Jawane Hilton
Councilmember Cedric Hicks, Sr.
City Manager Ken Farfsing
Community Director John Raymond
Planning Manager Saied Naaseh
City Attorney Sunny Soltani
Dan Garcia, SCAQMD, dgarcia@aqmd.gov

26-1 Response: The proposed implementation schedule for the refinery fenceline air monitoring system is based on both stakeholder input and SCAQMD staff experience with developing and implementing air monitoring systems as well as ensuring compliance with AB1647 with monitoring system deployment by January 1, 2020. Specifically, the implementation schedule was developed to not only provide refinery owners and operators sufficient time to procure monitoring equipment, but also to install and conduct performance tests of fenceline air monitoring equipment. In addition, the SCAQMD staff needs time to review the Plans for the eight affected facilities at the same time. These activities are imperative to ensuring the highest level of accuracy for measurements by the fenceline air monitoring system.

26-2 Response: The removal of refinery-related community air requirements from PR1180 will not delay implementation of the fenceline air monitoring requirements. As noted in Response 26-1, AB1647 requires the community monitoring system to be installed by January 1, 2020, which provides limited time to develop a community plan, procure equipment, site and install the system, and conduct performance tests. Also, the siting of refinery-related community air monitoring stations and the refinery-related fenceline air monitoring system will be determined in a public process that SCAQMD staff will initiate in 2018. SCAQMD staff recognizes that two affected facilities are located in the City of Carson so staff will ensure that the City of Carson is notified of future public meetings to discuss siting of refinery-related community air monitoring stations and seek to hold a public meeting in the City of Carson.

26-3 Response: PR1180 does not affect a petroleum refinery's obligation to comply with federal regulations, therefore, facilities subject to PR 1180 are still required to comply with US EPA 40 CFR §63.658. Further, imposing the same requirements as any existing state or federal regulations would be duplicative, as a result, SCAQMD staff is not proposing a benzene action level for PR 1180. Also, SCAQMD has an existing mechanism through the AB 2588 Program for regular updates to Health Risk Assessments that could require action to be taken under a Risk Reduction Plan. Petroleum refineries subject to PR 1180 are currently in the AB 2588 Program. These facilities are required to report their toxic emissions to the District quadrennial basis (i.e., once every four years) and facilities determined to be of high priority must prepare a health risk assessment and potentially a Risk Reduction Plan.

26-4 Response: PR 1180 is intended to implement requirements in AB 1647 that are now in statute in the Health & Safety Code Section 42705.6. Fenceline air monitoring plans required by PR 1180 are subject to a public review process. Specifically, PR 1180 requires that a fenceline air monitoring plan shall be made available, by the Executive Officer, for public review no less than fourteen (14) days prior to approval. Also, see response 25-1 above regarding additional language that has been added to the resolution in Attachment E to provide the fenceline air monitoring plan for public review as soon as reasonably possible after submittal by the refinery. Further, the refinery-related community air monitoring system will be developed in a public process that will facilitate community participation.

26-5 Response: AB 1647 requires that SCAQMD install and operate a refinery-related community air monitoring system by January 1, 2020. PR 1180 includes cost-recovery provisions for a refinery-related community air monitoring system. Therefore, adoption of PR 1180 will provide SCAQMD staff with the appropriate funding to implement the refinery-related community air monitoring requirements set-forth by AB 1647 and to proceed with the development of the refinery-related community air monitoring system. As previously discussed, the refinery-related community air monitoring system will be developed in a public process that will facilitate community participation.

The technical objectives of fenceline air monitoring are clearly identified in subdivision (a) of PR 1180 that states the purpose of the rule is to require real-time fenceline air monitoring systems…, "that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities." However, PR 1180 could help inform refinery leak detection and repair programs and alert communities of accidental releases as well as other refinery compliance efforts that could help minimize community impacts.

Please see Response 26-3 above for a discussion pertaining to pollutant triggers and health risk assessment updates.

26-6 Response: See response 26-5 above.

From: Bridget McCann
To: Daniel Garcia
Subject: FW: WSPA Proposed Language Options For Revising PR1180 Monitoring Plan
Date: Tuesday, November 14, 2017 6:06:30 PM
Importance: High

From: Bridget McCann
Sent: Tuesday, November 14, 2017 5:55 PM
To: pfine@aqmd.gov; Michael Krause (MKrause@aqmd.gov); dgarcia@aqmd.gov
Cc: Patty Senecal
Subject: WSPA Proposed Language Options For Revising PR1180 Monitoring Plan
Importance: High

Hi Phil—

As we discussed earlier, below are proposed changes by WSPA regarding possible revisions to monitoring plans. The fenceline monitoring systems are going to be in place as long as the refineries are in operation, and there may be various changes and/or considerations over time that will need to be addressed in individual monitoring plans as programs mature.

Please let me know if you have any questions.

Thanks,
Bridget

Bridget McCann
Manager, Southern California Region

NOTE: CHANGES SHOWN IN BLUE HAVE ALREADY BEEN SUBMITTED BY WSPA. CHANGES SHOWN IN RED ARE NEW PROPOSED CHANGES.

PR1180

(d) Plan Requirements

(3) The fenceline air monitoring plan required by paragraph (d)(1) shall address real-time air monitoring for the air pollutants specified in Table 1 on a continuous basis. The fenceline air monitoring system required by subdivision (e) shall monitor for all pollutants identified in Table 1. The owner or operator of a petroleum refinery must provide an explanation for not including real-time air monitoring for any of the pollutants specified in Table 1 in the fenceline air monitoring plan. Explanations for not including real-time air monitoring for any of the pollutants specified in Table 1 must be consistent with the criteria set-forth in the Rule 1180 Fenceline Air Monitoring Guidelines. A petroleum refinery may submit a revised fenceline air 27-1

monitoring plan if changes to the fenceline air monitoring system are supported based on new information. 27-1 Con't

PR1180 Guidelines
2. Fenceline Air Monitoring Systems

a. Multi-Pollutant Monitoring

Multi-pollutant monitoring is a means to broaden the understanding of air quality conditions and pollutant interactions, furthering capabilities to evaluate air quality models, develop emissions control strategies, and support research, including health studies. Petroleum refineries and activities associated with them emit a wide range of air pollutants, including criteria pollutants (SO2, NOX, CO, and PM); volatile organic compounds (VOCs), including photochemically reactive VOCs that contribute to formation of tropospheric ozone (e.g., ethylbenzene, formaldehyde); carcinogenic hazardous air pollutants (e.g., benzene, 1,3-butadiene, naphthalene, polycyclic aromatic hydrocarbons, formaldehyde); non-carcinogenic air toxics (hydrogen fluoride, hydrogen cyanide); persistent bio-accumulative toxics (mercury), and other air pollutants (e.g., hydrogen sulfide and carbonyl sulfide).

~~Chemical compounds associated with health risk and those measured at other ambient air monitoring locations should be identified in the air monitoring plans. Identification of the health risk drivers can be informed by the health risk assessment studies performed at the refineries, as well as other information regarding potential health risk near refineries. At the minimum, compounds listed in Table 1 below, shall be considered for the fenceline air monitoring as part of the air monitoring plan. Therefore, exclusion of any of these chemical compounds must be thoroughly explained and justified within the Air Monitoring Plan. Additional chemicals may be of interest to monitor as a part of the fenceline air monitoring system, for example, if certain annual emissions exceed 10,000 lbs/year. Other chemicals may also be inherently monitored by the open path systems and may be included in the reporting for additional public information.~~ 27-2

i. Chemical Species of Interest

The California Environmental Protection Agency's (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is collaborating with the California Air Resources Board (ARB) and the Interagency Refinery Task Force to identify and develop information on chemicals emitted from refineries and their health effects in order to assist air agencies in developing plans for air monitoring at refineries in California. OEHHA published the draft report1 in September 2017 that presents a comprehensive list of chemicals emitted from California refineries, including emissions that occur routinely in daily operations, as well as accidental and other non-routine emissions. The list prioritizes the chemicals according to their emissions levels and toxicity, providing a list of chemicals that would be top candidates for air monitoring near refineries according to the volume of the chemicals emitted and their toxicity. The presence of a chemical on this comprehensive list does not necessarily mean it is released from all refineries, at all times, or in significant quantities.

The potential compounds emitted from refineries that pose the highest health risk in nearby communities should be identified along with the appropriate monitoring technologies selected to measure them. This assessment should be informed by the OEHHA report on Refinery Chemical Emissions and Health Effects Report. ~~Measurements should be continuous and reported in real time when available. The fenceline monitoring should be performed using open path technology capable of measuring the pollutants associated with petroleum refinery operations.~~ The chemical compounds of interest for Rule 1180 are presented in Table 1 below.

The air monitoring plan must provide specification about the ~~open path~~ instruments selected for a fenceline air monitoring system, such as, detection limits of the equipment for each chemical and time-resolution capability. Also, the air monitoring plan must demonstrate that the instruments can measure the pollutants identified in Table 1. The selected ~~open path~~ instruments should be able to record and store the ~~measured spectral absorption and associated~~ average concentrations of measured pollutants for retrospective investigations. Where open-path monitors are being operated, all factors that could affect air pollutant measurements, such as, the maximum path length the instruments are capable of measuring and potential interferences must be discussed in the air monitoring plan.

Further, the petroleum refinery air monitoring plan must explain exclusion or replacement of monitoring for any of the compounds identified in Table 1 below. For example, in certain instances a petroleum refinery operator may propose to exclude monitoring for specific compounds that are

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not likely to be measured at or above the detection limits of the fenceline air monitoring equipment. In these instance, the petroleum refinery operator would be required to provide an alternative measurement methodology or evidence (e.g., historical air monitoring data or operational information) to support the proposed exclusion. A petroleum refinery may submit a revised fenceline air monitoring plan if changes to the fenceline air monitoring system are supported based on new information. 27-2 Con't

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27-1 Response: SCAQMD staff has incorporated the suggested language in the Rule 1180 Guidelines. For additional information see response 27-2 below.

27-2 Response: The SCAQMD staff has incorporated the following sentence, "*A petroleum refinery may submit a revised fenceline air monitoring plan if changes to the fenceline air monitoring system are supported based on new information*," to the Rule 1180 Guidelines.

Also, the SCAQMD staff has revised the paragraph under the sub-heading multi-pollutant monitoring to ensure that it does not contain duplicative statements. However, SCAQMD staff will maintain the language in this paragraph that is related to the need for monitoring of additional chemical compounds based on each refinery's reported emissions and health risk assessment studies, because this information is essential to developing an approvable fenceline air monitoring plan.

Further, the SCAQMD staff believes the requirement for recording and storing the measured spectral absorption data is important for retrospective investigations. Through the fenceline air monitoring plan development process the owner or operator of petroleum refinery may demonstrate that the use of fenceline monitors capable of storing this information is infeasible.

PROPOSED RULE 1180 **REFINERY FENCELINE AND COMMUNITY AIR MONITORING**

(a) Purpose

The purpose of this rule is to require real-time fenceline air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities.

(b) Applicability

This rule applies to petroleum refineries ~~that have the capacity to process more than 40,000 barrels per day of crude oil~~.

(c) Definitions

For the purposes of this rule, the following definitions shall apply:

(1) COMMUNITY AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations in communities near a petroleum refinery.

(2) FENCELINE AIR MONITORING SYSTEM is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery.

(3) PETROLEUM REFINERY is a facility that is permitted to processes petroleum, as defined in the Standard Industrial Classification Manual as Industry No. 2911.

(4) REAL-TIME is the actual or near actual time during which pollutant levels occur at or near the property boundary of a petroleum refinery or in a nearby community.

(5) RULE 1180 REFINERY FENCELINE AIR MONITORING PLAN GUIDELINES are a written framework to be used by the Executive Officer to evaluate a refinery fenceline air monitoring plan.

(d) Plan Requirements

(1) No later than [~~*six*~~ *eight months after Date of Rule Adoption*], the owner or operator of a petroleum refinery shall submit to the Executive Officer a written fenceline

air monitoring plan for establishing and operating a ~~continuous,~~ real-time fenceline air monitoring system.

(2) The fenceline air monitoring plan shall provide the following detailed information:

(A) Equipment to be used to continuously monitor, record, and report air pollutant levels for the pollutants specified in Table 1 – Air Pollutants to be Addressed by Fenceline Air Monitoring Plans in real-time, at or near the property boundary of the petroleum refinery;

(B) Siting and equipment specifications;

(C) Equipment in at least one petroleum refinery on-site location to continuously record wind speed and wind direction data;

(D) Procedures for air monitoring equipment maintenance and failures. The procedures for equipment maintenance and failures shall include a plan that describes the maintenance activities necessary to maintain proper performance of the fenceline air monitoring equipment and a plan that deals with equipment failures. At a minimum, the maintenance and failure plan shall describe the following:

(i) Routine maintenance requirements for equipment;

(ii) A planned schedule for routine maintenance performed on equipment;

(iii) Length of time that equipment will not be operating during routine maintenance activities; and

(iv) Temporary air monitoring measures that will be implemented in the event of an equipment failure or during routine maintenance activities and used until the fenceline air monitoring system is restored to normal operating conditions.

(E) Procedures for implementing quality assurance by a qualified independent party, including quality control and audits of the fenceline air monitoring systems;

(F) Procedures for implementing the fenceline air monitoring plan, including, information pertaining to the installation, operation, maintenance, and quality assurance, for the fenceline air monitoring system;

(G) Methods for dissemination of data collected by the equipment specified in subparagraph (d)(2)(A) and (d)(2)(C) to the public and SCAQMD as expeditiously as possible.

(3) The fenceline air monitoring plan required by paragraph (d)(1) shall address ~~continuous,~~ real-time air monitoring for the air pollutants specified in Table 1 on a

Summary of Comments on (Adopted June 1, 1990) (Amended December 7, 1990)

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:14:14 PM

Consider allowing the use of hand held, process unit monitoring, ground level monitoring, optical remote sensing, and/or immediately available real-time on-site modeling as suitable temporary air monitoring measures. See REAMAR O2 Recommendations R-A1b, R-A2, R-A3, R-A10, and R-B2.

Number: 2 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:15:26 PM

Should include local response agencies. See REAMAR O2 Recommendation R-A7a, R-C7a, and R-C7b.

continuous basis. The fenceline air monitoring system required by subdivision (e) shall monitor for all pollutants identified in Table 1. The owner or operator of a petroleum refinery must provide an explanation for not including ~~continuous,~~ real-time air monitoring for any of the pollutants specified in Table 1 in the fenceline air monitoring plan. Explanations for not including ~~continuous,~~ real-time air monitoring for any of the pollutants specified in Table 1 must be consistent with the criteria set-forth in the Rule 1180 Fenceline Air Monitoring Guidelines.

(4) The review and approval of the fenceline air monitoring plan shall be subject to plan fees as specified in Rule 306 – Plan Fees.

(5) The owner or operator of a petroleum refinery shall submit an updated fenceline air monitoring plan to the Executive Officer as follows:

(A) Ten (10) days after the date of any unplanned facility, equipment, process or administrative modification that could result in changes to an approved fenceline air monitoring plan.

(B) Forty-five (45) days before the date of implementation of any planned facility, equipment, process or administrative modification that could result in changes to an approved fenceline air monitoring plan.

(C) Sixty (60) days after the date of receiving information that an approved fenceline air monitoring plan does not adequately ~~monitor coverage for~~measure any pollutant(s) identified in Table 1 that are emitted from the petroleum refinery.

(D) Failure to comply with subparagraph (d)(5)(A) through (d)(5)(C) shall result in revocation of an approved fenceline air monitoring plan. Thirty (30) days after revocation of an approved fenceline air monitoring plan the owner or operator of a petroleum refinery shall submit a new fenceline air monitoring plan to the Executive Officer pursuant to paragraphs (d)(1) through (d)(4) and (d)(6) through (d)(7). The updated ~~F~~fenceline ~~A~~air ~~M~~monitoring ~~P~~plan shall not be subject to the implementation schedule in subdivision (e). An updated implementation schedule subject to approval by the Executive Officer shall be included in the new fenceline air monitoring plan but in no case shall be longer than 180 days.

(6) The owner or operator of a petroleum refinery may include the use of emerging technologies in a fenceline air monitoring plan that is compliant with the requirements of this rule.

(7) All fenceline air monitoring plans shall be consistent with the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 8:54:40 AM

Section 5 should require an updated fence-line air monitoring plan if revisions to the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines would require changes to the plan.

(e) Fenceline and Community Air Monitoring System Requirements

Beginning no later than one year after a fenceline air monitoring plan is approved by the Executive Officer, the owner or operator of a petroleum refinery shall complete installation and begin operation of a real-time fenceline air monitoring system in accordance with the approved fenceline air monitoring plan. The fenceline air monitoring system shall monitor for all pollutants identified in Table 1.

(f) Plan Review Process

(1) The Executive Officer shall notify the owner or operator in writing whether the fenceline air monitoring plan is approved or disapproved. Determination of approval status for the fenceline air monitoring plan shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in subdivision (d) and the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.

(A) If disapproved, the owner or operator shall resubmit the fenceline and air monitoring plan, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the plan. The resubmitted plan shall include any information necessary to address deficiencies identified in the disapproval letter.

(B) The Executive Officer will either approve the revised and resubmitted fenceline air monitoring plan or modify the plan and approve it as modified

(~~3~~2) A fenceline and air monitoring plan that is submitted pursuant to the requirements of subdivision (d) shall be made available, by the Executive Officer, for public review no less than fourteen (14) days prior to approval.

(g) Notifications

(1) Upon installation and operation of a fenceline air monitoring system as required by ~~subdivision~~ paragraph (d)(5) or subdivision (e), the owner or operator of a petroleum refinery shall comply with the following notification requirements by:

(A) Calling 1-800-CUT-SMOG to notify the Executive Officer 48 hours prior to the planned maintenance activity subject to subparagraph (d)(2)(D) and (d)(5)(B) by providing the name of the petroleum refinery, the name of the monitor, and the planned date(s) of the occurrence(s).

(B) Calling 1-800-CUT-SMOG to notify the Executive Officer within two hours of discovering that equipment described in the fenceline air monitoring plan subject to subdivision (d) failed to accurately provide real-

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 9:28:01 AM

Consider allowing an automated notification system where the monitoring system automatically notifies of outages, for example, email.

time air monitoring information. The owner or operator shall also provide the name of the petroleum refinery, the name of the air monitor, the date of the occurrence, and the reason for the lapse in collecting and/or reporting the real-time air monitoring information.

(2) The owner or operator of the petroleum refinery shall submit a written notification to the Executive Officer of any equipment failure that also results in a failure to accurately provide continuous, real-time air monitoring information as required by the approved fenceline air monitoring plan subject to subdivision (d) for 24-hours or longer. The written notification shall be submitted to the Executive Officer within 24 hours of discovering the equipment failure and shall include the following:

(A) An explanation of activities currently being pursued or taken to remedy the equipment failure;

(B) Estimated time needed to restore the fenceline air monitoring equipment to normal operating conditions that comply with the approved fenceline and community air monitoring plan; and

(C) Temporary air monitoring measures subject to subparagraph (d)(~~3~~2)(D) from the approved fenceline air monitoring plan to be implemented until the fenceline air monitoring system is restored to normal operating conditions.

(3) The owner or operator of a petroleum refinery shall submit an updated fenceline air monitoring plan to the Executive Officer if an equipment failure results in a failure to accurately provide continuous, real-time air monitoring information for more than 30 days.

(i) Recordkeeping

The owner or operator of a petroleum refinery shall maintain records of all information required under this rule for at least five years and shall make the information available to SCAQMD personnel upon request with at least the two most recent years kept onsite.

(j) Community Air Monitoring Fees

(1) Pursuant to CA Health and Safety Code §42705.6 an owner or operator of a petroleum refinery shall pay an ~~one-time~~ installation fee for refinery-related community air monitoring system based on a rate of $~~0.020~~ 0.0195 per annual barrels ~~by March 1, 2018~~. The fees ~~established in~~required by this paragraph shall

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Number: 1 Author: twillmon Subject: Sticky Note Date: 10/27/2017 4:26:08 PM

It seems like this section should be included in (d)5, with the other criteria for submitting an updated fenceline air monitoring plan to the EO.

be assessed on the petroleum refineries crude oil throughput capacity and calculated as:

Crude oil throughput capacity (barrels per year) x $0.0195 = Installation Fee

~~Annual operating and maintenance fees for the community air monitoring system will be recovered pursuant to Rule 301 fee schedule beginning January 1, 2020.~~

(2) No later than July 1, 2018, the owner or operator of a petroleum refinery shall make an initial minimum payment to the SCAQMD of thirty-percent of the installation fee required by paragraph (j)(1).

(3) No later than January 30, 2019, the owner or operator of a petroleum refinery shall make a final payment to the SCAQMD for the remaining balance of the installation fee required by paragraph (j)(1). The remaining balance shall be equal to the installation fee minus the initial minimum payment required by paragraph (j)(2).

(4) Annual operating and maintenance fees for the community air monitoring system shall be recovered pursuant to Rule 301–Permitting and Associated Fees.

(~~2~~5) The refinery-related community air monitoring fees required by paragraph (j)(1) are in addition to permit and other fees otherwise authorized to be collected from such facilities and shall be included as part of the annual permit renewal fees.

(~~3~~6) No later than January 1, 2025 and every five years thereafter, the Executive Officer shall conduct a refinery-related community air monitoring assessment to evaluate adequate coverage and/or need for equipment upgrades.

(k) Exemptions

An owner or operator of a petroleum refinery that has a maximum capacity to process less than 40,000 barrels per day of crude oil is exempt from the requirements of this rule.

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:27:42 PM

This includes the six refineries listed on REAMAR O2 report Table 1 (Note - the two non adjacent P66 refineries are considered in this table).

Table 1– Air Pollutants to be Addressed by Fenceline Air Monitoring Plans

Air Pollutants
Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3 Butadiene
Styrene
BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylenes)
Other Compounds
Hydrogen Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride+

+ If the facility uses hydrogen fluoride.

Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Diamond Bar, California

September 2017

Summary of Comments on Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines

Page: 1

Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 10:27:44 AM

Revise date.

Rule 1180 Refinery Fenceline and Community Air Monitoring Plan Guidelines

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1. Background

The South Coast Air Quality Management District (SCAQMD) Governing Board adopted Rule 1180~~–Petroleum~~ – Refinery Fenceline and Community Air Monitoring on ~~December 1, 2017~~(date of adoption). The purpose of Rule 1180 is to require rea-time fenceline ~~and community~~ air monitoring systems and to establish a fee schedule to fund refinery-related community air monitoring systems that provide air quality information ~~that provide continuous air quality information~~ to the public about levels of various criteria air pollutants, volatile organic compounds, metals and other compounds at or near the property boundaries of petroleum refineries and in nearby communities.

Rule 1180 requires that refinery operators submit a written fenceline ~~and community~~ air monitoring plan (air monitoring plan) for establishing and operating a continuous, real-time fenceline ~~and community~~ air monitoring system. Therefore, SCAQMD staff developed the Rule 1180 – Refinery Fenceline ~~and Community~~ Air Monitoring Plan Guidelines (Guidelines) as a written framework to be used by the Executive Officer to evaluate air monitoring plans required by Rule 1180. By design, these Guidelines will inform petroleum refinery operators subject to the Rule 1180 about the elements necessary to complete an air monitoring plan. SCAQMD recognizes the need for flexibility when designing an air monitoring plan, therefore, each plan will be evaluated on a case-by-case basis and tailored to each facility's size, operations, specific location, and its surrounding receptors.~~,~~ Therefore, a fenceline air monitoring system must be representative of the size of the affected facility and its emissions.

A fundamental requirement of Rule 1180 is that an air monitoring plan must provide detailed information about the installation, operation and maintenance of a fenceline ~~and community~~ air monitoring system.~~-~~ A fenceline air monitoring system is defined as a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery. ~~Whereas, a community air monitoring system is defined as a combination of equipment that measures and records air pollutant concentrations in communities near a petroleum refinery.~~ An effective fenceline ~~and community~~ air monitoring system should be capable of measuring routine emissions from refineries and detecting leaks from refinery equipment and other sources of refinery-related emissions. ~~These systems~~The fenceline air monitoring system would inform refinery operators and the public about air pollution impacts to nearby communities from refinery operations. ~~Therefore, the extent of a fenceline and community air monitoring system must be representative of the size of the affected facility and its emissions.~~

Developing an air monitoring plan requires three important steps; identification of emissions sources and affected communities, deriving a fenceline ~~and community~~ air monitoring system that can provide real-time information about certain air pollutant levels, and effectively communicating this information using data management technology and displays. Figure 1 -

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 10:28:34 AM

real-time

Number: 2 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:36:48 PM

Suggest text modification to read "... to the public and local response agencies about levels of various...". See REAMAR O2 Recommendations R-A7a, R-C7a, and R-C7b.

Number: 3 Author: sbennett Subject: Sticky Note Date: 10/30/2017 1:24:38 PM

Refinery are not required to monitor for metals at the fence line; it should be deleted from this list.

Number: 4 Author: sbennett Subject: Sticky Note Date: 10/27/2017 10:37:44 AM

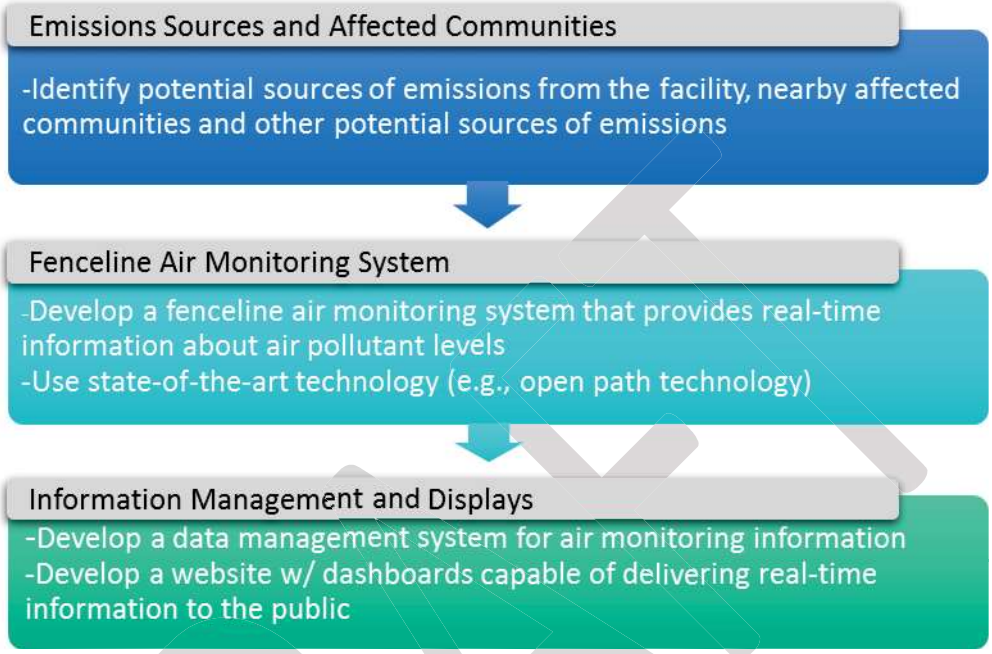
Should read "An effective fence line air monitoring system should be capable of measuring routine emissions refineries and detecting leaks, as well as unplanned releases, from refinery equipment...". See REAMAR O2 Recommendations R-A7a, R-C7a, and R-C7b.

Number: 5 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:34:43 PM

SCAQMD should consider monitoring emerging technologies on continuous leak detection and consider revisions to its leak detection and repair rules if it is demonstrated that it can replace current labor intensive periodic surveys with a more cost effective continuous technology that results in increased emissions reductions.

Overview of Key Steps to Developing an Air Monitoring Plan, below provides an overview of the key steps to developing a fenceline ~~and community~~ air monitoring system.

Figure 1: Overview of Key Steps to Developing an Air Monitoring Plan



An approvable air monitoring plan shall meet the following key objectives:

- Provide continuous information about various air pollutant levels (i.e., ~~measured in~~determined by air pollutant concentration) measured in real-time in durations short enough to adequately address significant emissions changes from refinery operations;
- Gather accurate air quality and meteorological data to identify both the time(s) and location(s) of various air pollutant~~s~~ levels near refinery operations and provide a comparison of these levels to other pollutant levels monitored in the Basin;
- Track long-term air pollutant levels, variations, and trends over time at or near the property boundaries of petroleum refineries and in nearby communities;
- Provide context to the data so that local communities can distinguish air quality in their location from other locations in the Basin and understand the potential health impacts associated with local air quality near petroleum refinery operations; and
- Provide a notification system for communities near refineries.

Rule 1180 sets-forth requirements for air monitoring plans. The air monitoring plan shall include detailed information for the following:

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:37:08 PM

Suggest "Provide a system to notify communities near refineries when measured emission exceed known health and safety values. See REAMAR O2 report recommendations R-A7a,

Number: 2 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:37:36 PM

Suggest adding additional bullet "Provide communities information on where they can obtain information from local response agencies and industry on how to prepare for an unplanned release and how to obtain more information during an emergency." See REAMAR O2 Finding F-C3, Recommendation R-C5b, Findings F-C5d, F-C5e, F-C5f, and Recommendation R-C7a. Note: Findings are the responsibility of local response agencies and industry.

- An evaluation of routine emission sources at the refinery (e.g., utilizing remote sensing or other measurement techniques or modeling studies, such as those used for health risk assessments);
- An analysis of the distribution of operations and processes within the refinery to determine potential emission sources;
- An assessment of air pollutant distribution in surrounding communities (e.g., mobile surveys, gradient measurements, and/or modeling studies used for health risk assessments);
- A summary of open-path air monitoring instruments and ancillary equipment that are proposed to continuously measure, monitor, record, and report air pollutant levels in real-time near the petroleum refinery facility perimeter (i.e., fenceline~~)~~);
- ~~A summary of fixed-site air monitoring instruments and ancillary equipment that are proposed to continuously measure, monitor, record, and report air pollutant levels in nearby communities~~
- A summary of instrument specifications, detectable pollutants, minimum and maximum detection limits for all air monitoring instruments;
- Proposed monitoring equipment siting and selected pathways for open-path instruments, including the justification for selecting specific locations based on the assessments mentioned above;
- Operation and maintenance requirements for the proposed monitoring systems;
- An implementation schedule consistent with the requirements of Rule 1180;
- Procedures for implementing quality assurance and quality control of data;
- A web-based system for disseminating information collected by fenceline ~~and community~~ air monitoring ~~systems, a proposed web-based data display, and the~~ system;
- Details of the proposed public ~~alert and~~ notification system; and
- Demonstration of independent oversight.

This information will assist the Executive Officer in determining the approval status of an air monitoring plan during the plan review process required by paragraph (f) of Rule 1180.

2. Fenceline Air Monitoring Systems

Pursuant to the requirements of Rule 1180 discussed above development of a fenceline air monitoring system shall take into account geospatial layout of the refinery site, potential release sources, local meteorology, atmospheric dispersion characteristics of the compounds of concern, the relative risk to likely receptors based on these criteria, and other considerations outlined below.

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:37:51 PM

Suggest adding bullet: An evaluation of likely unplanned release scenarios. See Recommendations R-A7a and R-B3.

Number: 2 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:38:12 PM

Suggest adding bullet "Details the methods to provide communities information on where they can obtain information from local response agencies and industry on how to prepare for an unplanned release and how to obtain more information during an emergency. See REAMAR O2 Finding F-C3, Recommendation R-C5b, Findings F-C5d, F-C5e, F-C5f, and Recommendation R-C7a. Note: Findings are the responsibility of local response agencies and industry.

Fenceline Air Monitoring Plan Checklist

Fenceline Air Monitoring Coverage (or Spatial Coverage)	
☑	Identify the facility's proximity to sensitive receptors affected by the refinery operation and provide the information below.
	○ Distance from facility to closest sensitive receptor(s)
	○ Location of downwind and upwind communities
	○ Eminent sources of non-refinery emissions surrounding the facility (e.g. non-refinery industrial facilities)
	○ Dispersion modeling†
☑	Describe historical facility emission patterns and ~~potential~~ pollutant hotspots based on the following:
	○ On-site location of operations and processes within the facility's perimeter ~~and intensity of emissions sources~~
	○ On-site location of emissions sou~~rces of operations and processes within the facility's perimeter~~ and level of emissions
	○ Facility plot plans and topography
	○ Dispersion modeling†
☑	Select sampling locations along the perimeter of the facility based on the information above. Also, provide the following:
	○ Locations where equipment will be sited (e.g., GIS coordinates) and measurement pathways
	○ Elevations of equipment and pathways
	○ A description of how the monitoring system will cover all nearby downwind communities
Fenceline Air Monitoring Equipment Description	
☑	Select open-path air monitoring equipment that is capable of continuously measuring air pollutants in real-time and provide the following:
	○ Specifications for the open-path instruments (e.g., detection limits, time resolution, etc.)
	○ Explanation of the operation and maintenance requirements for selected equipment
	○ Substantiate any request to use alternative technologies
☑	Monitor for the pollutants listed in Table 1 of Rule 1180 and include the following:
	○ Specify pollutant detection limits for all instruments and paths measured
	○ Substantiate any exclusion of chemical compounds listed in Table 1 of Rule 1180 or the use of an alternative air monitoring technology
Quality Assurance	
☑	Develop a Quality Assurance Project Plan (QAPP) that describes the following:
	○ Quality assurance procedures for data generated by the fenceline air monitoring system (e.g. procedures for assessment, verification and validation data)
	○ Standard operating procedures (SOP) for all measurement equipment

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:38:46 PM

Suggest adding "...and level of emissions during routine operations and unplanned releases". See REAMAR O2 Recommendations R-A7a and R-B3.

	○ Routine equipment and data audits
Data Presentation to the Public	
☑	Design a data display website that includes the following:
	○ Educational material that describes the objectives and capabilities of the fenceline air monitoring system
	○ A description of all pollutants measured and measurement techniques
	○ A description of background levels for all pollutants measured and provide context to levels measured at the fenceline
	○ Procedures to upload the data and ensure quality control
	○ Definition of QC flags
	○ Hyperlinks to relevant sources of information
	○ A means for the public to provide comments and feedback; Procedures to respond
	○ Archived data that with data quality flags, explains changes due to QA/QC and provides chain of custody information
Notification System	
☑	Design a notification system for the public to voluntarily participate in that includes the following:
	○ Notifications for activities that could affect the fenceline air monitoring system (e.g., planned maintenance activities or equipment failures)
	○ Notifications for the availability of periodic reports that inform the community about the air and provide updates on the performance and maintenance of the fenceline air monitoring system
	○ Triggers for exceedances in thresholds (e.g. Acute Reference Exposure Levels (RELs))
	○ Communication methods for notifications such as, website, mobile applications, automated emails/text messages and social media [1]

†Dispersion modeling shall be conducted using U.S. EPA's Preferred and Recommended Air Quality Dispersion Model (e.g., Health Risk Assessment)

Details about each of these key considerations are explained below.

a. Multi-Pollutant Monitoring

Multi-pollutant monitoring is a means to broaden the understanding of air quality conditions and pollutant interactions, furthering capabilities to evaluate air quality models, develop emissions control strategies, and support research, including health studies. –Petroleum refineries and activities associated with them emit a wide range of air pollutants, including criteria pollutants (SO_2, NO_X, CO, and PM); volatile organic compounds (VOCs), including photochemically reactive VOCs that contribute to formation of tropospheric ozone (e.g., ethylbenzene, formaldehyde); carcinogenic hazardous air pollutants (e.g., benzene, 1,3-butadiene, naphthalene, polycyclic

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Number: 1 Author: sbennett Subject: Sticky Note Date: 10/27/2017 4:39:05 PM

Suggest adding bullet explaining where the public can go to get more information during an emergency. See REAMAR O2 Finding F-C3, Recommendation R-C5b, Findings F-C5d, F-C5e, F-C5f, and Recommendation R-C7a. Note: Findings are the responsibility of local response agencies and industry.

aromatic hydrocarbons, formaldehyde); non-carcinogenic air toxics (hydrogen fluoride, hydrogen cyanide); persistent bio-accumulative toxics (mercury), and other air pollutants (e.g., hydrogen sulfide).

Chemical compounds associated with health risk and those measured at other ambient air monitoring locations should be identified in the air monitoring plans. Identification of the health risk drivers can be informed by the health risk assessment studies performed at the refineries, as well as other information regarding potential health risk near refineries. ~~The selection of chemical compounds to be measured at the community site(s) shall also be informed by the Air Toxics "Hot Spots" Program (AB2588) as well as information about compounds that are measured at locations throughout the basin.~~ At the minimum, compounds listed in Table 1 below, shall be considered for the fenceline ~~and community~~air monitoring as part of the ~~Air Monitoring Plan.~~ air monitoring plan. This is not intended to be a comprehensive list, and SCAQMD will consider requests to add or replace chemical compounds dependent on the rationale provided in the Air Monitoring Plan. Therefore, exclusion of any of these chemical compounds must be thoroughly explained and justified within the Air Monitoring Plan. ~~Multiple technologies~~Additional chemicals may be of interest to monitor as a part of the fenceline air monitoring system, for example, if certain annual emissions exceed 10,000 lbs/year.

i. Chemical Species of Interest

The California Environmental Protection Agency's (CalEPA) Office of Environmental Health Hazard Assessment (OEHHA) is collaborating with the California Air Resources Board (ARB) and the Interagency Refinery Task Force to identify and develop information on chemicals emitted from refineries and their health effects in order to assist air agencies in developing plans for air monitoring at refineries in California. OEHHA published the draft report[1] in September 2017 that presents a comprehensive list of chemicals emitted from California refineries, including emissions that occur routinely in daily operations, as well as accidental and other non-routine emissions. The list prioritizes the chemicals according to their emissions levels and toxicity, providing a list of chemicals that would be top candidates for air monitoring near refineries according to the volume of the chemicals emitted and their toxicity. The presence of a chemical on this comprehensive list does not necessarily mean it is released from all refineries, at all times, or in significant quantities.

The potential compounds emitted from refineries that pose the highest health risk in nearby communities should be identified along with the appropriate monitoring technologies selected to measure them. This assessment should be informed by the OEHHA report on Refinery Chemical Emissions and Health Effects Report. Measurements should be continuous and reported in real-time when available. The fenceline monitoring should be performed using open-path technology capable of measuring the pollutants associated with petroleum refinery

[1] Analysis of Refinery Chemical Emissions and Health Effects – Report. September 27, 2017 (https://oehha.ca.gov/media/downloads/faqs/refinerychemicalsreport092717.pdf)

operations~~. The chemical compounds of interest for Rule 1180 include, but are not limited to, BTEX compounds (benzene, toluene, ethylbenzene, and xylenes), hydrogen sulfide (H_2S), sulfur dioxide (SO_2), VOCs, alkanes, and ammonia in the parts per billion (ppb) range, regardless of the path length. A comprehensive list of chemical compounds to be measured is~~ The chemical compounds of interest for Rule 1180 are presented in Table 1 below.

The air monitoring plan must provide specification about the open-path instruments selected for a fenceline air monitoring system, such as, detection limits of the equipment for each chemical and time-resolution capability.~~–~~ Also, the air monitoring plan must demonstrate that the instruments can measure the pollutants identified in Table 1. ~~–~~The selected open-path instruments should be able to record and store the measured spectral absorption and associated average concentrations of measured pollutants for retrospective investigations. ~~All~~Where open-path monitors are being operated, all factors that could affect air pollutant measurements~~ by the open-path instruments~~, such as, the maximum path length the instruments are capable of measuring and potential interferences must be discussed in the air monitoring plan.

Further, the petroleum refinery air monitoring plan must explain exclusion or replacement of monitoring for any of the compounds identified in Table 1 below. ~~–~~For example, in certain instances a petroleum refinery operator may ~~proposed~~propose to exclude monitoring for specific compounds that are not likely to be measured at or above the detection limits of the fenceline air monitoring equipment. In these instance, the petroleum refinery operator would be required to provide an alternative measurement methodology or evidence (e.g., historical air monitoring data or operational information) to support the proposed exclusion. [1]

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Suggest adding discussion that a refinery may elect to substitute internal process unit air monitoring alone or in conjunction with immediately available real time on site modeling for substances they already monitor for. For example, most refineries routinely monitor for hydrogen sulfide inside of their facilities. This information may be more valuable to the community than open path fence line monitoring because of a timelier notification of unplanned releases of substances with acute health values at higher concentrations without chronic or carcinogenic health values at lower concentrations. Suggest SCAQMD consider LEL monitoring at the process unit level as an alternative to VOC monitoring at the fence line, provided the components with long term risk values are monitored at the fence line, such as BTEX, 1,3 - Butadiene, etc.. See REAMAR O2 report Recommendations R-A1b, R-A2, R-A7a, and R-B2.

Table 1- Refinery-Related Air Pollutants to be Addressed by Fenceline Air Monitoring Plans

Air Pollutants
Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3-Butadiene
Styrene
BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylenes)
Other Compounds
Hydrogen Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride[+]

[+] If the facility uses hydrogen fluoride.

- **Sulfur Dioxide (SO_2)**

Heating and burning of fossil fuel releases the sulfur present in these materials and result in the formation of SO_2. SO_2 is the criteria pollutant that is the indicator of SOx concentrations in the ambient air and can have direct health impacts and can cause damage to the environment. As result, SO_2 is routinely measured in ambient air monitoring networks. ~~Like H_2S, SO_2 is produced at refineries, though there are other sources.~~ The major sources of SO_2 at refineries are fuel fired in furnaces and boilers, FCC units, Sulphur Recovery Units, flares, etc. As a result, measurement of this compound will help identify potential ~~fugitive emissions from~~contribution of refineries to the ambient concentrations in nearby communities.

- **Nitrogen Oxides (NOx)**

Both gasoline and diesel powered vehicles are the main source of NOx emissions, however substantial emissions are also added by stationary sources such as petroleum refineries. Nitrogen oxides is a group of highly reactive gases that contribute to the formation of secondary particles, as well as tropospheric ozone. Scientific evidence links NO_2 exposures with adverse respiratory effects and is one of the criteria pollutants, making it a compound that is routinely measured in ambient air monitoring networks. NO_2 measurements also typically include measurement of NO

and NO_X. Measurement of these constituents will help determine if refineries add significant concentrations to nearby urban environments.

- **Volatile Organic Compounds (VOCs)**

VOCs include non-methane hydrocarbons (NMHC) and oxygenated NHMC such as alcohols, aldehydes and organic acids. They are emitted by a large number of sources, but many hydrocarbons are associated with fuels and the production of fuels. VOCs, mainly hydrocarbons, originate from production processes, storage tanks, transport pipelines and waste areas. As a result, measurement of these compounds is critical to determine the impacts that refineries have on nearby communities. While measurements of NMHC could provide valuable information about potential refinery emissions, for a ~~petrochemical plant~~refinery it is possible to distinguish a few and well defined number of specified VOCs to represent refinery fugitive emissions and/or health risk drivers. Measurement of these specified VOCs must be carried out continuously, using open-path technologies at the fenceline of the refineries~~.~~

Unless it is demonstrated in the ~~community~~ fenceline air monitoring plan that an alternative measurement technique (e.g. point monitors) can be effectively utilized. Automated gas chromatographs (Auto-GCs) is the best point monitor option to measure select VOC pollutant concentrations semi-continuously at a monitoring site. This technology has been developed by a number of manufacturers and U.S. EPA have evaluated current state and availability of several commercially available auto-GCs in order to determine their suitability for use in air monitoring stations and have published the results in the Photochemical Air Monitoring Station (PAMS) Gas Chromatography Evaluation Study Report[2]. Other methods for continuous measurement of speciated VOCs include (but not limited to) in-situ FTIR systems and quantum cascade laser instruments that can effectively measure selected VOCs simultaneously with high time resolution. The use of these measurement techniques can potentially provide real-time and continuous air quality data, however, a substantial number of auto-GC units (or other point monitors) would need to be deployed to achieve sufficient spatial coverage along the property boundary or fenceline of a petroleum refinery.

~~Alternatively,~~In some cases more traditional measurement techniques could be utilized, if the air monitoring plan successfully demonstrate the effectiveness of the measurement technique. For example, VOCs ~~are typically~~could be measured by the collection of ambient air using evacuated canister sampling and subsequent analysis on a gas chromatograph (GC). This method relies on acquiring air samples that often require a considerable amount of time depending on the measured concentrations (e.g., several hours with canisters to several days with adsorption cartridges) and subsequent chemical analysis in a certified laboratory. ~~In this method, the~~The sample collection time can vary from instantaneous grab sample to averaging times of 24 hours. If this sampling technique is selected, periodic 24 hour samples (e.g. ~~once every~~1 in 6 days) and

[2] RTI (2014). Gas Chromatograph (GC) Evaluation Study: Laboratory Evaluation Phase Report. Prepared for U.S. EPA PAMS Program. [https://www3.epa.gov/ttnamti1/files/ambient/pams/labevalreport.pdf]

instantaneous grab samples (e.g. 5 or 10 minute samples) that are triggered by elevated readings of ~~NMHC are required.~~continuous NMHC are required. The continuous NMHC measurement must achieve the temporal and spatial coverage requirements of the rule, while the periodic and triggered samples will provide information on the speciation of the measured VOCs.

Measurement of hydrocarbons will help determine if refineries add significant concentrations to nearby urban environments and can indicate leaks and emissions from refinery sources. The following are potential compounds of interest and are separated out based on their measurement and/or analytical techniques.

- **Aldehydes**

Aldehydes emitted into ambient air include, but are not limited to, formaldehyde, acetaldehyde, and acrolein that are identified as toxic air contaminants (TAC) and could be emitted from a refinery. These compounds are the products of incomplete combustion of natural gas and are both precursors of atmospheric radicals that accelerate the formation of ozone, and toxic air pollutants that may cause respiratory symptoms and cancer. These compounds should be measured continuously at the fenceline of the refineries using open-path technologies. A more detailed listing of aldehydes with potential health concerns is provided by OEHHA.

- **Aromatic Hydrocarbons**

Some of the aromatic hydrocarbons known as BTEX (referring to benzene, toluene, ethylbenzene, and xylenes) occur naturally in crude oil and are associated with emissions from ~~petrochemical~~petroleum refineries~~ facilities~~. The BTEX compounds are products of incomplete combustion of natural gas, and also fugitive emissions from petroleum storage and transfer. Emissions also occur from different combustion sources, such as motor engines, wood combustion and stationary fossil fuel combustion, and elevated levels of BTEX compounds are expected in vicinity of major roadways. This group of aromatic VOCs are important because not only they pose risk to human health, they also play a role in formation of tropospheric ozone.

Analytical methods for BTEX compounds in air include absorption traps and subsequent separation by gas chromatography (GC) with detection by flame ionization optical absorption or mass chromatography, as well as automatic-GC monitors. Optical methods such UV-DOAS and OP-FTIR monitors are more advanced techniques for measurement, however, UV-DOAS instruments are particularly more sensitive in detection of BTEX compounds at low concentrations and with good time resolution~~.~~ compared to OP-FTIR instruments.

- **Other Hazardous Air Pollutant VOCs**

Other VOC air toxics of concern that are often reported in refineries' emission inventories include 1,3-butadiene~~,~~ and styrene~~,~~ that have been detected in routine and non-routine refinery emissions and therefore must be measured and reported. A more detailed listing of potential VOCs of health concern is provided by the OEHHA and the Health Risk Assessment reports will better inform other toxics to specific facility. Depending on each facility emissions, measurement

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Repeat comment: SCAQMD should consider monitoring emerging technologies on continuous leak detection and consider revisions to its leak detection and repair rules if it is demonstrated that it can replace current labor intensive periodic surveys with a more cost effective continuous technology that results in increased emissions reductions.

of other VOC air toxics may be required. These VOCs compounds include, but are not limited to, the following methanol, phenol, naphthalene, and hexane. These ~~compounds~~toxic gases shall be measured and reported if the reported emission exceed 10,000 lbs/year and/or selected monitoring technologies are capable of detecting them.

- **Hydrogen Sulfide (H_2S)**

Hydrogen sulfide is a colorless, flammable, extremely hazardous gas with a "rotten egg" smell. It can result from the breakdown of organic matter in the absence of oxygen such as in swamps and sewers, occurs naturally in crude petroleum and natural gas, and is produced at oil refineries as a by-product of refining crude oil. As a result, low-level concentrations can occur continuously at petroleum refineries and its measurement will help identify potential leaks at refineries and address community odor concerns.

- **Ammonia (NH_3)**

While the main sources of ammonia are natural and mostly through decaying of organic matter, petroleum refineries could also emit considerable amounts, particularly from catalyst regenerator vent releases. It is colorless, pungent-smelling and corrosive and even though it is unlikely to have adverse effect on health at background levels, exposure to high concentrations following an accidental release or in occupational settings may induce certain health impacts.

- **Black Carbon (BC)**

Black carbon (BC) is a product of incomplete combustion of fossil fuels, biofuel, and biomass, and is emitted directly into atmosphere in form of particles, mostly in the PM2.5 size range. BC is a major component of "soot", a complex mixture that also contains some organic carbon (OC). It is emitted in high quantities by diesel engines and biomass burning. Although BC is often associated with emissions from heavy-duty diesel engines, a portion of all combustion emissions contains these constituents. BC has been routinely used to estimate the contribution of diesel particulate matter (DPM) to total PM. DPM is the major contributor to air toxics health risk in the South Coast Air Basin, however it cannot be directly measured through atmospheric measurements and has to be estimated, usually based on BC measurements. The DPM contribution to PM in areas where the affected refineries are situated are expected to be high due to high total truck trips from the ports of Los Angeles and Long Beach for goods movement as well as presence of other industrial activities in the region. Therefore, elevated BC levels are expected ~~at the community monitoring site~~in communities near refineries, and in order to help determine if refineries add significant concentrations to nearby urban environments and discern the contribution of refineries to observed BC levels in the community, the refinery operators are advised to determine potential BC hotspots on the facility fenceline (or within the facility), and perform BC measurements. These measurements will aid the members of the public to determine if the refineries are a significant contributor to elevated levels of BC.

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See discussion above regarding hydrogen sulfide process unit level monitoring.

- **Hydrogen Cyanide (HCN)**

Hydrogen cyanide is colorless, highly flammable and can be explosive when exposed to air in high concentrations. It is released from various industrial activities, including refining, and at high concentrations following accidental releases of emissions, are highly toxic. HCN can be effectively measured using open-path technologies and should be measured and reported at the fenceline if the selected open-path monitors can detect it at desirable levels.

- **Hydrogen Fluoride (HF)**

Hydrogen fluoride (HF) is a pungent, highly corrosive acid used at some oil refineries in a process called alkylation that boosts gasoline octane. HF also is used at chemical plants to manufacture compounds including refrigerants. The chemical poses a health risk to nearby residents and businesses because in the event of an accidental release, it can form a dense, fuming cloud capable of etching glass and causing severe damage to human skin and lung tissue. The facilities with alkylation units may already have in place monitors for detecting accidental releases of emissions and elevated levels of HF concentrations. Such monitors should ideally be placed near the alkylation unit, to ensure a rapid detection of accidental leaks to subsequently provide warning and real-time alerts to inform health concerns for the protection of refinery workers and the nearby communities in the vicinity of the refinery. All facilities that use hydrogen fluoride must monitor the ambient concentrations of HF or demonstrate in the ~~Air Monitoring Plan~~air monitoring plan that HF concentrations are adequately monitored and reported at the alkylation unit to be exempt from HF measurements at the fenceline.

b. Continuous and Real-Time Measurement of Air Pollutants

Continuous air monitoring at or near the property boundaries of petroleum refineries can significantly improve rapid detection and communication of potential hazardous releases to refinery operators, responders and the public in addition to providing long-term data be used to determine trends in emissions (e.g., diurnal, seasonal routine emissions variations). Therefore, the fenceline monitoring shall be operated continuously with a required time resolution of five-minute averaging when feasible. High time resolution monitoring reduces the chance of pollutant hot spots being undetected over the measured area and can provide real-time emissions information to refinery personnel and the nearby communities. If achieving the desired time-resolution is not feasible, refinery operators shall provide rationale in the air monitoring plan for any proposed time resolutions greater than five-minute averaging (e.g., based on the equipment employed, the number of paths covered by each open-path system, or other operational limitations).

c. Selection of Fenceline Air Monitoring Technologies

A petroleum refinery fenceline air monitoring system is a combination of equipment that measures and records air pollutant concentrations at or near the property boundary of a petroleum refinery. Multiple technologies may need to be employed to ensure adequate compound identification. Conventional fenceline air monitoring techniques rely on point

monitors that only provide concentration information from a single point in the survey area, greatly increasing the chances of missing surface emissions hotspots or emissions plumes. Therefore, even after collecting data from multiple points in the survey area, the point sampling approaches lack the spatial and temporal data necessary to obtain a complete picture of the emissions from large area sources.

Open-path technology is a well-established method to measure path-integrated trace gas absorptions and concentrations in the open atmosphere making it ideal for long-term fenceline air monitoring of emissions from refineries or other large area sources. Open-path technology is a type of Optical Remote Sensing (ORS) that measures air emissions along an open-path, significantly improving the spatial coverage. ORS instruments use a light signal to continuously detect and measure concentrations of chemical compounds along the distance covered by the light signal in real-time. As a result, open-path technologies can provide greater temporal and spatial resolution compared to conventional air monitoring techniques; for example, narrow pollutant plumes can be detected by an open-path fenceline air monitoring system that might otherwise be missed by point monitors. The light source emits light towards a detector either at the opposite end of the light path (bi-static configuration) or co-located with the light source (mono-static configuration) if the light is reflected back by a reflector, providing path-averaged concentrations of multiple pollutants, simultaneously. Although the open-path ORS techniques have been used for over 20 years and are well-established, they are constantly improving and gaining use for large area-source monitoring that are not conductive to traditional point source testing methods. Improvements often include changes to technologies that improve detection limits or the type of compounds detected.

Another advantage of open-path measurements is the capability of monitoring pollutant concentrations due to point source and fugitive emissions at or near the property boundary of a petroleum refinery operation depending on the design of the monitoring system. Fugitive emissions are emissions of gases or vapors from leaks and other unintended or accidental releases of emissions. Leaks from pressurized process equipment generally occur through valves, pipe connections, mechanical seals, or related equipment, usually originating from the process area. Fugitive emissions also occur from storage tanks. These tanks are used to store crude oil prior to refining, intermediates between refining processes, and refined product streams. Except for a few process storage tanks, the storage tanks are generally located together in what is referred to as the "tank farm". Due to the large number of potential leak sources that are scattered over a wide area at large refineries and difficulties in detecting and repairing these leaks (which only becomes significant collectively), these emissions are best monitored over a large area or path, using the open path systems. The U.S. EPA has published a comprehensive assessment of various open-path ORS technologies, outlining the advantages and limitations of each measurement method[3].

[3] https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf

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One disadvantage of open path monitors is that they only determine the path average concentration along the measurement beam. You do not know if a plume crossing its pathway is a broad plume of lower concentration, or a tight plume of higher concentration. Also, the open path system may not give enough information to determine the source of the emission. There are technologies available that initiate a multi segment scan along a measurement pathways if the path average concentration exceeds a trigger point. Alternatively, a fixed array of fixed point monitors can give more information on possible sources, but may not measure the higher concentration plume centerline or miss a narrow plume entirely. See REAMAR O2 report Recommendation R-A7a.

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Repeat comment: SCAQMD should consider monitoring emerging technologies on continuous leak detection and consider revisions to its leak detection and repair rules if it is demonstrated that it can replace current labor intensive periodic surveys with a more cost effective continuous technology that results in increased emissions reductions. Some technologies use scanning spectral imaging with data processing to identify leaks in real time. Other technologies use hand held cameras that visual leaks that can be pinpointed with traditional leak survey equipment. Others use continuous air measurements in connection with reverse trajectory modeling to trace measurements back to their sources. See REAMAR O2 Report Recommendations R-A1b, R-A3, R-A11, R-A12, and R-B2.

Based on the advantages that open-path technologies provide over conventional air monitoring techniques, the SCAQMD staff recommends the use of open-path technology, when applicable, for implementing a fenceline air monitoring system required by Rule 1180. In certain instances a refinery owner or operator may demonstrate that other air monitoring techniques and/or technologies (e.g., emerging technologies) could be ~~utilized~~used in place of open-path technology depending on the pollutant(s) that are monitored.~~, or availability of emerging technologies, based on the rationale provided in the air monitoring plans.~~

d. Alternative Fenceline Air Monitoring Technologies

In certain instances, alternative monitoring technologies may be appropriate to cover areas along the perimeter of a refinery that are not suited for other monitors such as open-path technologies. In these instances, the refinery operator may propose an alternative air monitoring technology(s). The refinery operator must demonstrate the proposed alternative air monitoring technology(s) will meet the requirements of Rule 1180 and provide adequate sensitivity and adequate temporal and spatial coverage for the compounds identified in Table 1.

e. Fenceline Sampling Location(s) and Coverage

Air monitoring plans must specify the following information related to the locations selected for the fenceline air monitoring equipment:

- Areas along the perimeter likely to emit compounds associated with petroleum refinery operations,
- Proximity of monitoring equipment to nearby receptors,
- Where equipment will be sited (e.g. GIS coordinates),
- Elevations at which equipment will be placed, and
- Expected length of the paths that will be monitored.

Also, the air monitoring plan must provide a discussion that explains the rationale for choosing these specifications. When considering a suitable open-path technology for sites along the petroleum refinery perimeter the refinery operator must address key considerations, such as, the distance necessary to accurately measure emissions and critical transport areas around the perimeter of the petroleum refinery. These considerations are further discussed below.

To ensure the highest level of accuracy when measuring emissions levels at or near the property boundary of a petroleum refinery facility the fenceline air monitoring system should be designed considering the following key factors:

i. Local Meteorological Conditions

Meteorological conditions can significantly affect the concentration of air pollution in a region. Therefore, it is imperative that the petroleum refinery operators consider the typical meteorological conditions (e.g., wind patterns, temperature, rainfall, cloud cover, etc.) of a site. For example, if a facility is in an area that is prone to fog, the facility operator should ensure the

equipment for the fenceline air monitoring system is not sensitive or easily impeded by low-lying cloud cover produced by fog.

Evaluating historical meteorological data is useful in equipment site selection and determining whether certain candidate equipment locations may experience higher emissions concentration from a source. Wind is the most critical meteorological element for the transport of refinery emissions to the surrounding communities. Often, peak concentrations occur during stable, low wind speed conditions when pollutants can build up and meander in any direction. Therefore, to the extent feasible, both long-term measurements such as annual average wind rose to cover large-scale circulation patterns, and short-term meteorological variations such as seasonal and diurnal variations should be considered in the air monitoring plan.

ii. Topography

Concentrations of pollutants can be greater in valleys than for areas of higher ground. This is because, under certain weather conditions, pollutants can become trapped in low lying areas. Therefore, the topography of the petroleum refinery can affect the distribution and dispersion of pollutants from refinery operations. As a result, to ensure that maximum pollutant levels along the perimeter of the facility are measured the petroleum refinery operator should design the fenceline air monitoring system to ensure fenceline air monitoring equipment is sited such that it captures the highest concentrations of pollutants along the perimeter of the facility to the extent feasible.

iii. Pollutant Hotspots

It is essential for the refinery operators to identify potential pollutant hotspots within the facility to ensure effective fenceline monitoring system that achieves maximum spatial coverage. Therefore, prior to developing the air monitoring plan the refinery operator should survey the facility with special attention to areas, such as, tank storage, processing, wastewater treatment, and loading areas. Information gathered from the survey should be used to establish the facility's overall emissions profile. The survey should also consider geographical and topographical parameters, as well as the elevation of potential pollutant hotspots.

iv. Spatial Coverage of Monitors

The fenceline monitoring system should be designed to ensure adequate coverage of the area along the facility perimeter, to the extent feasible. Considerations, such as, the proximity of refinery emissions sources to sensitive receptors (i.e., residents, schools, hospitals, etc.) and type of pollutants to be measured could require additional open-path monitors for a facility. Also, information available from dispersion modeling, gradient sampling and mobile measurements, should be taken into consideration when assessing adequate coverage of a facility perimeter with a fenceline air monitoring system.

Sampling locations should be away from certain supporting structures and have an open, unobstructed path. Ideally, each air monitoring path should be at least 1 meter vertically and

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Survey should include consideration of likely unplanned release scenarios. See Recommendation R-B3.

horizontally from any supporting structure, and away from dusty or dirty areas. Moreover, the air monitoring plans must identify potential disruption of airflow and the potential effect on measured concentrations caused by obstacles. Also, potential interferences caused by meteorological (e.g., fog or rain) or process issues (e.g., process steam) associated with the selected location(s) must be addressed. The air monitoring plan should describe how the proposed fenceline air monitoring system will effectively provide relevant information for all nearby downwind communities given the expected meteorological conditions. Due to the high prevalence of marine fog in the areas where the Basin refineries are located, heaters and fans may be required to keep the instrument optics and reflector mirrors free of moisture~~,~~ and increase data recovery.

f. Emerging Technologies

Some emerging next-generation monitoring technologies could possibly meet the requirements for this rule. ~~–~~For example, low-cost sensors could potentially allow cost-effective, real-time monitoring at numerous fixed locations along the perimeter (i.e., the fenceline) of a petroleum refinery. Despite substantial progress, at this time, none of these methods can provide the level of sensitivity and accuracy required to measure the pollutants required by Table 1 of Rule 1180 at the levels expected during normal refinery operations. ~~–~~However, gaseous sensors are expected to improve in the near future and fenceline air monitoring plans could be augmented to employ these sensors, therefore, SCAQMD may consider approving emerging technologies for future compliance with Rule 1180.

SCAQMD has established an Air Quality Sensor Performance Evaluation Center (AQ-SPEC)[4] to inform the public about commercially available low-cost sensors. Under this program, the performance of these sensors is compared against Federal Reference Method (FRM), Federal Equivalent Method (FEM), and Best Available Technology (BAT) instruments to determine their performance relative to more established measurement techniques. Some of these commercially available low-cost sensors can provide measurements for the criteria pollutants (specifically PM, ozone, NO_2 and CO) which correlate well with FRM, FEM, and BAT methods, however, the situation is different for gaseous air toxics, where ~~fast~~ sensors with sufficiently low detection limits for specific compounds (e.g., benzene) are generally not available at this time. Total VOC concentrations can be measured using sensors based on Photon Ionization Detection (PID) in the ppb-levels, although they do not provide VOC speciation and are not considered "low-cost" sensors. These sensors can serve as a temporary measurement technique in the event of an equipment failure or during extended maintenance activities until the fenceline air monitoring system is restored to normal operating conditions. However, as a replacement for ORS-based approach, in order to achieve same level of temporal and spatial resolution (and speciation of the target pollutants) using traditional point monitors, the refinery operators would have to deploy a network of monitors simultaneously at the fenceline of a facility, resulting in substantially increased sampling and analysis costs. Therefore, in comparing the costs of an ORS-

[4] http://www.aqmd.gov/aq-spec

based measurement approach with traditional point monitoring approaches for long-term measurements, an ORS-based approach may be more cost-effective.

3. Meteorological Measurements

Exposures to air contaminants within an urban area can vary greatly due to proximity to emission sources, the magnitude and specific mix of emissions, structures and terrain influences, and meteorological conditions. Variability in wind speed and direction in particular, pose significant challenges for the analysis of data from air quality monitoring programs and exposure assessments that rely on the ability to determine upwind and downwind locations in relation to emissions sources at any time. Therefore, an understanding and assessment of the general meteorological patterns in and around each facility is a critical component in not only the design of the measurement systems but also interpreting the measurement results and to measure the transport and dispersion of air pollutants from the refinery to the community. Therefore, the sub-paragraph (d)(2)(D) of Rule 1180 requires fenceline monitoring locations to continuously record wind speed and wind direction data.

The Air Monitoring Plan must provide information on siting considerations and equipment to be employed for real-time meteorological data collection at high time resolution (at minimum, matching the time resolution of the air quality monitors), in order to provide high quality data. Wind sensor quality, siting, and quality assurance shall meet the specifications and guidelines that are typically required by air quality regulatory measurements and modeling purposes (for reference, see the U.S. EPA Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements[5].

~~3.~~4. Quality Assurance/Quality Control (QA/QC)

The measurements for ~~a~~ fenceline ~~and community~~ air monitoring system shall reflect a commitment to quality data that is outlined in the air monitoring plan. -The air monitoring plan shall address quality assurance, standard operating procedures, technical audits, data verification and validation, and data quality assessment. Rule 1180 requires the measurements from the fenceline ~~and community~~ monitoring system be available to the public on a real-time basis with– Quality Assurance/Quality Control (QA/QC) measures implemented to provide confidence in the emissions data collected.

All emissions data must be collected, managed and archived in a standard electronic format after necessary data processing and validation. Processing the data involves collecting the data, assuring its quality, storing the data in a standardized format, and interpreting the data for communication ~~of~~to the public. The most critical steps in this process include:

- Automatically retrieving data from the fenceline ~~and community~~ monitors containing the measured levels of each air pollutant along with meteorological parameters;

[5] https://www3.epa.gov/ttn/amtic/files/ambient/met/Volume_IV_Meteorological_Measurements.pdf

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A statewide standard for the data format would aid AB 617 implementation efforts.

- Validating data file completeness and integrity;
- Transferring file contents to a database;
- Flagging data that do not meet pre-defined quality control limits;
- Copying quality assured data and indices into a database for use by data display and dissemination program;
- Generating and recording logs to monitor system operation;
- Notifications when measured concentrations are above pre-defined concentrations limits.

The real-time and near-real-time disseminated emissions data ~~will~~should not be ~~the~~considered final, however it is important that the preliminary real-time emissions data distributed to the public be of an acceptable quality. Also, it is important that instrument failures are detected automatically to prevent grossly invalid data from being presented to the public. This can be accomplished by utilizing built-in status flags on the instruments and by providing real-time data screening for outliers, impossible values, stuck values, negative values, rates of change, excessive short-term noise, etc.

To ensure that the collected data meets the highest quality possible, each piece of monitoring equipment must be operated in strict accordance with an in-depth operating protocol. To achieve the appropriate level of detail and standardization, and to consequently ensure that the monitoring equipment provides high quality data, Standard Operating Procedures (SOPs) must be prepared for each specific measurement method. The SOPs should be informed by general operating instructions that are typically provided by the manufacturers of equipment, and general operational guidelines and performance specifications that are available for U.S. EPA-approved methods. The SOPs should address specific topics such as calibration procedures and quality control procedures (indicating standards and checks, acceptance criteria and schedule), as well as data reduction (indicating validation procedures, reporting and schedule).

A Quality Assurance Project Plan (QAPP) that follows U.S.EPA guidelines[6] must be developed that outlines the QA/QC parameters. The QAPP provides a blueprint for conducting and documenting a study that produces quality results and must outline the specific goals of the monitoring networks and instrumentation, the data quality that is required and how that relates to when data generated by the instrumentation is accepted, and how the data will be reviewed and managed by the refineries. The QAPP should provide clear definitions and procedures for QA/QC that are necessary to indicate why some data may be missing, suspect, or invalid. ~~All changes to the reported data must be explained. This should be achieved by~~The refinery operators must provide quarterly data reports after rigorous review of calibration data, data processing calculations (such as conversion calculations of instrument signal to pollutant concentration), data consistency, field data sheets and logbooks, instrument performance checks, and

[6] U.S. EPA (2002). Guidance for Quality Assurance Project Plans. EPA/240/R-02/009. [https://www.epa.gov/sites/production/files/2015-06/documents/g5-final.pdf]

equipment maintenance and calibration forms. All changes to the reported real-time data must be explained in quarterly reports.

The critical functions to be addressed in the QAPP are summarized below:

- **Project background and management:** The QAPP should provide background information and define the problem(s) to be addressed and the general goals of the fenceline and community monitoring, and describe project organization, quality objectives and acceptance criteria for measurement data, and plans for documentation, record keeping, and data dissemination.
- **Technical Approach:** The QAPP should demonstrate that the appropriate approaches and methodologies are employed for performing measurements, data handling, and quality control are selected and address the design and implementation of the measurement systems.
- **Assessment/Oversight:** The QAPP should offer appropriate QA/QC steps for ensuring the effectiveness of the monitoring plan covering experimental design, representativeness of the data, instrument operation and data acquisition, calibration check procedures, data quality indicators, independent systems and performance audits, and peer-review.

  Data Validation and Usability: The QAPP should describe what steps will be taken to ensure that the individual data elements conform to the criteria specified in the monitoring plans.

5. Data Display and Dissemination

~~The collected data~~The primary goal of Rule 1180 is to provide continuous and real-time emissions data to the community as a whole that can in turn be used to evaluate and adaptively manage the impacts of refineries' emission on the community. Therefore, it is essential that the collected must be made available and displayed online in a relevant, useful and understandable manner to the public in real-time or near-real-time~~,~~ and clearly identified as preliminary data. The real-time or near-real-time data must be submitted to SCAQMD in an approved format. The refinery operators must also publish quarterly reports written at a public-friendly level on the data dissemination website. The air monitoring plan must include how the quality assured data will be displayed and the steps taken to provide context to the real-time measurements to the public. Also, the air monitoring plan shall address means for providing automated, reliable, useful, and understandable information, including, the intent and limitations of the data collected and an explanation of how background concentrations and/or contributions from other sources may affect measured concentrations.

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A secondary goal should be to provide actionable data to industry, local responders, air districts and the public during unplanned releases and emergencies.

Number: 2 Author: sbennett Subject: Sticky Note Date: 10/27/2017 2:15:08 PM

Links should provide information from industry and local response agencies on how to prepare for an emergency and where to get more information on public protection advisories during unplanned releases. See REAMAR O2 Finding F-C3, Recommendation R-C5b, Findings F-C5d, F-C5e, F-C5f, and Recommendation R-C7a. Note: Findings are the responsibility of local response agencies and industry.

The major goals of the outreach program include:

- Developing multiple communication venues to ensure widespread access to environmental information and to appeal to the various communication preferences (e.g., text messages, email, website, etc.) among the end users;
- Promoting access to and awareness of the measurements and use of the real-time air pollution data through an active outreach and education program;
- Developing contextual material to assist interpretation and understanding of the real-time data and its limitations;
- Designing an effective public outreach program (e.g., informational meetings, workshops, etc.) that informs the public about the health impacts associated with emissions levels detected by ~~a~~the fenceline ~~and community~~ air monitoring system and informs decision related to reducing community exposure;
- Identifying a designated refinery personnel to address SCAQMD's and public questions about monitoring equipment and readings. [1]

The air monitoring data must be provided in a manner that the public can readily access and understand. ~~Ideally, the websites~~Websites for all refineries ~~would~~should be ~~similar~~designed in ~~nature to improve~~a user-~~friendliness~~friendly format. In order to make the data provided in this outreach as accessible as possible, the project websites should use data visualization tools to graphically depict information using maps and time series plots of measured pollutants and wind data. In order to provide context to this complex data set for the public, the designed website should contain information regarding the species measured and the measurement techniques, discussion of levels of concern for each measured species, typical background levels, potential non-refinery sources that could contribute to measured concentrations, and definition of data QC flags, written at a public-friendly level with clarity and thoroughness and provide links to additional sources of information for members of the public. In addition, the ~~Air Monitoring Plan~~air monitoring plan and the data website should include how the public can provide comments and feedback for improvement of the website, a means for residents to report experiences and provide information regarding potential impacts from the refinery that could be used to improve data display and the monitoring activities themselves.

6. Notification System

The website should offer an opt-in notification system that is integrated with the data collected by the air monitoring network that automatically generates and issues ~~alerts~~notifications to subscribers when pollutant levels are ~~unusually high (e.g.,~~above specified thresholds pursuant to the approved air monitoring plan. Factors that could establish the thresholds include NAAQS, exceeding acute ~~and/or chronic~~ Reference Exposure Levels (RELs), or unusually high concentrations (e.g. once a major leak is detected). ~~A~~ REL is an airborne concentration level of a chemical ~~that is not anticipated to present a significant risk of an adverse non-cancer health effect~~at or below which no adverse health effects are anticipated for a specified exposure

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Suggest adding bullet "Details the methods to provide communities information on where they can obtain information from local response agencies and industry on how to prepare for an unplanned release and how to obtain more information during an emergency. See REAMAR O2 Finding F-C3, Recommendation R-C5b, Findings F-C5d, F-C5e, F-C5f, and Recommendation R-C7a. Note: Findings are the responsibility of local response agencies and industry.

duration as developed by ~~the Office of Environmental Health Hazard Assessment (OEHHA)~~[7]~~.~~OEHHA[8]. RELs are based on the most sensitive, relevant, adverse health effect reported in the medical and toxicological literature. RELs are designed to protect the most sensitive individuals in the population by the inclusion of margins of safety. Therefore, ~~E~~exceeding the REL does not automatically indicate an adverse health impact. The REL is not the threshold where population health effects would first be seen. However, levels of exposure above the REL levels have an increasing but undefined probability of resulting in an adverse health impact, particularly in sensitive individuals (e.g., the very young, the elderly, pregnant women, and those with acute or chronic illnesses). OEHHA has developed acute RELs for assessing potential non-cancer health impacts for short-term, one-hour peak exposures to air pollutants including facility emissions. By definition, an acute REL is an exposure that is not likely to cause adverse health effects in a human population, including sensitive subgroups, exposed to that concentration for the specified exposure duration on an intermittent basis. Chronic RELs are developed for assessing non-cancer impacts from long-term exposure, at or below which no adverse health impacts are anticipated following long-term exposure. Long-term exposure for these purposes has been defined by U.S. EPA as at least 12% of a lifetime, or about eight years for humans.

The notification system should be designed to provide public via email, text message or other communication venues, the ability to be notified on at least: (1) data availability and release of periodic reports; (2) acute REL exceedances; and (3) monitoring system status. The early notifications~~, aside from informing,~~ will inform the public when certain pollutants exceed ~~certain~~those concentration thresholds, or pose potential health hazard, allowing the public to take proper actions to protect their health. The early ~~alerts, aside from providing alarms to the adjacent population,~~notifications would also provide information to refinery operators to rapidly mitigate any undetected and/or accidental emissions. Identification and rapid mitigation of accidental releases will have a significant impact on detection and reduction of refinery fugitive emissions.

~~Furthermore, the~~The air monitoring plan must contain alternative methods of accessing data without a computer for those members of the community who may not have internet access. Moreover, air Monitoring plans should include how residents can access historical data directly and in a user-friendly manner, as websites should not simply provide graphical information about current conditions. The archived data should include data quality control flags, explain changes, and provide other chain of custody information to identify data that should be removed or was removed after QA/QC. The data must also be made available to SCAQMD in an approved format. Some examples of methods for communicating the data to the public include the following:

- Website data displays;
- Mobile application;

~~[7] OEHHA, 2008; http://www.oehha.ca.gov/air/allrels.html~~

[8] OEHHA, 2008; http://www.oehha.ca.gov/air/allrels.html

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Suggest adding bullet explaining where the public can go to get more information during an emergency. See REAMAR O2 Finding F-C3, Recommendation R-C5b, Findings F-C5d, F-C5e, F-C5f, and Recommendation R-C7a. Note: Findings are the responsibility of local response agencies and industry.

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A statewide standard for the data format would aid AB 617 implementation efforts.

- Automated email/fax/text alert system;
- Social media feeds;
- Public data displays in community locations;
- Automated call-in phone system;
- Television and radio reports; and
- Published data summary reports.

As provided by state law, emergency response agencies such as local fire agencies, have the primary responsibility for scene management during an accidental release of emissions or other emergency incidents. The refinery operators must identify the primary local agency that provide emergency preparedness and response services for each refinery, and outline the process to be developed to integrate with and augment the existing public alert systems and communication mechanisms to provide the public with timely alerts and public safety information during refinery upsets and accidental releases of pollutants and not to conflict or duplicate the first response alert systems in case of an accidental release of emissions.

The California Air Resources Board (ARB) Monitoring and Laboratory Division and the California Air Pollution Control Officers Association (CAPCOA) have completed the first volume of the Refinery Emergency Air Monitoring Assessment Report. The report provides a comprehensive inventory of emergency air monitoring assets and capabilities located in and around California's major oil refineries. This report, "Objective 1: Delineation of Existing Capabilities" is now available online and can be accessed at:

- Refinery Emergency Air Monitoring Assessment Report: Objective 1 Final Report
- Refinery Emergency Air Monitoring Assessment Report: Objective 1 Appendices

~~6.~~7. Other Regulatory Programs

The U.S. EPA adopted a rule in December 2015 (40 CFR §63.658) with fenceline monitoring provisions that require sampling for benzene at refinery property boundaries. Considering that open-path technologies are currently the best available and the most accurate method for fenceline monitoring of benzene and other pollutants, SCAQMD will assist the refineries in seeking U.S. EPA approval for monitoring systems proposed as part of Rule 1180 through the refinery's fenceline air monitoring plan to also meet U.S. EPA requirements for monitoring of benzene.

~~7.~~8. Future Updates to Rule 1180 – Fenceline Air Monitoring Guidelines

Revisions and updates to this guidance are expected and will be required as new instrumentation, methodologies and monitoring strategies are developed.

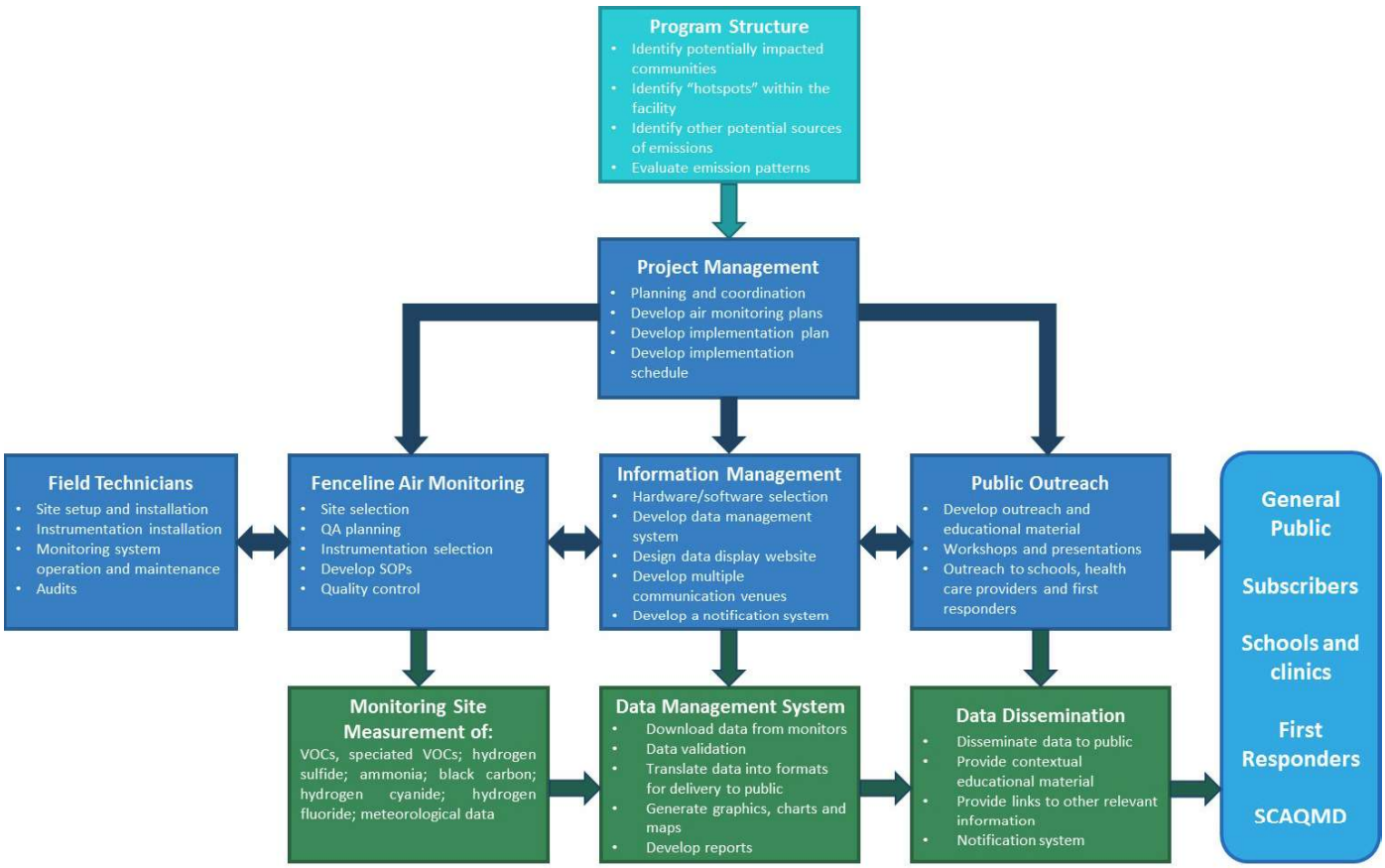

Figure 2 - Overview of the Refinery Fenceline Air Monitoring Programs

~~8.~~9. References and Other Resources

Bay Area Air Quality Management District, 2016. Air Monitoring Guidelines for Petroleum Refineries.
http://www.baaqmd.gov/~/media/files/planning-and-research/public-hearings/2016/9-14-and-12-15/042016-hearing/1215-amg-041416-pdf.pdf?la=en

Bay Area Air Quality Management District, 2016. Regulation 12, Rule 15: Petroleum Refining Emissions Tracking.
[http://www.baaqmd.gov/~/media/files/planning-and-research/rules-and-regs/reg-12/rg1215-pdf.pdf?la=en]

U.S. EPA, 2015. AP-42: Compilation of Air Pollutant Emission Factors, Volume I: Stationary Point and Area Sources, Chapter 5: Petroleum Industry.
[https://www3.epa.gov/ttn/chief/ap42/ch05/index.html]

U.S. EPA, 2015. 40 CFR §63.658, Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards, Final Rule.
[https://www.gpo.gov/fdsys/pkg/FR-2015-12-01/pdf/2015-26486.pdf]

EPA Requirements for Quality Assurance Project Plans (EPA QA/R-5, EPA/240/B-01/003)
[https://www.epa.gov/sites/production/files/2016-06/documents/r5-final_0.pdf]

Guidance for the Data Quality Objectives Process (EPA QA/G-4, EPA/600/R-96/055)
[https://archive.epa.gov/epawaste/hazard/web/pdf/epaqag4.pdf]

EPA Guidance on Technical Audits and Related Assessments for Environmental Data Operations (EPA QA/G-7, EPA/600R-99/080)
[https://www.epa.gov/sites/production/files/2015-07/documents/g7-final.pdf]

Network Design for State and Local Monitoring Stations (SLAMS), National Air Monitoring Stations (NAMS), and Photochemical Assessment Monitoring Stations (PAMS).
Code of Federal Regulations. Title 40, Part 58, Subpart E, Appendix D.

Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II, Part 1 (EPA-454/R-98-004)
[https://goo.gl/HGCNrR]

Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (EPA/625/R-96/010b)
[https://www3.epa.gov/ttn/amtic/airtox.html]

Guidance for Preparing Standard Operating Procedures (SOPs) (EPA QA/G-6, EPA/240/B-01/004)
[https://www.epa.gov/sites/production/files/2015-06/documents/g6-final.pdf]

EPA Handbook: Optical Remote Sensing for Measurement and Monitoring of Emissions Flux
[https://www3.epa.gov/ttnemc01/guidlnd/gd-052.pdf]

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Suggest adding REAMAR O2 and OEHHA reports as references.

ATTACHMENT I

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Socioeconomic Impact Assessment for Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring

December 2017

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EXECUTIVE SUMMARY

A socioeconomic analysis was conducted to assess the potential impacts of Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring on the four-county region of Los Angeles, Orange, Riverside and San Bernardino. A summary of the analysis and findings is presented below.

Elements of the Proposed Rule	Proposed Rule 1180 (PR 1180) would implement California Health and Safety Code (H&SC) Section 42705.6 and would require real-time fenceline air monitoring systems and establish a fee schedule to fund installation of refinery-related community air monitoring systems that provide air quality information to SCAQMD and the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities. Although PR 1180 would not directly reduce emissions from the affected refineries, it would provide useful information for leak detection and repair ~~to~~ and may address potential emission~~s~~ reductions in the future.
Affected Industries	PR 1180 would apply to all petroleum refineries within SCAQMD's jurisdiction, with proposed exemptions applicable to an owner or operator of a petroleum refinery that has a maximum capacity to process less than 40,000 barrels per day of crude oil. Eight major petroleum refineries are expected to be affected and they are classified under the industry of Petroleum Refineries (coded as 324110 based on the North American Industry Classification System), all of which are located in Los Angeles county.
Major Assumptions of Analysis	The cost assumptions for fenceline air monitoring systems were based on staff's analysis of the cost of new monitoring technologies and recent cost reports provided to SCAQMD staff by vendors. The cost was assumed to scale with a refinery's throughput capacity, such that larger refineries would incur a greater portion of the cost in the analysis. The cost assumptions for community air monitoring fees were based on staff's estimates of the cost of designing, developing, installing, operating and maintaining refinery-related community air monitoring systems by SCAQMD. Pursuant to H&SC Section 42705.6, these costs would be paid for by the affected refineries, and PR 1180 establishes a one-time proposed Installation Fee, paid in two installations, ~~of $0.0195 per annual barrel of crude oil throughput capacity~~as specified in Table 2 of PR 1180. ~~and an~~ Annual Operation and Maintenance (O&M) Fees ~~pursuant to the~~ would be included in upcoming proposed amendments to Rule 301–Permitting and Associated Fees. In order not to understate the cost of PR 1180 requirements, staff's estimates of the potential Rule 301 O&M Fees are included in this analysis.
Annual Compliance Costs	The fenceline air monitoring requirements were estimated to have an average annual cost of approximately $3.6 million at a 4% real interest rate, while the community air monitoring fees were estimated to have an average annual cost of $3.5 million. Based on these estimates, PR 1180 was estimated to have an

	average annual cost of approximately $7.1 million that would be incurred by eight potentially affected refineries, with estimated facility-specific costs ranging from $48~~90~~,000 to $1.5 million depending on the refinery's physical size and ~~throughput capacity~~their specific fee schedule. This compliance cost is equivalent to approximately 0.03% of output and 0.13% of industry gross domestic product (GDP) for the affected industry.
Macroeconomic Job Impacts	This analysis projects an average annual increase of 35 jobs in the four-county region over an 11 year period (2018-2028). The positive job impact is a net result of projected increases in jobs in local government, professional, scientific, and technical services, and construction, combined with smaller decreases in the mining, oil and gas extraction sector.

INTRODUCTION

Proposed Rule 1180 (PR 1180) would require real-time fenceline air monitoring systems and establish a fee schedule to fund installation of refinery-related community air monitoring systems that provide air quality information to the public about levels of various criteria air pollutants, volatile organic compounds, metals, and other compounds, at or near the property boundaries of petroleum refineries and in nearby communities. The purpose of the Proposed Rule and Guidelines are to implement California Health and Safety Code (H&SC) Section 42705.6.

PR 1180 would apply to all petroleum refineries within SCAQMD's jurisdiction, with proposed exemptions applicable to an owner or operator of a petroleum refinery that has a maximum capacity to process less than 40,000 barrels per day of crude oil.[1] Specifically, PR 1180 would require an affected petroleum refinery to submit a fenceline air monitoring plan—in accordance with the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines—to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. Following SCAQMD's approval of the plan, the affected refineries would be required to implement the approved plan within the specified timeline. PR 1180 would also establish a fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing~~,~~ and installing~~,~~ refinery-related community air monitoring systems by SCAQMD pursuant to H&SC Section 42705.6. It defers the determination of a fee schedule for cost recovery of operating~~,~~ and maintaining the community air monitoring systems to the ~~annual amendment process for~~upcoming proposed amendments to Rule 301–Permitting and Associated Fees. Although PR 1180 would not directly reduce emissions from the facilities, it would provide useful information for leak detection and repair and could address potential emission~~s~~ reductions in the future.

LEGISLATIVE MANDATES

The socioeconomic assessments at SCAQMD have evolved over time to reflect the benefits and costs of regulations. The legal mandates directly related to the assessment of the proposed rule include the SCAQMD Governing Board resolutions and various sections of the California H&SC.

SCAQMD Governing Board Resolutions

On March 17, 1989 the SCAQMD Governing Board adopted a resolution that calls for an economic analysis of regulatory impacts that includes the following elements:

- Affected industries
- Range of probable costs
- Cost effectiveness of control alternatives
- Public health benefits

[1] Based on annual crude oil capacity reported by the California Energy Commission (CEC). See the PR 1180 Draft Staff Report for further discussion.

Health & Safety Code Requirements

The state legislature adopted legislation that reinforces and expands the Governing Board resolutions for socioeconomic assessments. H&SC Section 40440.8(a), which became effective on January 1, 1991, requires that a socioeconomic impact assessment be prepared for any proposed rule or rule amendment that "will significantly affect air quality or emissions limitations." H&SC Section 40440.8(b) defines socioeconomic impacts as:

- Type of affected industries
- Impact on employment and the regional economy
- Range of probable costs, including those to industry
- Availability and cost effectiveness of alternatives to the rule
- Emission reduction potential
- Necessity of adopting, amending or repealing the rule in order to attain state and federal ambient air quality standards

H&SC Section 40728.5, which became effective on January 1, 1992, requires SCAQMD's Governing Board to actively consider the socioeconomic impacts of regulations and make a good faith effort to minimize adverse socioeconomic impacts. It also expands socioeconomic impacts to include small business impacts, specifically:

- Type of industries or business affected, including small business
- Range of probable costs, including costs to industry or business, including small business

Finally, H&SC Section 40920.6, which became effective on January 1, 1996, requires that incremental cost effectiveness be performed for a proposed rule or amendment that imposes Best Available Retrofit Control Technology or "all feasible measures" requirements relating to all non-attainment pollutants and their precursors. This statute does not apply to PR 1180 as it would not regulate air pollutant emissions from petroleum refineries directly; however, the availability of information about the potential presence of air contaminants, including some toxics, resulting from petroleum refinery operations could result in efforts to further reduce emissions from refineries and could provide useful information for leak detection and repair. The necessity analysis is included in the PR 1180 Staff Report.

~~As PR 1180 does not regulate air pollutant emissions from petroleum refineries directly, its adoption will not directly result in any significant changes in air quality or emissions limitations. Therefore, a socioeconomic impact assessment is not legally required. This report was prepared for informational purposes only.~~

AFFECTED FACILITIES

PR 1180 would potentially affect eight refineries with a maximum capacity to process 40,000 or more barrels per day of crude oil. All of these refineries are located in Los Angeles County and classified under the industry of Petroleum Refineries (324110) according to the North American Industry Classification System (NAICS).

SMALL BUSINESS

The SCAQMD defines a "small business" in Rule 102 for purposes of fees as one which employs 10 or fewer persons and which earns less than $500,000 in gross annual receipts. The SCAQMD also defines "small business" for the purpose of qualifying for access to services from the SCAQMD's Small Business Assistance Office (SBAO) as a business with an annual receipt of $5 million or less, or with 100 or fewer employees. In addition to the SCAQMD's definition of a small business, the federal Clean Air Act Amendments (CAAA) of 1990 and the federal Small Business Administration (SBA) also provide definitions of a small business.

The CAAA classifies a business as a "small business stationary source" if it: (1) employs 100 or fewer employees, (2) does not emit more than 10 tons per year of either VOC or NOx, and (3) is a small business as defined by SBA. The SBA definitions of small businesses vary by six-digit NAICS codes. In general terms, a small businesses must have no more than 500 employees for most manufacturing and mining industries, and no more than $7 million in average annual receipts for most nonmanufacturing industries.[2]

Information on employees and sales for all of the affected refineries are available, based on the proprietary 2016 Dun and Bradstreet data. None of the eight refineries were classified as a small business under all definitions mentioned above.

COMPLIANCE COST

PR 1180 would require, no later than eight months after rule adoption, that the affected refineries prepare and submit for SCAQMD's review a written fenceline air monitoring plan for establishing and operating a real-time fenceline air monitoring system. No later than one year after plan approval by SCAQMD, an affected refinery would be required to complete installation and begin operation of a real-time fenceline air monitoring system in accordance with the approved plan. The cost analysis herein estimates the compliance costs that would be incurred by the affected facilities. These costs are associated with the preparation of a fenceline air monitoring plan, fees paid to SCAQMD for plan review, the installation and operation of real-time fenceline air monitoring systems, and the dissemination of monitoring data. (Compliance costs associated with fenceline air monitoring notification and recordkeeping requirements are expected to be minimal and therefore not included in the analysis.) Additionally, the cost analysis also includes the community air monitoring fees which consist of a one-time proposed installation fee, paid in two installments, as specified by the fee schedule in Table 2 of ~~1.95 cents ($0.0195) per annual barrels of crude oil throughput capacity~~PR 1180, and an annual operating and maintenance fees for the community air monitoring system that will be proposed for adoption in Rule 301–Permitting and Associated Fees.

[2] See the SBA website (http://www.sba.gov/community/blogs/community-blogs/small-business-matters/what-small-business-what-you-need-know-and-wh).The latest SBA definition of small businesses by industry can be found at http://www.sba.gov/content/table-small-business-size-standards.

Table 1: Estimated Compliance Costs Associated with Real-Time Fenceline Air Monitoring Requirements (in 2017 dollars)

	Facility A	Facility B	Facility C	Facility D	Facility E	Facility F	Facility G	Facility H	Total
Refinery Throughput Capacity (Barrels Per Year)[3]	98,185,000	54,567,500	31,025,000	38,142,500	93,914,500	50,735,000†		18,250,000	384,819,500
Number of Fenceline Air Monitors Assumed to be Installed	12	10	6	8	12	8	8	6	70
Fenceline Air Monitoring Plan									
Air Monitoring Plan Development	$353,000	$196,000	$111,000	$137,000	$337,000	$91,000	$91,000	$66,000	$1,383,000
Air Monitoring Plan Review	$59,000	$33,000	$18,000	$23,000	$56,000	$15,000	$15,000	$11,000	$229,000
Real-Time Fenceline Air Monitoring Systems									
Equipment cost	$1,800,000	$1,500,000	$900,000	$1,200,000	$1,800,000	$1,200,000	$1,200,000	$900,000	$10,500,000
Site preparation	$1,803,000	$1,503,000	$902,000	$1,202,000	$1,803,000	$1,202,000	$1,202,000	$902,000	$10,518,000
Operations (Annually)	$141,000	$117,000	$70,000	$94,000	$141,000	$94,000	$94,000	$70,000	$821,000
Data Dissemination and Notification									
Website - Design and Development	$140,000	$140,000	$140,000	$140,000	$140,000	$140,000	$140,000	$140,000	$1,120,000
Mobile App and Notification Development	$118,000	$118,000	$118,000	$118,000	$118,000	$118,000	$118,000	$118,000	$943,000
Operations (Annually)	$41,000	$41,000	$41,000	$41,000	$41,000	$41,000	$41,000	$41,000	$329,000
Total Capital and Other Upfront Costs	$4,272,000	$3,489,000	$2,189,000	$2,820,000	$4,254,000	$2,766,000	$2,766,000	$2,136,000	$24,693,000
Total Annual Costs Per Year	$182,000	$158,000	$111,000	$135,000	$182,000	$135,000	$135,000	$111,000	$1,150,000
Total Compliance Costs Annualized over 11 Years									
With 4% Real Interest Rate	$609,000	$506,000	$327,000	$414,000	$607,000	$408,000	$408,000	$321,000	$3,602,000
With 1% Real Interest Rate	$555,000	$461,000	$299,000	$378,000	$553,000	$373,000	$373,000	$294,000	$3,287,000

Note: Numbers may not sum due to rounding.

† The crude oil capacity is reported for the two facilities combined as they are under the same ownership. The costs estimates assumed an even distribution of costs between these two facilities.

[3] Based on annual crude oil capacity reported by the California Energy Commission (CEC). See the PR 1180 Draft Staff Report for further discussion.

Real-Time Fenceline Air Monitoring Requirements

The average annual compliance cost associated with the proposed real-time fenceline air monitoring system requirements were estimated to range from $3.3 million to $3.6 million per year depending on the real interest rate used to amortize the capital and other upfront costs. The costs are annualized over a period of 11 years (2018-2021), which is ~~the~~ based on the minimum expected equipment life of fenceline air ~~monitoring~~ monitors of 10 years and accounts for the one year difference in start dates for air monitoring plan development (2018) and initial capital equipment expense (2019). The cost assumptions are discussed below, and Table 1 summarizes the associated cost breakdowns and totals.

- *Fenceline Air Monitoring Plan*

PR 1180 would require, no later than eight months after rule adoption, the affected refineries to submit for SCAQMD's review a written fenceline air monitoring plan (plan) developed in accordance with the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines. Based on the cost estimate of developing an air monitoring plan with high complexity by SCAQMD staff,[4] the estimated plan development cost for each refinery was scaled according to the expected complexity of its fenceline air monitoring plan, using a refinery's throughput capacity as the complexity proxy. Upon plan submittal, the affected refineries would be required to pay the SCAQMD Rule 306 fees for the review of a submitted plan. The plan review cost estimate was based on the current published plan evaluation fee rate for Title V facilities in Fiscal Year 2018-2019 ($170.62 per hour). To be conservative and not to underestimate the potential costs, it was assumed that a total of 115 hours would be needed for plan review per plan submittal[5] and two plan resubmittals would occur before the plan is approved by SCAQMD.

Overall, the costs associated with developing and reviewing fenceline air monitoring plans were estimated to approximately range from $77,000 for the refinery with the lowest throughout capacity to $411,000 for the refinery with the highest throughout capacity. The total cost for the eight affected refineries combined was estimated at $1.6 million.

- *Real-Time Fenceline Air Monitoring Systems*

PR 1180 would require, no later than one year after SCAQMD approves the submitted fenceline air monitoring plan, that an affected refinery completes installation and begins operation of a real-time fenceline air monitoring system in accordance with the approved plan. The cost to install and operate real-time fenceline air monitoring systems at each of the affected refineries is expected to vary from facility to facility and depends on the technologies that an affected refinery would elect and be approved by SCAQMD to use. The facility-specific cost estimates developed herein are for the purposes of conducting a socioeconomic impact assessment only. They were based on general assumptions about the type, number, and mix of monitoring equipment that may be implemented as a potential compliance option. These assumptions do not substitute for the detailed planning

[4] The cost estimate was roughly $353,000, assuming a full year of costs of employing one full-time air quality specialist and a quarter year each for a program supervisor and a planning and rules manager.
[5] Based on the range of estimated hours to review Ambient Air Monitoring Sampling Plans for Rule 1420.2. Estimated hours vary between 50 and 150 hours based on the complexity of the air monitoring plans.

that would be required by PR 1180 for the submittal of a fenceline air monitoring plan specific to each refinery, developed in accordance with the Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines.

The facility-specific cost estimates shown in Table 1 consist of one-time capital equipment and site preparation costs and an annual operation cost. The capital equipment cost was estimated based on the number of fenceline air monitors assumed to be installed at each site based on the assumption of an effective monitoring path length of approximately 1,200 meters per monitor and that the number of pathways needed would be proportional to the perimeter of the refineries, such that larger-sized refineries would have a greater number of air monitors assumed to be installed.[6] The equipment cost was estimated at $150,000 per monitor, using the average cost estimate of two different types of open-path air monitors: Open Path Fourier Transform Infrared (OP-FTIR) spectrometer and Ultra-Violet Differential Optical Adsorption Spectrometer (UV DOAS), based on multiple vendor quotes obtained by staff. Both of these open-path technologies are expected to be needed for measuring all the air pollutants required to be monitored in PR 1180, unless an emerging technology is proposed in the fenceline air monitoring plan and approved by SCAQMD. The site preparation costs were estimated to total approximately ~~total~~ $150,000 per monitoring site, based on the SCAQMD's experience with performing similar work at a refinery, ~~,~~ and included costs ~~for site procurement,~~ for site and instrument preparation, and monitor installation. Overall, the upfront costs associated with preparing and installing fenceline air monitoring systems were estimated to range from $1.8 to $3.6 million per facility, with the total cost for the eight affected refineries combined estimated at $21.0 million.

The annual cost to operate the real-time fenceline air monitoring systems was estimated based on the costs associated with a prior project and included costs such as labor and electricity expenditures. The operational cost of the fenceline air monitoring systems expected to be incurred by an affected refinery was assumed to be proportional to the number of open-path monitors assumed for each of the affected refinery and was estimated at approximately $11,700 for each monitor. Overall, the annual cost to operate the fenceline air monitoring systems was estimated to approximately range from $70,000 per year for the refinery with the lowest estimated number of required pathways to $141,000 per year for the refinery with the highest number of pathways. The total annual operating cost for the eight affected refineries combined was estimated at $821,000.

- *Data Dissemination and Notification*

PR 1180's fenceline air monitoring plan requirements include description of data dissemination method(s) in the plan. The Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines further specifies that air pollutant emissions data collected by the fenceline air monitoring systems would

[6] Note that the estimated number of pathways included in this analysis may be different from the actual number of pathways implemented according to each affected refinery's fenceline air monitoring plan. Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines specifies that the fenceline air monitoring system should be designed to ensure adequate coverage of the area along the facility perimeter, to the extent feasible. Moreover, information available from dispersion modeling, gradient sampling and mobile measurements, should be taken into consideration when assessing adequate coverage of a facility perimeter with a fenceline air monitoring system. At the same time, considerations, such as, the proximity of refinery emissions sources to sensitive receptors (i.e., residents, schools, hospitals, etc.) and type of pollutants to be measured could require additional open-path monitors for a facility.

need to be displayed and disseminated to the public using a web-based system in real-time or near-real-time, with Quality Assurance/Quality Control (QA/QC) measures implemented to provide confidence in the emissions data collected. The affected refineries would also need to provide a notification system for communities near refineries. Additionally, the refinery operators must publish quarterly reports written at a public-friendly level on the data dissemination website.

The cost estimates associated with the requirements above consist of upfront costs related to website design and development and mobile application and notification system development, as well as the annual operating and maintenance (O&M) costs. These costs were estimated based on the aforementioned prior project and assumed to be identical for each of the eight affected refineries, as these systems are expected to be able to address the data dissemination needs of any refinery irrespective of its size. The upfront costs were estimated at about $258,000 per facility, or $2.1 million for the eight facilities combined. The annual O&M costs were estimated at approximately $41,000 per year per facility, or $329,000 per year for all affected refineries.

Community Air Monitoring Fees

PR 1180 would establish a community air monitoring fee schedule, to be paid by the petroleum refineries, for the cost of designing, developing, and installing refinery-related community air monitoring systems by SCAQMD. Table 2 of PR 1180 ~~paragraph (j)(1) proposes~~specifies an installation fee ~~of 1.95 cents ($0.0195) per annual barrels of crude oil throughput capacity, which would result in approximately $356,000~~ for ~~the~~each refinery ~~with the lowest throughout capacity~~ to ~~$1.9~~be paid by dates described in paragraphs (j)(2) and (j)(3). The facility-specific total installation fees would range from $357,000 to $1.4 million ~~for the refinery with the highest throughout capacity~~. The total installation fee to be collected from the eight affected refineries combined would amount to approximately $7.5 million. PR 1180 paragraph (j)(4) proposed ~~an~~ additional ~~fee for the~~ annual operating and maintenance (O&M) fees ~~of~~ for the community air monitoring systems. ~~This~~Based on staff's cost estimates publicly released on October 26th, 2017,[7] the potential total O&M costs of these systems were tentatively estimated at nearly $3.5 million per year. A fee schedule would be specified in the upcoming proposed amendments to Rule 301–Permitting and Associated Fees and will be analyzed as part of those amendments. ~~Please see the PR 1180 Draft Staff Report for the basis of the proposed fee rate for the installation of community air monitoring systems. Based on staff's cost estimates publicly released on October 26th, 2017,[7] potential~~ For the purpose of this cost analysis only, it was assumed that the tentative O&M ~~costs of these systems were estimated at nearly $3.5 million per year; if also~~cost estimate would be apportioned by each affected refinery's crude oil throughput capacity, ~~it would correspond to an annual O&M fee of 0.91 cents ($0.0091) per annual barrels of crude oil throughput capacity,~~ and therefore, the O&M associated fees could possibly range from about $165,000 per year for the refinery with the lowest throughout capacity to about $889,000 per year for the refinery with the highest throughout capacity.

Table 2 reports the total compliance costs related to community air monitoring systems. These costs are also averaged over an 11-year analysis horizon to be consistent with fenceline air

[7] "Proposed Rule 1180 Cost Analysis Summary for a Refinery-Related Community Air Monitoring System," available at http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1180/community-air-monitoring-cost-estimation.pdf.

monitoring as described above, assuming that the full proposed installation fee amount was paid off by the beginning of 2019 and would not be financed. The annualized cost ranges from $168,000 to $~~902~~857,000 per year depending on the refinery's throughput capacity and totals $3.5 million per year for all refineries combined.

Table 2: Estimated Compliance Costs Associated with Community Air Monitoring Fees (in 2017 dollars)

	Total Cost ~~Estimates for the Proposed~~of Installation Fee (Table 2 of PR 1180)	**Cost Estimates for the Potential Rule 301 Annual O&M Fees[8]**	**Average Annual Cost over 11 years**
~~Proposed Fee Amount ($/barrel per year)~~	~~$0.0195~~	~~$0.0091[8]~~	
Facility			
Facility A	$1,~~916~~430,000	$889,000	$~~902~~857,000
Facility B	$1,~~065~~430,000	$494,000	$~~501~~534,000
Facility C	$~~605~~715,000	$281,000	$~~285~~295,000
Facility D	$~~744~~715,000	$345,000	$~~350~~348,000
Facility E	$1,~~833~~430,000	$850,000	$~~862~~826,000
Facility F	$~~495~~715,000	$230,000	$~~233~~253,000
Facility G	$~~495~~715,000	$230,000	$~~233~~253,000
Facility H	$~~356~~358,000	$165,000	$168,000
Total	**$7,509,000**	**$3,484,000**	**$3,533,000**

Note: Numbers may not sum due to rounding.

Total Compliance Costs

Total compliance costs were estimated from the total cost for real-time fenceline air monitoring system requirements (Table 1) and the total cost for community air monitoring fees (Table 2). Total compliance cost is shown in Table 3, and it was calculated on both a present worth value basis and an average annual basis.[9] The present worth value of the cost of PR 1180 is estimated to range from $4.5 million to $~~14.0~~13.6 million, with a total of $66.~~1~~2 million for all refineries combined. The average annual cost of compliance is estimated to range from $462,000 to $1.5 million, depending on facility size and the real interest rate assumed, with a total ranging from $6.8 million to $7.1 million, when amortized over 11 years, for all refineries combined. Considering an industry output of $26.9 billion and industry Gross Domestic Product (GDP) (value-added) of $5.7 billion for the Petroleum and Coal Products Manufacturing industry in Los

[8] Based on the tentative ~~staff~~ cost estimates released October 26th, 2017 and ~~converted to $ per barrel per year of~~ apportioned by facility-specific throughput capacity for cost analysis purposes only.

[9] The Present Worth Value (PWV), calculates the total capital cost and recurring cost over the analysis horizon, 11 years in this case, and discounts them to present value (2018) based on a 4% discount rate.

Angeles County,[10] this compliance cost is equivalent to 0.03% of industry output and 0.13% of industry GDP on an annual basis.

Table 3: Total Compliance Cost (in 2017 dollars)

	Present Worth Value			**Total Compliance Costs Annualized over 11 Years**	
Facility	Fenceline Monitoring	Community Monitoring	Total Compliance Cost	With 4% Real Interest Rate	With 1% Real Interest Rate
Facility A	$5,583,000	$~~8,452~~7,985,000	$~~14,036~~13,569,000	$1,~~511~~467,000	$1,~~456~~412,000
Facility B	$4,636,000	$~~4,697~~5,049,000	$9,~~333~~685,000	$1,~~007~~040,000	$~~962~~995,000
Facility C	$3,006,000	$2,~~671~~776,000	$5,~~677~~782,000	$~~612~~622,000	$~~584~~594,000
Facility D	$3,801,000	$3,~~284~~255,000	$7,~~085~~057,000	$~~764~~762,000	$~~729~~726,000
Facility E	$5,566,000	$~~8,085~~7,698,000	$13,~~650~~264,000	$1,~~470~~433,000	$1,~~415~~379,000
Facility F	$3,748,000	$2,~~184~~395,000	$~~5,932~~6,144,000	$~~641~~661,000	$~~606~~626,000
Facility G	$3,748,000	$2,~~184~~395,000	$~~5,932~~6,144,000	$~~641~~661,000	$~~606~~626,000
Facility H	$2,953,000	$1,~~571~~572,000	$4,~~524~~525,000	$489,000	$462,000
Total	**$33,041,000**	**$33,127,000**	**$66,168,000**	**$7,135,000**	**$6,821,000**

Note: Numbers may not sum due to rounding.

JOBS AND OTHER SOCIOECONOMIC IMPACTS

The Regional Economic Modeling Inc.'s Policy Insight Plus model (REMI PI+ v2.1) was used to assess the total socioeconomic impacts of a policy change (i.e., the proposed rule). The model links the economic activities in the counties of Los Angeles, Orange, Riverside, and San Bernardino, and for each county, it is comprised of five interrelated blocks: (1) output and demand, (2) labor and capital, (3) population and labor force, (4) wages, prices and costs, and (5) market shares.[11]

[10] Output is defined as the amount of production, including all intermediate goods purchased as well as value added (compensation and profit). Industry GDP (Value-Added) is a measure of compensation of employees, production taxes less subsidies, and gross operating surplus; thus to a certain degree reflects the industry's profit margin. Output and Value-added data for 2017 by industry were compiled by Regional Economic Modeling, Inc. (REMI). Converted to 2017 dollars based on California CPI projection (California Department of Finance).

[11] Within each county, producers are made up of 66 private non-farm industries, three government sectors, and a farm sector. Trade flows are captured between sectors as well as across the four counties and the rest of U.S. Market shares of industries are dependent upon their product prices, access to production inputs, and local infrastructure. The demographic/migration component has 160 ages/gender/race/ethnicity cohorts and captures population changes in births, deaths, and migration. (For details, please refer to REMI online documentation at http://www.remi.com/products/pi.)

The assessment herein was performed relative to a baseline ("business as usual") where PR 1180 would not be implemented. PR 1180 would create a policy scenario under which the affected refineries would incur an average annual compliance cost totaling $6.8 million to $7.1 million to ~~$7.4 million to~~ comply with the requirements of PR 1180. Based on the PR 1180 requirements, the compliance costs were assumed to occur in 2019 for the installation of community air monitoring systems[12] and fenceline air monitoring plan development and submittal. The installation costs related to fenceline air monitoring systems were further assumed to occur in 2019. Finally, the operation of both fenceline and community air monitoring systems was assumed to commence in 2020, after the installation of these systems are completed.

Direct effects of PR 1180 were estimated and used as inputs to the REMI model in order for the model to assess secondary and induced impacts for all the actors in the four-county economy on an annual basis and across a user-defined horizon (2018 to 2028). Direct effects of PR 1180 include additional costs to the affected entities and additional sales, by local vendors, of equipment, devices, or services that would meet the proposed requirements. While compliance expenditures increase the cost of doing business for affected facilities, the purchase of monitoring equipment and site preparation combined with spending on operational needs such as utilities, equipment rental, and real estate leases will increase sales in other sectors. Table 4 lists the industry sectors modeled in REMI that would either incur cost or benefit from the compliance expenditures.

[12] Note that PR 1180 paragraphs (j)(2) and (j)(3) allow the required installation fee to be paid off in two installments~~, i.e., a minimum of 30 percent~~: the first by July 1, 2018 and the ~~remaining portion~~second by January 30, 2019.

Table 4: Industries Incurring vs. Benefitting From Compliance Costs/Spending

Source of Compliance Costs	REMI Industries Incurring Compliance Costs (NAICS)	REMI Industries Benefitting from Compliance Spending (NAICS)
Air Monitoring Plan Development	Petroleum Refineries (324110)	*Capital Cost:* Professional, Scientific, and Technical Services (54)
Air Monitoring Plan Review		*Capital Cost:* Public Administration (92)[13]
Equipment cost		*Capital Cost:* Computer and Electronic Product Mfg (334)
Site preparation		*Capital Cost:* Construction (23)
Operations		*Recurring Cost:* Professional, Scientific, and Technical Services (54)
Website - Design and Development, Mobile and Notification Development, and Operations		*Capital Cost:* Professional, Scientific, and Technical Services (54)
Data logging system		*Capital Cost:* Computer and Electronic Product Mfg (334)
Equipment Installation and Calibration		*Recurring Cost:* Professional, Scientific, and Technical Services (54)
Real estate lease		*Recurring Cost:* Real Estate (531)
Operations - Utilities		*Recurring Cost:* Utilities (21)
Operations - Equipment rental		*Recurring Cost:* Rental and lease (532)
Operations – Labor (community monitoring)		*Recurring Cost:* Public Administration (92)[13]

The potential impacts of PR 1180 on the regional economy were simulated with the REMI model. The estimated average annual compliance cost based on a 4% real interest rate (Tables 1-3) were input into the REMI model as an increase in production cost for the industry of petroleum refineries in Los Angeles County. The resulting increase in compliance spending was input in the REMI model as an increase in exogenous demand in Los Angeles County for products and services provided by the industries described in Table 4. The simulated total effect on regional jobs consists

[13] Instead of using the default "local government spending" policy variable in REMI, staff elected to use a "custom local government spending" policy variable that it considers to more accurately reflect the SCAQMD spending portfolio. This custom policy variable has a lower proportion of local government spending going into the construction industry and proportionately allocates the difference to local government and professional services sectors. The simulation using this custom policy variable results in a prediction of a lower net job gain than would have been found with the default policy variable. This follows the approach taken in the Socioeconomic Assessment of the PAR Regulation III Fees from June 2017.

of the effect on the directly affected refinery industry, combined with the indirect and induced effects resulting from the increased industry costs and spending that will cascade through the regional economy.

The overall impact of PR 1180 was projected to lead to a net gain of 35 jobs on average per year above the baseline scenario job forecast from 2018 to 2028 (Table 5). The net gain of jobs is a result of a gain in jobs from increased compliance spending and foregone jobs in the refinery industry and upstream industries. The foregone jobs are mostly concentrated in the Mining, Oil and Gas Extraction sector, which is an upstream supplier for the refinery industry, with 3 jobs foregone per year on average. The jobs gained from the increase in spending are most highly concentrated in the local government sector. The average net gain of 20 jobs per year in this sector include but is not limited to the additional employees that will need to be recruited by SCAQMD to implement the community air monitoring systems. Smaller job gains of on average 9 per year in the professional, scientific, and technical services sector was also projected, as the sector is expected to benefit from the increased spending on monitoring support activities.

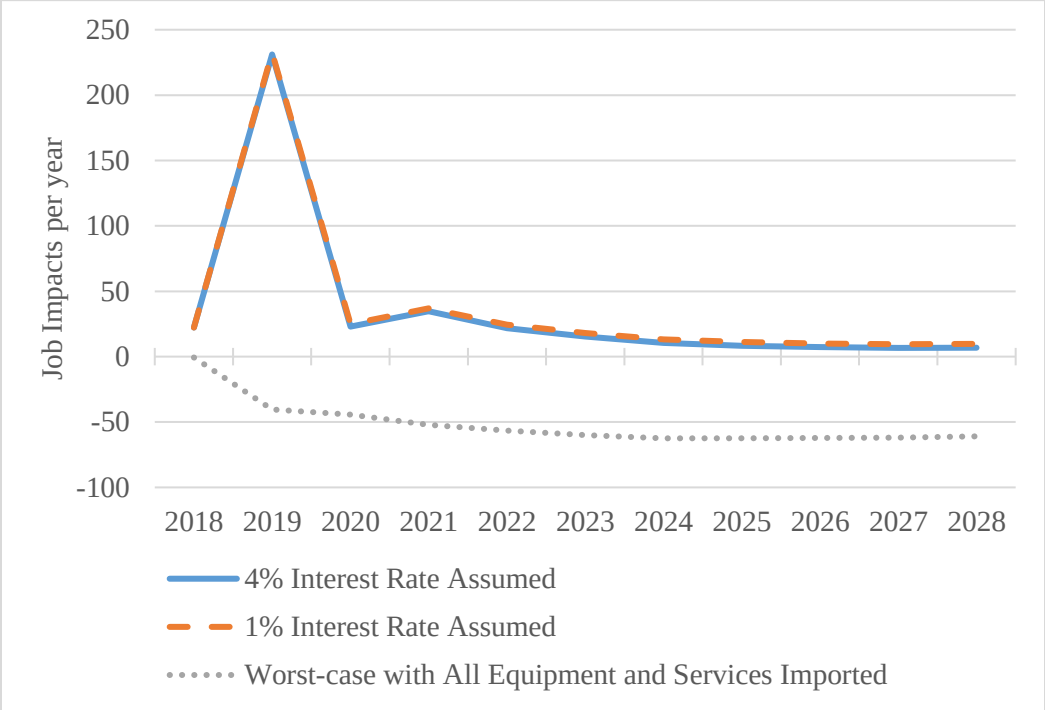
Table 5: Projected Job Impacts of Proposed Rule 1180 by Sector

Sector	NAICS	Jobs			Average Annual (2018-2028)		
		2018	2023	2028	Jobs	Baseline Jobs	% Change
Agriculture, Forestry, Fishing, and Related Activities	11	0	0	0	0	29,885	0.000%
Mining, Oil and Gas Extraction	21	0	-4	-5	-3	22,762	-0.014%
Utilities	22	0	0	0	0	19,465	0.000%
Construction	23	2	-7	-6	3	511,185	0.001%
Manufacturing	33	0	-3	-3	1	617,009	0.000%
Wholesale Trade	42	0	-1	-2	-1	522,418	0.000%
Retail Trade	44-45	1	-2	-2	-1	1,020,399	0.000%
Transportation and Warehousing	48-49	0	-1	-1	0	419,249	0.000%
Information	51	0	0	0	0	347,310	0.000%
Finance and Insurance	52	1	0	0	1	496,145	0.000%
Real Estate and Rental and Leasing	53	1	1	0	1	596,341	0.000%
Professional, Scientific, and Technical Services	54	9	7	5	9	891,078	0.001%
Management of Companies and Enterprises	55	0	-2	-2	-1	118,594	-0.001%
Administrative and Waste Management Services	56	2	1	0	2	829,634	0.000%
Educational Services	61	0	0	0	0	258,862	0.000%
Health Care and Social Assistance	62	1	1	1	2	1,406,007	0.000%
Arts, Entertainment, and Recreation	71	0	0	0	0	362,763	0.000%
Accommodation and Food Services	72	1	1	0	2	816,286	0.000%
Other Services, except Public Administration	81	1	0	0	1	739,716	0.000%
Government	92	1	23	21	20	1,038,480	0.002%
Total		22	15	7	35	11,063,587	0.000%

Two additional scenarios of PR 1180 were simulated in order to examine the sensitivity to a different assumptions on real interest rates and provide a reasonable range within which job impacts are expected fall. One scenario considers both the compliance cost of PR 1180 and the corresponding spending, but at a 1% real interest rate rather than 4%.

The other additional scenario represents a worst-case scenario where all the stimulative effects of the increased compliance spending on the economy occurs outside of the region. The job impacts over time for primary scenario and two additional scenarios are illustrated in Figure 1. There is a large peak in job gains in 2019 when the bulk of the capital spending occurs, stimulating demand industries such as Construction, Computer and Electronic Products Manufacturing, and Professional, Scientific and Administrative Services. Following 2019, the job gains begin a downward trend over the rest of analysis horizon, where the compliance costs leads to jobs foregone in the Petroleum and Coal Product Manufacturing industry and upstream suppliers, while increased spending in operations and maintenance providing industries (see Table 4) and for SCAQMD staff for the community monitor program leads to net job gains. The worst-case scenario illustrates only the impacts of compliance cost, indicating a steady downward trend in jobs foregone over the analysis horizon.

Figure 1: Projected Regional Job Impacts, 2018-2028



SUMMARY

The above analysis provides information on the compliance costs for both the fenceline air monitoring system and community air monitoring system requirements of PR 1180 along with the projected job impacts of implementing the rule. The fenceline air monitoring system requirements were estimated to have an average annual cost of approximately $3.6 million at a 4% real interest rate, while the community air monitoring fee requirements were estimated to have an average annual cost of $3.8 million. Based on these estimates, PR 1180 was estimated to have an average annual compliance cost of approximately $7.1 million incurred by the eight potentially affected refineries, with facility-specific compliance costs ranging from $~~490~~489,000 to $1.5 million depending on the refinery's ~~throughput capacity~~physical size and their specific fee schedule. This

compliance cost is equivalent to approximately 0.03% of output and 0.13% of industry GDP for the affected refinery industry. The job impact analysis projects a net gain of 35 jobs over the 2018-2028 period relative to the baseline scenario, resulting primarily from job gains in local government, professional, scientific and technical services, and construction. Ultimately, the projected job impact is very small relative to the regional economy, representing a change of less than 0.001 percent.

REFERENCES

Dun & Bradstreet Enterprise Database. 2016.

Draft Staff Report for Proposed Rule 1180. November, 2017, South Coast Air Quality Management District, Diamond Bar, CA.

Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines. October, 2017, South Coast Air Quality Management District, Diamond Bar, CA.

ATTACHMENT J

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

SUBJECT: **NOTICE OF EXEMPTION FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT**

PROJECT TITLE: **PROPOSED RULE 1180 - REFINERY FENCELINE AND COMMUNITY AIR MONITORING**

Pursuant to the California Environmental Quality Act (CEQA) Guidelines, the South Coast Air Quality Management District (SCAQMD) is the Lead Agency and has prepared a Notice of Exemption for the project identified above.

SCAQMD staff has reviewed the Proposed Rule 1180 – Refinery Fenceline and Community Air Monitoring and Accompanying Guidelines pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA.

SCAQMD staff has determined that it can be seen with certainty that there is no possibility that Proposed Rule 1180 and Accompanying Guidelines may have a significant adverse effect on the environment. Therefore, the project is considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule. A Notice of Exemption has been prepared pursuant to CEQA Guidelines Section 15062 - Notice of Exemption. If the proposed project is approved, the Notice of Exemption will be filed with the county clerks of Los Angeles, Orange, Riverside and San Bernardino counties.

Any questions regarding this Notice of Exemption should be sent to Sam Wang (c/o Planning, Rule Development and Area Sources) at the above address. Mr. Wang can also be reached at (909) 396-2649. Mr. Daniel Garcia is also available at (909) 396-3304 to answer any questions regarding the proposed rule.

Date: October 31, 2017

Signature:

Barbara Radlein
Program Supervisor, CEQA Section
Planning, Rules, and Area Sources

Reference: California Code of Regulations, Title 14

NOTICE OF EXEMPTION

To:	County Clerks Counties of Los Angeles, Orange, Riverside and San Bernardino	**From:**	South Coast Air Quality Management District 21865 Copley Drive Diamond Bar, CA 91765

Project Title: Proposed Rule (PR) 1180 - Refinery Fenceline and Community Air Monitoring

Project Location: The SCAQMD has jurisdiction over the four-county South Coast Air Basin (all of Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The SCAQMD's jurisdiction includes the federal nonattainment area known as the Coachella Valley Planning Area, which is a sub-region of Riverside County and the SSAB.

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

Public Agency Approving Project:	**Agency Carrying Out Project:**
South Coast Air Quality Management District	South Coast Air Quality Management District

Exempt Status:
CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule

Reasons why project is exempt: SCAQMD staff has reviewed PR 1180 and the accompanying Guidelines pursuant to: 1) CEQA Guidelines Section 15002(k) – General Concepts, the three-step process for deciding which document to prepare for a project subject to CEQA; and 2) CEQA Guidelines Section 15061 – Review for Exemption, procedures for determining if a project is exempt from CEQA. To comply with PR 1180 requirements, petroleum refineries would be required to install and operate continuous, fenceline air monitoring systems to monitor a comprehensive list of criteria pollutants and toxic air contaminants in real-time. The construction and operational activities associated with the installation and operation of air monitoring systems due to implementing PR 1180 requirements are minimal. Therefore, SCAQMD staff has determined that it can be seen with certainty that there is no possibility that PR 1180 and the accompanying Guidelines may have a significant adverse effect on the environment. Thus, PR 1180 and the accompanying Guidelines are considered to be exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) – Activities Covered by General Rule.

Date When Project Will Be Considered for Approval (subject to change):
SCAQMD Governing Board Hearing: December 1, 2017; SCAQMD Headquarters

CEQA Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Mr. Sam Wang	(909) 396-2649	swang1@aqmd.gov	(909) 396-3982
Rules Contact Person:	**Phone Number:**	**Email:**	**Fax:**
Mr. Daniel Garcia	(909) 396-3304	dgarcia@aqmd.gov	(909) 396-3324

Date Received for Filing: _____ **Signature:** *(Signed Upon Board Approval)*

Barbara Radlein
Program Supervisor, CEQA Section
Planning, Rule Development & Area Sources

ATTACHMENT K

Proposed Rule 1180

Refinery Fenceline and Community Air Monitoring

Public Hearing
December 1, 2017

South Coast AQMD

Background

- Community concerns regarding exposure to refinery emissions and desire for real-time information/notification
- AB 1647 requires fenceline and community monitoring at and near refineries
- AB 617 will likely require community monitoring in many of the same communities
- Staff is working to coordinate and integrate multiple monitoring efforts and mandates

- PR1180, MATES V, AQ-SPEC, AB 617, AB 1647, US EPA Benzene Monitoring, Torrance Project

Air Monitoring Activities

2017

- **AQ-SPEC** low cost sensor deployment though 2019
- **Torrance Refinery** monitoring project through 2019

2018

- Jan 30, benzene monitors deployed for **U.S. EPA rule**
- District to begin **MATES V** effort
- Aug 1, **PR 1180** fenceline air monitoring plans due
- Oct 1, CARB to select highest priority community locations

2019

- July 1, District required to deploy monitoring systems in highest priority community locations per **AB 617**

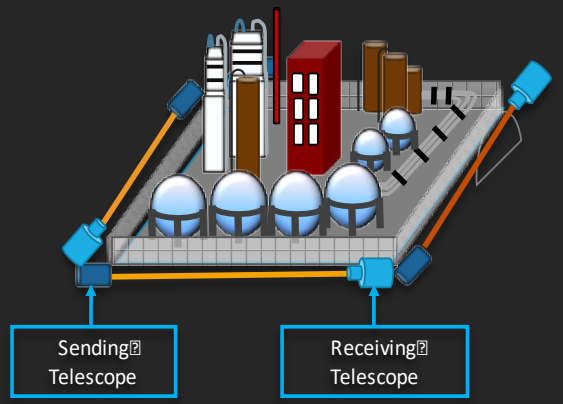
2020

- Jan 1, **AB 1647** requires refineries to install fenceline air monitoring systems and District to deploy community air monitoring system

Rule Approach

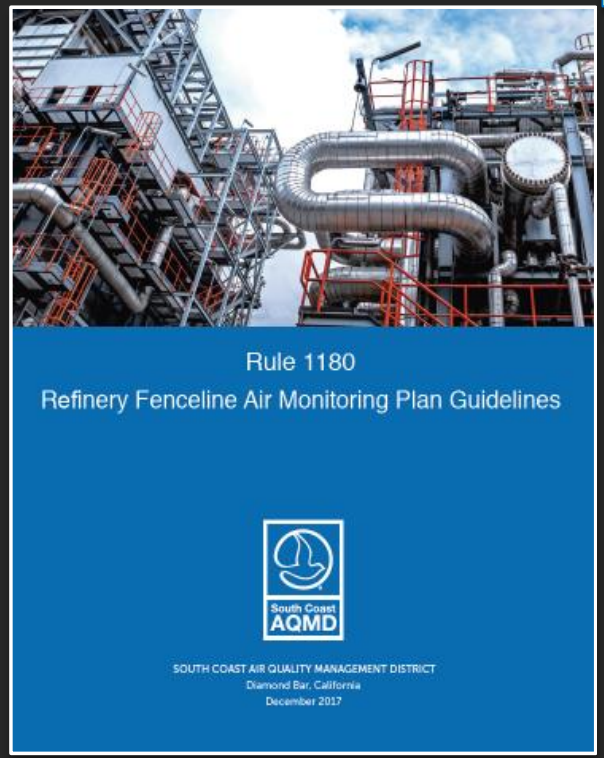
- Applies to petroleum refineries
  - Exempts facilities with throughput capacity of less than 40,000 barrels per day of crude oil
- Requires fenceline air monitoring plans to be submitted by August 1, 2018

Fenceline Monitoring Concept

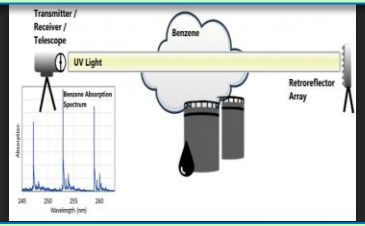


Fenceline Air Monitoring Plans

- Plans required to be consistent with proposed guidelines
- Public review of plans
- Fenceline air monitoring system required to be installed 1-year from plan approval



Fenceline Coverage



Equipment & Quality Assurance

Notification System

Air Pollutants Covered by Fenceline Air Monitoring Plans

Air Pollutants
Criteria Air Pollutants
Sulfur Dioxide
Nitrogen Oxides
Volatile Organic Compounds
Total VOCs (Non-Methane Hydrocarbons)
Formaldehyde
Acetaldehyde
Acrolein
1,3 Butadiene
Styrene
BTEX Compounds (Benzene, Toluene, Ethylbenzene, Xylene)
Other Compounds
Hydrogen Sulfide
Carbonyl Sulfide
Ammonia
Black Carbon
Hydrogen Cyanide
Hydrogen Fluoride+

+ If the facility uses hydrogen fluoride

Community Air Monitoring Fees

- AB 1647 requires air districts to implement refinery-related community air monitoring and for refineries to cover the cost
- Fee schedule previously proposed based on throughput capacity
- New refined fee schedule based on estimated costs given refinery locations relative to communities and one other

Community Air Monitoring Fee Schedule

Installation fee

(capital equipment cost, siting, labor, etc.)

+

Annual Operation & Maintenance

(utilities, leases, calibrations, labor, etc)

By July 1, 2018 – Initial minimum payment required

By January 30, 2019 – Final payment of the balance

Rule 301

Future rule amendment to include O&M fees

Other Requirements

- Triggers for submitting plan updates
  - Ensure long-term adequacy of fenceline monitoring system
- Notifications for equipment failures and maintenance downtimes
- Recordkeeping requirements

Key Issues - Applicability

- Key Issue:
  - One facility commented that their facility should be exempt from air monitoring requirements because the facility currently produces biofuels
- Staff Response:
  - Facility currently maintains all permits to process crude oil
  - Biofuel refining also produces emissions

Key Issues - Requirements

- Key Issue:
  - Stakeholders commented that the proposed rule covers pollutants not associated with refineries
- Staff Response:
  - Pollutants in rule identified as refinery-related emissions by recent OEHHA report
  - Rule provisions allow facilities to demonstrate that certain pollutants are not emitted
  - Many pollutants will be measured as part of air monitoring technologies deployed for other pollutants

Key Issues – Public Process

- Key Issue:
  - Stakeholders want to ensure full public process for review and comments on monitoring plans
- Staff Response:
  - Intent is for full public process
  - Added Resolution language as suggested by commenters

Staff Recommendation

Adopt the Resolution:

- Determining that the proposed rule and Guidelines are exempt from the requirements of CEQA
- Adopt Proposed Rule 1180
- Adopt Rule 1180 Refinery Fenceline Air Monitoring Plan Guidelines

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 32

PROPOSAL: Certify Final Environmental Assessment and Amend Rule 1420 – Emissions Standard for Lead

SYNOPSIS: Rule 1420 was adopted in September 1992 with the purpose of reducing lead emissions from non-vehicular sources. On October 15, 2008, the U.S. EPA lowered the National Ambient Air Quality Standard (NAAQS) for lead from 1.5 $\mu g/m^3$ to 0.15 $\mu g/m^3$ averaged over a rolling 3-month period to protect public health and the environment. PAR 1420 – Emissions Standard for Lead, will further protect public health from exposure to lead from facilities not covered under Rules 1420.1 and 1420.2, and help ensure continued attainment of the lead NAAQS. The proposal includes an initial ambient air lead concentration limit of 0.150 $\mu g/m^3$ averaged over any consecutive 30 days, which will be lowered to a final limit of 0.100 $\mu g/m^3$ by 2021 to be consistent with Rules 1420.1 and 1420.2. The proposed amended rule also establishes requirements for building enclosures, revisions to the point source lead emission limits, periodic source testing, conditional ambient air monitoring, and enhanced housekeeping measures.

COMMITTEE: Stationary Source, September 15, 2017, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached Resolution:
1. Certifying the Final Environmental Assessment for Proposed Amended Rule 1420 – Emissions Standard for Lead; and
2. Amending Rule 1420 – Emissions Standard for Lead.

Wayne Nastri
Executive Officer

PF:SN:DD:MM:KE

Background
Rule 1420 – Emissions Standard for Lead, was adopted in September 1992 with the purpose of reducing lead from non-vehicular sources. At the time of rule adoption, the National Ambient Air Quality Standard (NAAQS) for lead, previously established in 1978, was 1.5 $\mu g/m^3$ averaged over a calendar quarter. In 2008 U.S. EPA reduced the lead NAAQS to 0.15 $\mu g/m^3$ averaged over 90 days, based on more than 6,000 new health studies that were conducted since 1990. These studies identified lead as a probable carcinogen and associated lead exposure with a broad range of adverse health effects in both children and adults. Children were found to be most vulnerable to lead exposure, with low levels of lead linked not only to poor IQ, learning and memory, but also to weakened immune systems. In adults, lead exposure was found to cause increased blood pressure, cardiovascular disease, and decreased kidney function.

On December 31, 2010, a portion of Los Angeles County was designated as nonattainment for the 2008 lead NAAQS based on exceedances at two source-specific monitors near two large lead-acid battery recycling facilities located in Vernon and the City of Industry. As a result, the Board adopted the 2012 Lead State Implementation Plan which committed to a control measure to amend Rule 1420, lowering the lead concentration to 0.15 $\mu g/m^3$ and retaining a more stringent averaging period of a 30-day rolling average. To better tailor provisions to the various sources covered under Rule 1420, the largest lead sources were removed from Rule 1420 and two separate rules were developed. Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants at Large Lead-Acid Battery Recycling Facilities was adopted on November 5, 2010, and Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities was adopted on October 2, 2015. PAR 1420 will address the remaining smaller lead processing and metal melting facilities.

Proposal
PAR 1420 applies to facilities that process materials with a lead content greater than 0.05 percent lead by weight on average, calculated on a monthly basis. The structure of PAR 1420 is based on Rules 1420.1 and 1420.2, with provisions that reflect that PAR 1420 applies to smaller lead sources. PAR 1420 represents an overall strengthening to further control point and fugitive lead emissions to ensure compliance with the lead NAAQS and public health protection. All provisions will apply to facilities that process greater than two tons of lead per year. Core requirements under the proposed rule amendment include: complying with an ambient lead concentration limit of 0.150 $\mu g/m^3$ averaged over 30 consecutive days, beginning on the date of adoption and 0.100 $\mu g/m^3$ beginning January 1, 2021; demonstrating that all lead emissions control devices meet a 99 percent control efficiency or emit less than 0.0003 pound per hour; conducting biennial source tests with an option for quadrennial source tests if the lead emission rate is less than 0.00015 pound per hour; conducting lead processing and metal melting operations in a building enclosure (negative pressure is not required); emission control device monitoring; implementing enhanced housekeeping provisions; and additional recordkeeping. Facilities that process 2 tons of lead per year or less will only be subject to housekeeping and recordkeeping requirements. Although mandatory

ambient lead monitoring is not required, non-compliance with the point source requirements or SCAQMD monitored data that is greater than 0.150 $\mu g/m^3$ can trigger requirements to conduct ambient lead monitoring. Exemptions from the proposed rule amendments are included for facilities subject to Rules 1420.1 and 1420.2, as well as facilities that accept permit conditions limiting the amount of lead processed or the lead content of materials being processed.

Public Process
Proposed Amended Rule 1420 was developed through a public process. Through the rulemaking process, staff held four stakeholder working group meetings to discuss provisions of the proposed rule amendment: March 8, 2017, May 31, 2017, July 6, 2017, and September 20, 2017. In addition, staff held a Public Workshop on September 7, 2017.

Key Issues
No key issues have been identified.

California Environmental Quality Act
PAR 1420 is considered a "project" as defined by the California Environmental Quality Act (CEQA), and the SCAQMD is the designated lead agency. Pursuant to CEQA Guidelines Sections 15252 and 15070 and SCAQMD Rule 110, the SCAQMD has prepared an Environmental Assessment (EA) for PAR 1420. The environmental analysis in the Draft EA concluded that PAR 1420 would not generate any significant adverse environmental impacts and therefore, no alternatives or mitigation measures are required. The Draft EA was released for a 30-day public review and comment period from September 19, 2017 to October 19, 2017. Two comment letters were received from the public relative to the Draft EA and responses to the comments have been prepared. The comment letters and the individual responses to the comments have been included in Appendix D of the Final EA.

Subsequent to release of the Draft EA, modifications were made to the proposed project. SCAQMD staff has reviewed the modifications to the proposed project and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the Draft EA. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, the Draft EA is now a Final EA and is included as an attachment to the Board package. It is necessary that the Board review the Final EA, including responses to comments, prior to certification of the Final EA and adoption of PAR 1420.

Socioeconomic Analysis
PAR 1420 would affect 107 facilities out of which one is classified as a Recyclable Material Merchant Wholesaler, with the remaining 106 facilities classified under the Manufacturing sector. Among all affected facilities, 43 are in Los Angeles, 57 in Orange, four in Riverside, and three are located in San Bernardino County. Only 15 out of the

107 affected facilities would incur cost impacts related to periodic source testing, capture efficiency testing, and building enclosure, and rooftop cleaning requirements. The remaining 92 facilities would only be subject to the housekeeping and recordkeeping requirements at nominal costs. Based on SCAQMD permit data and available information on employees and sales, 11 of the 107 facilities are small businesses as defined under Rule 102. These 11 facilities are only subject to the housekeeping and recordkeeping requirements.

The annual compliance costs of PAR 1420 were estimated to range from $273,000 to $280,000, depending on the real interest rate assumed (1-4 percent). The source testing requirement would contribute to about 80 percent of the total annual cost. On a per-facility basis, it was estimated that each of the 15 affected facilities referenced above could incur an annual cost of $4,800 to $43,000 depending on the number of lead point sources at the facility and the level of construction necessary to enclose the buildings housing their lead processing areas. The estimated overall compliance costs would result in minimal job impacts in the regional economy.

AQMP and Legal Mandates

Pursuant to Health & Safety Code Section 40460(a), the SCAQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all state and federal regulations and standards. The SCAQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. The proposed amendments to Rule 1420 will implement the 2016 AQMP Control Measure TXM-07 (Control of Lead Emissions from Stationary Sources) and will be incorporated in the 2012 Lead State Implementation Plan (SIP) to help ensure attainment and maintenance of the lead NAAQS.

Implementation and Resource Impact

Existing SCAQMD resources will be used to implement Proposed Amended Rule 1420.

Attachments

A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Amended Rule 1420
G. Final Staff Report for Proposed Amended Rule 1420
H. Final Environmental Assessment
I. Board Meeting Presentation

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Amended Rule 1420 – Emission Standards for Lead

<u>Ambient Air Lead Concentration Limit</u>
• Meet 0.150 μg/m^3 averaged over any 30 consecutive days:
  ▪ Effective date of rule adoption until December 31, 2020
• Meet 0.100 μg/m^3 averaged over any 30 consecutive days on and after January 1, 2021
• An exceedance of the ambient air lead concentration limits shall occur if it is measured by any monitor installed pursuant to subdivision (l) – Ambient Monitoring and Sampling Requirements or by an SCAQMD-installed monitor
 	
<u>Executive Officer Determination to Conduct Conditional Ambient Air Monitoring</u>
• Ambient monitoring may be triggered if:
  ▪ Ambient air concentration of lead from a facility exceeds 0.150 μg/m^3 averaged over any 30 consecutive days
  ▪ Lead point source control device is less than the minimum 99 percent efficiency or the outlet mass lead emissions rate exceeds 0.0003 pound per hour, based on two source tests over a rolling 36-month period
 	
<u>Lead Point Source Emissions Controls</u>
• Vent emissions from each lead point source to an emissions control device that meets outlet mass lead emissions of < 0.0003 pound per hour or reduces lead emissions by a minimum of 99 percent according to following schedule:
  ▪ No later than June 1, 2018, for a lead point source that is vented to an existing lead emissions control device
  ▪ No later than six (6) months after a Permit to Construct for a lead emission control device is issued, if lead point source was not previously vented to an existing emission control device
• No later than June 1, 2018, demonstrate an outlet mass lead emissions rate of < 0.0003 pound per hour for an uncontrolled lead point source
• Require a new source test to determine compliance with lead point source control limits if a permit modification to an equipment or process increases lead emissions
 	
<u>Total Enclosures</u>
• No later than June 1, 2018, complete modification of a structure to a total enclosure if the structure existed as of the date of adoption
• No later than 12 months after the date of adoption, complete construction of a new structure, provided the owner or operator provides written notification within 60 days after date of adoption
• Total enclosures shall minimize cross-draft conditions that could decrease the collection efficiency of a lead emission collection system and cause the release of fugitive lead dust emissions from openings

Housekeeping

- PAR 1420 includes a variety of housekeeping measures to address fugitive emissions, effective upon the date of adoption, including:
  - Immediate cleanup after any construction or maintenance activities, accidents, process upsets, or equipment malfunction
  - Prohibition of dry sweeping or use of compressed air for housekeeping
  - Wet mopping, washing, or vacuuming in areas within close proximity to stations dedicated to metal grinding
- Rooftop cleaning at least one time per year, during the months of July through September, on structures that house areas where lead is processed at facilities that process more than 10 tons of lead per year
- Can use an alternative housekeeping measure provided it meets the same objective and effectiveness as the housekeeping measure it is replacing

Periodic Source Testing

- Conduct source testing for each lead control device biennially
- Conduct source testing no later 48 months after the date of the most recent source test, if the source test demonstrates control device lead outlet emissions rate of less than 0.00015 pound/hour

Recordkeeping

- Monthly recordkeeping of amounts of lead-containing material processed
- Monthly average weight percentage of lead processed determined by U.S. EPA-approved methods, metal analyses for bulk samples of baghouse catches or analysis of feedstock, including ingots and scrap
- Records of all ambient air lead monitoring, wind monitoring, housekeeping activities, construction or maintenance activities, source tests, periodic smoke and anemometer tests, and emission collection device inspection and maintenance

Exemptions

- Ambient Air Monitoring Relief Plan – Facilities shall be exempt from the ambient air monitoring and sampling requirements of PAR 1420 if:
  - One year of monitored ambient air monitoring demonstrates lead concentration of $\leq 0.070\ \mu g/m^3$ averaged over any 30 consecutive days;
  - Air dispersion modeling analysis demonstrates facility ambient air lead concentration of $\leq 0.070\ \mu g/m^3$ averaged over any 30 consecutive days; and
  - Most recent source tests show a total facility mass lead emissions rate of < 0.040 pound per hour
- Lead Minimization Plan
  - Facilities that reduce process rate to ≤ 2 tons of lead annually based on facility permit conditions and process records shall only be subject to the ambient air lead concentration limits, housekeeping, and recordkeeping requirements
  - Facilities that reduce lead content of materials processed to ≤ 0.05 percent based on a permit condition shall only be subject to recordkeeping requirements
- Hand soldering, repair, and maintenance operations exempt from all requirements
- Facilities subject to Rules 1420.1 and 1420.2 are exempt from all requirements

ATTACHMENT B
KEY ISSUES AND RESPONSES

Proposed Rule 1420 – Emissions Standard for Lead
• No key issues have been identified

ATTACHMENT C

RULE DEVELOPMENT PROCESS
Proposed Amended Rule 1420 – Emissions Standard for Lead

Initial Rule Development: September 2017

↓

Four Working Group Meetings
March 8, 2017
May 31, 2017
July 6, 2017
September 20, 2017

↓

75-Day Public Notice: August 18, 2017

↓

Public Workshop: September 7, 2017

↓

Stationary Source Committee Briefings (1)
September 15, 2017

↓

Set Hearing: November 3, 2017

↓

Public Hearing: December 1, 2017

15 months spent in rule development
1 Public Workshop
4 Working Group Meetings

ATTACHMENT D

KEY CONTACTS LIST

Advanced Environmental Controls

Almega Environmental

Alta Environmental

Associates Environmental

Atlas Pacific

The Boeing Company

California Metals Coalition

California Metal X

Castlerock Environmental

Cast Metals Services Incorporated

Concorde Battery Corporation

Custom Alloy Sales

Fontana Foundry Corporation

Fox Hills Industries

Gasser Olds Incorporated

Gerdau

Haaker Equipment Company

Industrial Environmental Coalition of Orange County

Industrial Sweepers and Scrubbers

Interspace Battery

JE Compliance Services Incorporated

Keramida Incorporated

Kinsbursky Brothers Incorporated

Metal Finishing Association of Southern California

Montclair Bronze

Natural Resources Defense Council

Quemetco

S.A. Recycling

Total Clean

Yorke Engineering

ATTACHMENT E

RESOLUTION NO. 17-_____

A Resolution of the Governing Board of the South Coast Air Quality Management District (SCAQMD) certifying the Final Environmental Assessment (EA) for Proposed Amended Rule 1420 – Emissions Standard for Lead.

A Resolution of the SCAQMD Governing Board amending Rule 1420 – Emissions Standard for Lead.

WHEREAS, the SCAQMD Governing Board finds and determines with certainty that Proposed Amended Rule 1420 is considered a "project" as defined by the California Environmental Quality Act (CEQA); and

WHEREAS, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l), and has conducted a CEQA review and analysis of Proposed Amended Rule 1420 pursuant to such program (SCAQMD Rule 110); and

WHEREAS, the SCAQMD staff has prepared a Draft EA pursuant to its certified regulatory program and CEQA Guidelines Sections 15251, 15252, 15162, and 15070, setting forth the potential environmental consequences of Proposed Amended Rule 1420 and determined that the proposed project would not have the potential to generate significant adverse environmental impacts; and

WHEREAS, the Draft EA was circulated for 30-day public review and comment period, from September 19, 2017 to October 19, 2017, and two comment letters were received; and

WHEREAS, the Draft EA has been revised to include comments received on the Draft EA and responses, so that it is now a Final EA; and

WHEREAS, it is necessary that the SCAQMD 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 PAR 1420; 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 and 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 a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 were not prepared because the analysis shows that Proposed Amended Rule 1420 would not have a significant adverse effect on the environment, and thus, are not required; and

WHEREAS, the Board package includes the Final EA and other supporting documentation, and this information was presented to the SCAQMD Governing Board and that the Board has reviewed and considered the entirety of this information before approving the staff recommendations; and

WHEREAS, the Final EA reflects the independent judgment of the SCAQMD; and

WHEREAS, the SCAQMD 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 Section 15073.5 or 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 SCAQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D)(i) of the Administrative Code), that the modifications to Proposed Amended Rule 1420 since the notice of public hearing was published add clarity that meets the same air quality objective and are not so substantial as to significantly affect the meaning of the proposed amended rule within the meaning of Health and Safety Code Section 40726 because: (a) the changes do not impact emission reductions, (b) the changes do not affect the number or type of sources regulated by the rule, (c) the changes are consistent with the information contained in the notice of public hearing, and (d) the consideration of the range of CEQA alternatives is not applicable because the effects of PAR 1420 do not cause significant impacts and therefore alternatives are not required; and

WHEREAS, Proposed Amended Rule 1420 is a control measure in the 2016 Air Quality Management Plan (AQMP) and was not ranked by cost-effectiveness relative to other AQMP control measures in the 2016 AQMP, and furthermore, pursuant to California Health and Safety Code Section 40910, cost-

effectiveness in terms of dollars per ton of pollutant reduced is only applicable to rules regulating ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide and does not apply to toxic air contaminants; and

WHEREAS, Proposed Amended Rule 1420 and supporting documentation, including but not limited to, the Final EA, the Socioeconomic Impact Assessment, the Final Staff Report, and this December 1, 2017, Board letter were presented to the SCAQMD Governing Board and the SCAQMD Governing Board has reviewed and considered the entirety of this information, as well as has taken and considered staff testimony and public comment prior to approving the project; and

WHEREAS, California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the Final Staff Report; and

WHEREAS, lead has been identified as a toxic air contaminant by the Office of Environmental Health Hazard Assessment (OEHHA) and the Centers for Disease Control and Prevention has stated that no safe blood level of lead in children has been identified; and

WHEREAS, the 2010 Clean Communities Plan specified that the SCAQMD would investigate sources of lead emissions and identify control measures to address lead emissions from these identified sources; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1420 is needed to further protect public health by minimizing public exposure to lead emissions and preventing exceedances of the 2008 National Ambient Air Quality Standard (NAAQS) for Lead; and

WHEREAS, the SCAQMD staff relied on the U.S. Environmental Protection Agency's 2008 *Review of the Lead NAAQS* and the U.S. Environmental Protection Agency's *2016 Final Decision to Retain the National Ambient Air Quality Standards (NAAQS) for Lead* as the basis and supporting scientific information for establishing the 0.100 microgram per cubic meter ($\mu g/m^3$) limit, which demonstrates that the 0.100 $\mu g/m^3$ limit is more protective of human health compared to the existing federal standard of 0.15 $\mu g/m^3$; and

WHEREAS, the SCAQMD Governing has determined that a need exists to amend Rule 1420 to reduce lead emissions by implementing the 2012 Lead State Implementation Plan for Los Angeles County and the 2016 Air Quality

Management Plan (AQMP) Control Measure TXM-07 – Control of Lead Emissions from Stationary Sources; and

WHEREAS, Proposed Amended Rule 1420 will be submitted to the California Air Resources Board and the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan; and

WHEREAS, the SCAQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Sections 39002, 39650 et seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41511, 41700, and 41706 of the California Health and Safety Code; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1420, as proposed to be adopted, is written and displayed so that its meaning can be easily understood by persons directly affected by it; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 1420, as proposed to be amended, is in harmony with, and not in conflict with, or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1420, as proposed to be adopted, does not impose the same requirements as any existing state or federal regulations, and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD; and

WHEREAS, the SCAQMD Governing Board, in adopting this regulation, references the following statutes which the SCAQMD hereby implements, interprets or makes specific: the provisions of California Health and Safety Code Sections 40001 (rules to achieve and maintain ambient air quality standards), 41700 (nuisance), and 41706(b) (emission standards for lead compounds from non-vehicular sources), and Federal Clean Air Act Sections 112 (Hazardous Air Pollutants) and 116 (Retention of State Authority); and

WHEREAS, California Health and Safety Code Section 40727.2 requires the SCAQMD 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 SCAQMD's comparative analysis of Proposed Amended Rule 1420 is included in the staff report; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment, as contained in the Final Staff Report, of

Proposed Amended Rule 1420 is consistent with the March 17, 1989 Governing Board Socioeconomic Resolution for rule adoption; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1420 will result in increased costs to sites containing applicable toxic air contaminants, yet are considered to be reasonable, with a total annualized cost as specified in the Socioeconomic Impact Assessment, as contained in the Final Staff Report; and

WHEREAS, the SCAQMD Board has actively considered the Socioeconomic Impact Assessment, as contained in the Final Staff Report, and has made a good faith effort to minimize such impacts; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment, as contained in the Final Staff Report, is consistent with the provisions of California Health and Safety Code Sections 40440.8, 40728.5, and 40920.6; and

WHEREAS, the SCAQMD staff conducted a public workshop regarding Proposed Amended Rule 1420 on September 7, 2017; and

WHEREAS, a public hearing has been properly noticed in accordance with all provisions of California Health and Safety Code Section 40725; and

WHEREAS, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

WHEREAS, the SCAQMD Governing Board specifies the Manager overseeing the rule development for Proposed Amended Rule 1420 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

NOW, THEREFORE BE IT RESOLVED, that the SCAQMD Governing Board does hereby certify the Final EA for Proposed Amended Rule 1420 was completed in compliance with CEQA and SCAQMD Rule 110 provisions and finds that the Final EA was presented to the SCAQMD Governing Board, whose members reviewed, considered, and approved the information therein prior to acting on Proposed Amended Rule 1420; and

BE IT FURTHER RESOLVED, that because no significant adverse environmental impacts were identified as a result of implementing Proposed Amended Rule 1420, Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Plan are not required; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 1420 as set forth in the attached, and incorporated herein by reference; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board requests that Proposed Amended Rule 1420 be submitted into the State Implementation Plan; and

BE IT FURTHER RESOLVED, that the Executive Officer is hereby directed to forward a copy of this Resolution and Proposed Amended Rule 1420 to the California Air Resources Board for approval and subsequent submittal to the U.S. Environmental Protection Agency for inclusion into the State Implementation Plan.

DATE: _____ _____

CLERK OF THE BOARDS

ATTACHMENT F

Proposed Amended Rule 1420

Adopted September 11, 1992

Ver.11142017-r1

PROPOSED AMENDED RULE 1420. EMISSIONS STANDARD FOR LEAD

(a) Purpose

The purpose of this rule is to ~~reduce emissions of lead from non-vehicular sources~~ protect public health by reducing emissions and ambient air concentrations of lead from non-vehicular sources, reduce public health impacts by reducing the exposure to lead, and to help ensure continued attainment of the National Ambient Air Quality Standard for Lead.

(b) Applicability

(1) This rule applies to any ~~all persons who~~ owner or operate~~or~~ of a metal melting facility or lead processing facilit~~ies~~y that ~~use or~~ processes lead-containing materials, including, ~~but not limited to,~~ primary or secondary lead smelters, foundries, lead-acid battery manufacturers or recyclers, lead platers, and lead-oxide, brass, and bronze producers that process lead-containing materials. Specific provisions of this rule shall apply as follows:

(A) A facility that processes two (2) tons per year or less of lead with an average lead content that is greater than 0.05 percent by weight, shall only be subject to paragraphs (d)(1) and (d)(2) and subdivisions (h) and (i) of this rule.

(B) A facility that processes more than two (2) tons per year of lead with an average lead content greater than 0.05 percent by weight, shall be subject to all provisions of this rule.

(2) Amount of lead processed in a year referenced in paragraph (b)(1) shall be determined based on any of the five calendar years prior to [DATE OF ADOPTION], or any year thereafter.

(3) Average lead content referenced in paragraph (b)(1) shall be determined based on the highest one-month average after [DATE OF ADOPTION], or any month thereafter using one of the methods specified in paragraph (i)(2). ~~Applicability of subdivisions (e), (f), (g), (h), (j) and (k) of this rule shall be based on the greatest amount of lead processed in any one of the three years dating back from the adoption of this rule, and the amount processed annually thereafter.~~

(c) Definitions

For the purpose of this rule, the following definitions shall apply:

(1) BAG LEAK DETECTION SYSTEM is a system that monitors electrical charge transfer based in triboelectric or electrostatic induction to continuously monitor bag leakage and similar failures by detecting changes in particle mass loading in the exhaust.

(2) CAPTURE VELOCITY is the minimum hood induced air velocity necessary to capture and convey air contaminants into an emission collection system.

(3) DUCT SECTION is a length of duct including angles and bends which is contiguous between two or more process devices (e.g., between a furnace and a heat exchanger; baghouse and scrubber; scrubber and stack; etc.).

~~(1) DUST-FORMING MATERIAL is any material containing more than 15 percent by weight of particulate matter less than 0.84 millimeter (mm) equivalent diameter as determined by ASTM C136-84a, *Standard Method for Sieve Analysis of Fine and Coarse Aggregates*, using a number 20 U.S. Bureau of Standards sieve with a 0.84-mm square opening, or an alternative EPA-approved procedure.~~

(4) DUST SUPPRESSANTS are water, hygroscopic materials, or non-toxic chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(~~2~~5) EMISSION COLLECTION SYSTEM is any equipment, including the associated ducting, installed for the purpose of directing, taking in, confining, and conveying an air contaminant, and which at minimum conforms to design and operation specifications given in the most current edition of *Industrial Ventilation, Guidelines and Recommended Practices*, published by the American Conference of Government and Industrial Hygienists, at the time a complete permit application is on file with the SCAQMD ~~District~~.

(~~7~~6) EMISSION CONTROL DEVICE is any equipment installed in the ventilation system of a lead point source or emission collection system for the purpose of collecting and reducing emissions of lead.

~~(3) EMISSION POINT is any location where lead is emitted into the atmosphere from equipment or processes.~~

~~(4) ENCLOSED STORAGE AREA is any space, container, and/or structure used to contain material that prevents its contents from being emitted into the atmosphere.~~

(~~6~~7) FOUNDRY is any facility, operation, or process where metal or a metal alloy is melted and cast.

(~~5~~8) FUGITIVE LEAD-DUST EMISSIONS are emissions of lead-containing material from locations other than ~~emission points~~lead point sources including, but not limited to, foot and vehicular traffic~~,~~ and storage piles, where the dust forming material at the emission source has a lead content of greater than ~~0.5~~ 0.05 percent by weight ~~or more~~ as determined by EPA-approved methods.

(9) FURNACE is a device used to melt metal including, but not limited to, cupola, electric arc, pot, induction, blast, crucible, sweat and reverberatory furnaces.

(~~7~~10) LEAD means elemental lead, alloys containing elemental lead, or lead compounds, calculated as elemental lead.

(~~8~~11) LEAD-ACID BATTERY MANUFACTURER is any facility, operation, or process that produces storage batteries or battery components using lead or lead compounds.

(~~9~~12) LEAD-ACID BATTERY RECYCLER is any facility, operation, or process in which lead-containing batteries are disassembled and/or the lead battery components are melted.

(~~10~~13) LEAD-OXIDE PRODUCER is any facility, operation, or process intended to produce lead-oxide from materials containing lead, including, but not limited to, lead melting and/or oxidizing furnaces, lead-~~-~~oxide conveying systems, associated air pollution control systems, and equipment used for product recovery, storage, and dispensing.

(14) LEAD POINT SOURCE is any process or equipment used at a metal melting facility or lead-processing facility to process materials that have a lead content of greater than 0.05 percent by weight as determined by paragraph (i)(2).

(~~11~~15) LEAD-PROCESSING FACILITY is any primary or secondary lead smelter, foundry, lead-acid battery manufacturer or recycler, lead plating, or lead-oxide, bronze, or brass producer.~~company, business, facility, process or operation which uses or processes lead-containing materials, located on one or more contiguous or adjacent properties in actual contact~~

~~or separated only by a public roadway or other public right-of-way, and owned or operated by the same person or by persons under common control.~~

(16) MAINTENANCE ACTIVITY is a routine process to keep equipment and machinery in working order or to prevent breakdowns and includes any of the following activities conducted outside of a total enclosure that generates or has the potential to generate fugitive lead-dust:

(A) Maintenance activities on any emission collection or control device that vents a lead point source or metal grinding operation; or

(B) Replacement or removal of any duct section used to vent a lead point source or metal grinding operation.

(17) METAL is any ferrous (iron-based) metal and alloys and non-ferrous (non-iron-based) metals and alloys. Examples of metals include, but are not limited to, iron, aluminum, copper, gold, silver, zinc, tin, lead, platinum, nickel, chromium, cadmium, manganese, mercury, tungsten, and titanium, and their alloys, including steel, brass, and bronze.

(18) METAL MELTING FACILITY is any facility that operates equipment to which scrap metal, ingots, and/or other forms of metals are charged and melted, including but not limited to, die casting, recycling, refining, sintering, smelting, or soldering operations where the lead content of the material processed is greater than 0.05 percent by weight as determined by paragraph (i)(2).

~~(12) MOLTEN METAL is a metal or metal alloy in the semi-solid or liquid state.~~

~~(13) PERSON is any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, or other capacity, including any governmental entity or charitable organization.~~

(~~14~~19) PRIMARY LEAD SMELTER is any facility, operation, or process engaged in the production of lead, lead alloys, and/or lead compounds from lead ore and/or lead ore concentrates through the use of pyrometallurgical techniques.

~~(15) PROCESSES means 5sing lead or lead-containing material in any operation.~~

(20) REPAIR is an operation or activity to return a damaged object or an object not operating properly, to good condition.

(~~16~~21) RINGELMANN OPACITY refers to an opacity shade as given in a chart published by the United States Bureau of Mines.

(~~17~~22) SECONDARY LEAD SMELTER is any facility, operation, or process engaged in the production of lead, lead alloys, and/or lead compounds from lead-bearing scrap material through the use of pyrometallurgical techniques.

(23) SLAG means the inorganic by-product material discharged, in melted state, from a smelting furnace and contains lead compounds. This shall include, but is not limited to, lead sulfate, lead sulfide, lead oxides, and lead carbonate consisting of other constituents charged to a smelting furnace, which are fused together during the pyrometallurgical process.

(24) SMELTING is the heating and chemical reduction of metal containing lead compounds.

(25) SMELTING FURNACE is any furnace where smelting takes place including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

(26) TOTAL ENCLOSURE is a permanent containment structure, enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, or run-off), that has limited openings to allow access for people and vehicles, that is free of breaks, cracks, gaps, or deterioration that could cause or result in the escape of fugitive lead-dust emissions.

(d) ~~Standard~~ Ambient Air Lead Concentration Limit

~~On or after July 1, 1994, no person who owns or operates a lead-processing facility shall discharge into the atmosphere:~~

~~(1) Emissions which cause ambient concentrations of lead to exceed 1.5 microgram per cubic meter, averaged over 30 days, beyond the property line of a facility; or~~

(1) The owner or operator of a lead processing or metal melting facility shall not discharge emissions into the atmosphere, which contribute to ambient air concentrations of lead that exceed the following:

Effective Date	Ambient Air Concentrations of Lead (µg/m^3), averaged over 30 consecutive days
[DATE OF ADOPTION] to December 31, 2020	0.150
On and after January 1, 2021	0.100

(2) An exceedance of the ambient air concentration of lead specified in the above table shall occur if it is measured by any monitor installed pursuant to subdivision (l) or a SCAQMD-installed monitor that measures lead concentrations resulting from the facility operations.

~~(2)~~(3) F~~f~~ugitive lead-dust emissions shall not ~~that~~ exceed Ringelmann 0.5, or 10 percent opacity, for more than three (3) minutes aggregate in any 60-minute period.

~~(c) Requirements~~

~~On and after July 1, 1994, the following requirements shall apply to any person who owns or operates a lead-processing facility.~~

~~(1) All emission points shall be vented to an emission collection system.~~

~~(2) The gas stream from any emission collection system shall be ducted to a lead control device which shall reduce lead emissions by 98 percent or more, as determined by a source test conducted in accordance with SCAQMD Method 12.1 - Determination of Inorganic Lead Emissions from Stationary Sources Using a Wet Impingement Train, or particulate matter emissions by 99 percent or more as determined by a source test using SCAQMD Method 5.1 - Determination of Particulate Matter Emissions from Stationary Sources Using a Wet Impingement Train. When the particulate matter captured by the lead control device is hygroscopic, or SOx is present in concentrations greater than 10 ppm, or ammonia is present, SCAQMD Method 5.1 shall be replaced by SCAQMD Method 5.2 - Determination of Particulate Matter Emissions from Stationary Sources Using Heated Probe and Filter. Source tests shall be conducted by persons approved by the Executive Officer. Lead or particulate matter emissions reduction shall be calculated as follows:~~

$$\frac{Cin - Cout}{Cin} \times 100 = \%\ \text{emissions reduction}$$

~~Where: Cin = mass at the inlet of the control device~~

~~Cout = mass at the outlet of the control device~~

~~(3) Each emission collection system and lead control device shall, at minimum, be maintained and operated in accordance with the manufacturer's specifications.~~

~~(4) Fugitive lead-dust emissions shall be controlled by the following housekeeping practices:~~

~~(A) Dust-forming material which may contain lead including, but not limited to, baghouse dust, dross, ash, or feed material shall be stored in an enclosed storage area;~~

~~(B) Surfaces that accumulate lead-containing dust subject to vehicular or foot traffic shall be washed down, vacuumed, or wet-mopped at least once a week, or shall be maintained with the use of non-toxic chemical dust suppressants; and,~~

~~(C) Lead or lead-containing wastes generated from housekeeping activities shall be stored, disposed of, recovered, or recycled using practices that do not lead to fugitive lead-dust emissions.~~

~~(5) A facility that processes more than 10 tons of lead per year shall install, maintain and operate ambient air quality monitoring equipment as specified in subdivision (g).~~

~~(6) A facility that processes more than 2 tons, but less than or equal to 10 tons of lead per year shall determine ambient lead concentrations by monitoring as specified in subdivision (g), or by air dispersion modeling calculations as specified in subdivision (h). The Executive Officer may require ambient air monitoring as specified in subdivision (g) for any facility when air dispersion modeling calculations indicate that ambient lead concentrations may exceed 0.75 microgram per cubic meter, averaged over 30 days.~~

~~(7) Ambient air quality monitoring may be discontinued upon the submittal of a written request and determination by the Executive Officer that lead emissions will remain below a level at which a potential for exceedance of the lead standard of subdivision (d) exists.~~

(e) Executive Officer Determination to Conduct Ambient Air Monitoring

(1) The Executive Officer may notify the owner or operator of a lead processing or metal melting facility that ambient air monitoring may be required if the Executive Officer has reason to believe that:

(A) The ambient air concentration of lead from the lead processing facility contributes to ambient air concentrations of lead that exceeds 0.150 µg/m^3 averaged over 30 consecutive days; or

(B) The lead point source limits for any lead point source emission control device at the lead processing or metal melting facility exceeded the limits pursuant to subdivision (f), based on two (2) source tests over a rolling 36-month period.

(2) Within 30 days of the date of initial notification from the Executive Officer that ambient air monitoring may be required, the owner or operator may provide the Executive Officer any additional information that may substantiate that the criteria set forth in subparagraphs (e)(1)(A) or (e)(1)(B) has not been met.

(3) Prior to making a final determination, the Executive Officer will consider:

(A) The additional information provided to the Executive Officer pursuant to paragraph (e)(2);

(B) The evaluation of any emissions data, which includes, but is not limited to, ambient air lead data or source test data;

(C) Any facility site visit(s); and

(D) Any findings from an investigation of surrounding sources.

(4) The Executive Officer shall notify the owner or operator of the final determination. An owner or operator of a lead processing facility that receives notification that the Executive Officer has determined that ambient lead monitoring is required shall conduct ambient lead monitoring and sampling pursuant to subdivision (l).

(f) Lead Point Source Emissions Control

(1) The owner or operator of a lead-processing or metal melting facility shall vent emissions from each lead point source to an emission control device that meets an outlet mass lead emission rate of less than 0.0003 pound per hour or reduces lead emissions by a minimum of 99% as determined by the most recent SCAQMD-approved source test conducted on behalf of the facility or the SCAQMD pursuant to subdivision (j) based on the following schedule:

(A) No later than June 1, 2018, if the lead point source is vented to an existing lead emissions control device; and

(B) No later than six (6) months after a Permit to Construct for a lead emission control device is issued by the Executive Officer, if the lead point source was previously not vented to an existing lead emissions control device.

(2) In lieu of complying with paragraph (f)(1), the owner or operator of an uncontrolled lead point source may elect to demonstrate an outlet mass lead emissions rate of less than 0.0003 pound per hour, as determined by a SCAQMD-approved source test conducted on behalf of the facility or the SCAQMD pursuant to subdivision (j) no later than June 1, 2018.

(3) Any permit modification to the equipment or process that may increase the amount of lead emissions shall require a new source test to determine compliance with paragraphs (f)(1) or (f)(2).

(4) Each emission collection system and emission control device subject to this subdivision shall be approved, in writing, by the Executive Officer and, at a minimum, be inspected, maintained, and operated in accordance with the manufacturer's specifications.

(g) Total Enclosures

(1) An owner or operator of a lead-processing or metal melting facility shall conduct all metal melting and lead processing operations including metal grinding, in a total enclosure that minimizes cross-draft conditions that could result in the decrease in collection efficiency of the emission collection system and the release of fugitive lead-dust emissions from openings in the wall and roof of a total enclosure, such as windows, passages, doorways, and bay doors. Alternative methods to minimize the release of fugitive lead-dust from the total enclosure may be used if the owner or operator can demonstrate to the Executive Officer an equivalent or more effective method(s) to minimize cross-draft conditions.

(A) Acceptable methods to minimize cross-draft conditions include, but are not limited to the following:

(i) Closing openings, except when moving parts, people, vehicles, or equipment through the openings;

(ii) Use of automatic roll-up doors;

(iii) Installation of plastic strip curtains; or

(iv) Use of vestibules.

(2) For a lead processing or metal melting facility existing as of [DATE OF ADOPTION], any modification or construction made to a structure to meet the provisions of paragraph (g)(1) shall be completed:

(A) No later than June 1, 2018, if the owner or operator is modifying a structure that is existing as of [DATE OF ADOPTION]; or

(B) No later than 12 months after [DATE OF ADOPTION], if the owner or operator is constructing a new structure, provided the owner or operator provides written notice to the Executive Officer within 60 days after [DATE OF ADOPTION].

(3) All enclosure types shall be designed in a manner that does not conflict with the requirements set forth by the United States Department of Labor Occupational Safety and Health Administration or the California Division of Occupational Safety and Health regarding worker safety.

(4) The owner or operator of a lead processing or metal melting facility shall inspect any total enclosure at least once a calendar month for breaks, cracks, gaps, or deterioration that could cause or result in fugitive lead-dust.

(5) The owner or operator of a lead processing or metal melting facility shall repair any breaks, cracks, gaps, or deterioration that could result in fugitive lead-dust from any total enclosure within 72 hours of discovery. The Executive Officer may approve a request for extension beyond the 72-hour limit if the request is submitted to Rule1420notifications@aqmd.gov before the 72-hour time limit has expired and the owner or operator can provide information to substantiate that either:

(A) The repair will take longer than 72 hours; or

(B) The equipment, parts, or materials needed for the repair cannot be obtained within 72 hours.

(h) Housekeeping Requirements

Unless otherwise specified, no later than 30 days after [DATE OF ADOPTION], the owner or operator of a facility that processes lead shall control fugitive lead-dust by conducting the following housekeeping practices:

(1) Clean by wet wash, wet mop, or with a vacuum in a manner that does not generate fugitive lead-dust, the areas at specified frequencies listed in subparagraphs (h)(1)(A) through (h)(1)(C), unless located within a total enclosure vented to a lead emission control device.

(A) For lead processing facilities that process more than 10 tons per year of lead, cleaning of rooftops on structures that house areas associated with lead processing operations at least one time per year during the months of July through September.

(B) Effective [DATE OF ADOPTION], weekly cleanings by wet wash, wet mop, vacuum, or stabilization with dust suppressant of all:

(i) Areas where lead-containing wastes generated from housekeeping activities are stored, disposed of, recovered, or recycled; and

(ii) Surfaces that accumulate lead-containing dust subject to vehicular or foot traffic.

(C) Initiate immediate cleaning, no later than one hour after any construction or maintenance activity or event, including, but not limited to accidents, process upsets, or equipment malfunction that causes deposition of fugitive lead-dust emissions onto areas specified in subparagraphs (h)(1)(A) and (h)(1)(B). If the facility can demonstrate that delays were due to unreasonable risks to safety posed by earlier cleaning or inability to reasonably obtain equipment required to implement this requirement, immediate cleanings of rooftops shall be completed within 72 hours.

(2) Effective [[DATE OF ADOPTION]], the owner or operator of a lead processing or metal melting facility shall not conduct any housekeeping activities that involve dry sweeping or the use of compressed air.

(3) Conduct quarterly cleaning of collection vents, openings and ducting of each lead emission control device according to procedures in the most current edition of the *Industrial Ventilation*, *A Manual of Recommended Practice for Operation and Maintenance*.

(4) Remove any weather cap installed on any stack that is a source of lead emissions.

(5) Effective [DATE OF ADOPTION], store all materials capable of generating any amount of fugitive lead-dust including, but not limited to, slag and any other lead-containing waste generated from the housekeeping requirements of this subdivision and the construction or maintenance activities of subdivision (g), in sealed leak-proof containers, or stabilize such materials using dust suppressants approved in writing by the Executive Officer, unless located within a total enclosure.

(6) Transport all materials capable of generating any amount of fugitive lead-dust including, but not limited to, slag and any other waste generated from the housekeeping requirements of this subdivision and the construction or maintenance activities of subdivision (g), within closed conveyor systems or in sealed leak-proof containers, or stabilize such materials using dust suppressants approved in writing by the Executive Officer, unless located within a total enclosure. This paragraph shall not be applicable to the transport of high temperature materials exceeding 500 degrees Fahrenheit where implementation of the specified control requirements is infeasible.

(7) Conduct wet washing, wet scrubbing, or vacuum sweeping of any paved area located outside of a total enclosure that is subject to vehicular traffic, no later than one hour after any construction or maintenance activity or event, including accidents, process upsets, or equipment malfunction that results in the deposition of fugitive lead-dust, unless located within a total enclosure vented to a lead emissions control device. Wet scrubbing shall not be required during days of measurable precipitation.

(8) Effective [DATE OF ADOPTION], except when inside a total enclosure, all lead-containing trash and debris shall be placed in covered containers that remain covered at all times except when trash or debris is actively deposited into a receptacle. Trash and debris containers shall be free of liquid or dust leaks.

(9) Post signs at all entrances and truck loading and unloading areas indicating a speed limit of five (5) miles per hour or less on any roadway located within 75 feet of the perimeter of a total enclosure.

(10) For any of the housekeeping requirements specified under paragraphs (h)(1) through (h)(9), an alternative housekeeping measure can be used provided the owner or operator demonstrates and receives written approval from the Executive Officer that the alternative housekeeping measure meets the same objective and effectiveness of the housekeeping requirement it is replacing.

(11) The owner or operator of a lead processing or metal melting facility that is conducting metal grinding of lead-containing materials shall wet wash, wet mop, or vacuum in a manner that does not generate fugitive lead-dust ~~of~~ the following:

(A) Floors within 20 feet of a work station or work stations dedicated to the metal grinding operations;

(B) Floors within 20 feet of any entrance/exit point of ~~from~~ a temporary enclosure, building or total enclosure that houses the grinding operations; and

(C) Floors within 10 feet of an emission control device dedicated to the metal grinding operations.

(i) Recordkeeping

~~Effective January 1, 1994, any person who owns or operates a lead-processing facility subject to this rule shall maintain two years of the following records at the facility and make them available to the Executive Officer upon request:~~The owner or operator of a lead processing or metal melting facility shall keep records of the following:

(1) ~~Information on quantities of each lead-containing material processed, and the lead content of the material, including purchase records, usage records, results of analysis or other verification to indicate lead content and lead usage, updated annually.~~ Data related to lead-containing raw materials used at the facility, including quantities processed monthly and the lead content of these raw materials, purchase records, results of analyses, source test data, and other SCAQMD-approved verification to indicate amounts of lead-containing materials processed. The Executive Officer may approve other alternative methods used to calculate the amount of lead processed and the percentages of lead contained within the lead-containing raw materials processed. The monthly amount of lead processed shall be calculated by multiplying the monthly average weight percentage of lead as calculated in paragraph (i)(2) by the quantity of raw material processed monthly at each lead point source. The annual amount of lead processed by the facility shall be calculated by summing the monthly amounts of lead processed for all lead point sources over a calendar year.

(2) ~~Results of all ambient air lead monitoring, including data specified by subdivision (g), and air dispersion modeling as specified in subdivision (h), as applicable.~~ Monthly records shall be maintained to determine the monthly average weight percentage of lead contained in processed materials. The monthly average weight percentage of lead shall be determined by using one of the following methods:

(A) EPA-approved method (s);

(B) Metal analyses for bulk samples of baghouse catches;

(C) Weighted monthly average of lead content from analysis of feedstock, including ingots and scrap; or

(D) An alternative method approved by the Executive Officer that can quantify the average weight percentage contained in processed materials.

(3) ~~Records of housekeeping activities completed as required by paragraph (e)(4), and inspections and maintenance of emission collection systems and control devices, including the name of the person performing the activity, and the dates on which specific activities were completed.~~ Results of all ambient air lead monitoring, wind monitoring, and other data specified in subdivision (l);

(4) Records of the following shall also be maintained:

(A) Construction, inspections, maintenance, and repairs of total enclosures pursuant to paragraphs (g)(2) through (g)(4);

(B) Housekeeping activities completed as required by paragraphs (h)(1), (h)(3), and (h)(7);

(C) Source tests data as required by subdivision (j) and paragraph (k)(3);

(D) Data files, inspection, and maintenance of emission collection devices as required by subdivision (k), including the name of the person conducting the activity and the dates and times at which specific activities were completed;

(E) Smoke test results as required by paragraph (k)(5); and

(F) Hot wire anemometer data collected, including capture velocities, dates of measurement and calibration documentation as required by paragraph (k)(6).

(5) The owner or operator shall maintain all records for three years, with at least the two most recent years kept onsite and made available to the SCAQMD upon request.

(j) ~~Reporting~~

~~Any lead-processing facility that is required or elects to do ambient air monitoring shall report to the District the results of all ambient air lead and wind monitoring each calendar quarter. Results of individual 24-hour samples shall be reported and averaged each calendar month. Any exceedances of ambient air quality standards identified within that period shall be reported to the District within 24 hours of receipt of the completed sample analysis required in paragraph (g)(4).~~

Source Tests

(1) Effective [DATE OF ADOPTION], the owner or operator of a lead processing or metal melting facility shall conduct a source test of all lead point sources once every 24 months after the initial source test to demonstrate compliance with the facility mass emissions standards specified in subdivision (f). If a source test to demonstrate compliance with the lead point source emission standards of subdivision (f) demonstrates stack outlet mass lead emissions of less than 0.00015 pounds per hour, then the next source test for the lead point source lead emissions control device shall be performed no later than 48 months after the date of the most recent source test.

(2) The owner or operator of a lead processing or metal melting facility with an existing lead emission control device in operation before [DATE OF ADOPTION] shall conduct a source test for this device no later than June 1, 2018. The owner or operator with a new or modified lead control device with initial start-up on or after [DATE OF ADOPTION] shall conduct the initial source test for the no later than six (6) months after a Permit to Construct is issued by the Executive Officer.

(3) At least 60 calendar days prior to conducting a source test pursuant to paragraph (j)(1) or (j)(2), the owner or operator of a lead processing or metal melting facility shall submit a source test protocol to the Executive Officer for approval. The source test protocol shall include the source test criteria of the end user, all assumptions, required data, calculated targets for testing, and the following:

(A) Target lead mass emission standard;

(B) Planned sampling parameters;

(C) Information on equipment, logistics, personnel, and other resources necessary for an efficient and coordinated source test; and

(D) Evaluation of emission collection system.

(4) The owner or operator of a lead processing or metal melting facility shall notify the Executive Officer, in writing, of the intent to conduct source testing, one week prior to conducting any source test required by paragraphs (j)(1) or (j)(2).

(5) The owner or operator of a lead processing or metal melting facility shall notify the Executive Officer within 5 calendar days of when the facility knew or should have known of any source test result that exceeds any of the

emission standards specified in subdivision (f). Notifications shall be made to 1-800-CUT-SMOG and followed up in writing to the Executive Officer with the results of the source tests within ten (10) calendar days of notification.

(6) Source tests shall be conducted while operating at a minimum of 80% of the equipment's permitted capacity and in accordance with any of the following applicable test methods:

(A) SCAQMD Method 12.1 – *Determination of Inorganic Lead Emissions from Stationary Sources Using a Wet Impingement Train*;

(B) CARB Method 12 – *Determination of Inorganic Lead Emissions from Stationary Sources*; or

(C) U.S. EPA Method 12 – *Determination of Inorganic Lead Emissions from Stationary Sources.*

(D) CARB Method 436 – *Determination of Multiple Metal Emissions from Stationary Sources.*

(7) The owner or operator of a lead processing or metal melting facility may use alternative or equivalent source test methods as defined in U.S. EPA 40 CFR 60.2, if approved in writing by the Executive Officer, in addition to the CARB, or the U.S. EPA, as applicable.

(8) The owner or operator of a lead processing or metal melting facility shall use a test laboratory approved under the SCAQMD Laboratory Approval Program for the source test methods cited in this subdivision. If there is no approved laboratory, then approval of the testing procedures used by the laboratory shall be granted by the Executive Officer on a case-by-case basis based on SCAQMD protocols and procedures.

(9) When more than one source test method or set of source test methods are specified for any testing, the application of these source test methods to a specific set of test conditions is subject to approval by the Executive Officer. In addition, a violation established by any one of the specified source test methods or set of source test methods shall constitute a violation of the rule.

(10) An existing source test conducted on or after January 1, 2014 for lead emission control devices existing before [DATE OF ADOPTION] may be used as the initial source test specified in paragraph (j)(1) to demonstrate compliance with the lead emission control standards of subdivision (f). The source test shall meet, at a minimum, the following criteria:

(A) The source test is the most recent conducted since January 1, 2014;

(B) The source test demonstrated compliance with the control requirements of subdivision (f);

(C) The source test is representative of a method used to test emissions from control devices currently in use; and

(D) The source test was conducted using applicable and approved test methods specified in paragraphs (j)(6) through (j)(8).

(11) Source testing conducted by the facility, the SCAQMD, or a contractor acting on behalf of the SCAQMD or the facility to determine compliance with this rule shall be performed according to the most recent SCAQMD-approved source test protocol for the same purpose.

(12) Reports from source testing conducted pursuant to subdivision (j) shall be submitted to the SCAQMD within 90 days of completion of source testing.

~~(f) Compliance Plan~~

~~No later than July 1, 1993, any person who owns or operates a lead-processing facility that processes more than 2 tons of lead per year shall submit a Compliance Plan to the Executive Officer for approval, with the following, including all supporting information, data, and calculations:~~

~~(1) For each of the previous three calendar years dating from the date of the adoption of this rule;~~

~~(A) Quantities of each lead-containing material processed;~~

~~(B) The amount of lead in each material processed;~~

~~(2) For the previous 12 calendar months;~~

~~(A) The maximum and average daily process rates and monthly process rates for all equipment and processes;~~

~~(B) The maximum and average daily and annual emissions of lead from all emission points and average daily and annual emission estimates from all sources of fugitive lead-dust;~~

~~(3) The approximate date of intended source tests for lead control devices, as required by paragraph (e)(2), and an application for a Permit to Construct any required lead control devices and associated emission collection systems, if applicable;~~

~~(4) Engineering drawings, calculations or other methodology to demonstrate compliance with paragraphs (e)(1) and (e)(4);~~

~~(5) Air dispersion modeling calculations using procedures approved by the Executive Officer to determine the location of sampling sites as required by~~

~~subdivision (g) or to estimate ambient concentrations of lead as required by subdivision (h);~~

~~(6) All information necessary to demonstrate means of compliance with subdivision (g).~~

~~(g) Requirements for Ambient Air Monitoring~~

~~No later than 6 months after approval of the Compliance Plan, all facilities that are required or elect to employ ambient air monitoring shall conduct ambient air monitoring as follows:~~

~~(1) Collect samples from a minimum of two sampling sites approved by the Executive Officer located at or beyond the property line of the facility where maximum ground level lead concentrations are indicated by Executive Officer approved air dispersion modeling calculations and based on Executive Officer approved emission estimates from all emission points and fugitive lead-dust sources;~~

~~(2) Collect samples from a minimum of one Executive Officer approved sampling site to determine background ambient lead concentration;~~

~~(3) Collect 24-hour samples at all sites for 30 consecutive days from the date of initial sampling, followed by one 24-hour sample collected every 6 days, on a schedule approved by the Executive Officer;~~

~~(4) Submit samples collected pursuant to paragraphs (g)(1), (g)(2), and (g)(3) to a Executive Officer approved laboratory for analysis within three (3) calendar days of collection and calculate ambient lead concentrations for individual 24-hour samples within 15 calendar days of the end of the calendar month in which the samples were collected;~~

~~(5) Sample collection shall be conducted using Title 40, CFR 50 Appendix B - Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method), and sample analysis shall be conducted using Title 40, CFR 50 Appendix G - Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air, or U.S. EPA-approved equivalent methods;~~

~~(6) Continuously record wind speed and direction data during sampling periods using equipment approved by the Executive Officer at location and placement approved by the Executive Officer;~~

~~(7) Ambient air quality monitoring shall be conducted by persons approved by the Executive Officer and sampling equipment shall be operated and maintained in accordance with EPA-referenced methods.~~

~~(h) Requirements for Air Dispersion Modeling~~

~~(1) Facilities that process more than 2 tons, but less than or equal to 10 tons of lead per year shall submit to the Executive Officer, with the Compliance Plan, the results and input data of air dispersion modeling calculations, as applicable. Air dispersion modeling shall be conducted using modeling approaches and emission estimates approved by the Executive Officer.~~

(k) Emission Control Device Monitoring

(1) Bag Leak Detection System

The owner or operator of a lead processing or metal melting facility shall apply for a permit to install, operate, calibrate, and maintain a Bag Leak Detection System for baghouses subject to the requirements of SCAQMD Rule 1155 – Particulate Matter (PM) Control Devices.

(2) The owner or operator of a lead processing or metal melting facility shall continuously monitor the pressure drop across the filter of an emission control device used to control lead emissions with a gauge. The gauge shall be located so that it is easily visible and in clear sight of the owner or operator or maintenance personnel. For the purposes of this requirement, the owner or operator shall ensure that the monitoring device:

(A) Is equipped with ports to allow for periodic calibration in accordance with manufacturer's specifications;

(B) Is calibrated according to manufacturer's specifications at least once every calendar year;

(C) Is equipped with a continuous data acquisition system (DAS). The DAS shall record the data output from the monitoring device at a frequency of at least once every 60 minutes;

(D) Generates a data file from the computer system interfaced with each DAS each calendar day saved in Microsoft Excel (xls or xlsx) format or other format as approved by the Executive Officer. The file shall contain a table of chronological date and time and the corresponding data output value from the monitoring device in inches of water column. The operator shall prepare a separate data file each day showing the 4-hour average pressure readings recorded by this device each calendar day; and

(E) Is maintained in accordance with manufacturer's specifications.

(3) The owner or operator of a lead emissions control device shall be required to conduct a source test pursuant to subdivision (j), if the pressure across

the filter is not maintained within the range specified by the manufacturer or according to conditions of the Permit to Operate for the emission control device as determined by hourly or more frequent recordings by the DAS for the averaging periods below, no later than 30 days after the discrepancy is detected:

(A) A 4-hour time period on three (3) or more separate days over 60 continuous days; or

(B) Any consecutive 24-hour period.

(4) The owner or operator of a lead processing or metal melting facility shall operate the emission collection system associated with the lead emission control device at a minimum collection induced capture velocity specified in the most current edition of the *Industrial Ventilation, A Manual of Recommended Practice for Design, published by the American Conference of Governmental Industrial Hygienists*, at the time a permit application is deemed complete with the SCAQMD.

(5) For each emission collection system subject to this subdivision, a periodic smoke test shall be conducted during source testing, pursuant to paragraph (j)(1) and at least once every three months thereafter, using the procedure set forth in Appendix 1 of this rule. The smoke test need not be performed if it is demonstrated to the Executive Officer that it presents an unreasonable risk.

(6) A calibrated hot wire anemometer shall be used to measure the capture velocity of each emission collection system at least once monthly, based on its location within a lead processing facility and its design configuration:

(A) An emission collection system designed with a hood or enclosure shall maintain a capture velocity of at least 200 feet per minute as measured at the face of the enclosure or the minimum slot velocity measured in the most recent source test that verifies 100% collection efficiency.

(B) An emission collection system without an enclosing hood that is designed with collection slots shall maintain a capture velocity of at least 2,000 feet per minute, or the minimum slot velocity measured in the most recent source test that verifies 100% collection efficiency.

~~(j)~~(l) Ambient Monitoring and Sampling Requirements

(1) Within 120 days of the date of final determination pursuant to paragraph (e)(4) that the owner or operator of a lead processing or metal melting facility shall conduct ambient air lead monitoring, the owner or operator of a lead processing or metal melting facility shall submit a Lead Ambient Air Monitoring and Sampling Plan for review and approval by the Executive Officer, subject to plan fees as specified in SCAQMD Rule 306 – Plan Fees that includes:

(A) Source test results of all lead point sources conducted pursuant to subdivision (j).

(B) Map of the facility identifying the location of all lead emission sources, emission control devices, stacks, enclosures, openings of enclosures, storage of lead containing materials, roadways where vehicles carrying lead containing materials travel within the facility, vehicle ingress and egress locations, the property line of the facility, the fence line of the facility if it differs from the property line of the facility, and any areas within the property line of the facility that are publicly accessible.

(C) Number and locations for sampling sites that meet the requirements of paragraph (l)(2).

(D) The Executive Officer shall notify the owner or operator in writing of whether the Lead Ambient Air Monitoring and Sampling Plan has been approved or disapproved.

(i) Determination of approval status shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in subparagraphs (l)(1)(A) through (l)(1)(C).

(ii) If the Lead Ambient Air Monitoring and Sampling Plan is disapproved, the owner or operator shall resubmit the plan, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the plan. The resubmitted plan shall include any information necessary to address deficiencies identified in the disapproval letter. A facility shall be in violation of the rule after a second successive denial of the Lead Ambient Air Monitoring and Sampling Plan.

(iii) If the resubmitted plan is denied, the owner or operator may appeal the denial to the Hearing Board under Rule 216 – Appeals and Rule 221 – Plans.

(2) No later than 90 days after the approval of a Lead Ambient Air Monitoring and Sampling Plan, the owner of a lead processing or metal melting facility shall install monitors and conduct ambient air lead monitoring and sampling as follows:

(A) Collect samples from a minimum of two (2) sampling sites. Locations for sampling sites shall be approved by the Executive Officer.

(B) Locations for sampling sites shall be based on maximum expected ground level concentrations, at or beyond the property line, as determined by Executive Officer-approved air dispersion modeling calculations and emissions estimates from all lead point sources and fugitive lead-dust sources, and other factors including, but not limited to, population exposure and seasonal meteorology.

(C) The Executive Officer may require one or more of the sampling sites to be at locations that are not based on maximum ground level lead concentrations, and that are instead at locations at or beyond the property line that are representative of upwind or background concentrations.

(D) Sampling sites at the property line may be located just inside the fence line on facility property if logistical constraints preclude placement outside the fence line at the point of maximum expected ground level lead concentrations.

(E) The Executive Officer may require a facility to relocate existing monitors or install additional monitors to those required under subparagraph (l)(2)(A) in order to measure ambient air lead concentrations at locations that may contribute to the exceedance of an ambient air lead concentration limit specified in subdivision (d), if information becomes available showing:

(i) A new or existing source of lead emissions that was not previously identified or fully disclosed;

(ii) An increase in lead emissions from an existing source where existing monitors are not capturing the potential ambient air lead concentration; or

(iii) That none of the existing monitors are capturing the maximum expected ground level lead concentration.

(3) All facilities required to conduct ambient monitoring pursuant to paragraphs (e)(4) and (l)(2), shall collect one valid 24-hour, midnight-to-midnight sample at least once every six calendar days, on a schedule approved by the Executive Officer.

(4) If a valid 24-hour, midnight-to-midnight sample was not collected due to a monitor malfunction or other occurrence beyond the control of the facility, the owner or operator shall:

(A) Report with a notification made to 1-800-CUT-SMOG within two (2) hours of knowing that the valid 24-hour, midnight-to-midnight sample was not collected, providing the facility name, name of the monitor, date of the occurrence, and reason that the valid 24-hour, midnight-to-midnight sample was not collected; and

(B) For each of the monitors, the operator shall not miss a valid 24-hour, midnight-to-midnight sample for more than one day over a consecutive 30-day period.

(5) The owner or operator of a lead processing or metal melting facility shall submit samples collected pursuant to this subdivision to a laboratory approved under the SCAQMD Laboratory Approval Program for analysis within five calendar days of collection and calculate ambient lead concentrations for individual valid 24-hour samples within 15 calendar days of the end of the calendar month in which the samples were collected. Split samples shall be made available and submitted to the SCAQMD upon request by the Executive Officer.

(6) Sample collection for lead shall be conducted using Title 40, CFR 50 Appendix B - *Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method)*, or U.S. EPA-approved equivalent methods, and sample analysis for lead shall be conducted using Title 40, CFR 50 Appendix G - *Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air*, or U.S. EPA-approved equivalent methods.

(7) Continuously record wind speed and direction on sampling days using equipment approved by the Executive Officer at a minimum of one location approved by the Executive Officer.

(8) Ambient air monitoring shall be conducted by persons approved by the Executive Officer, or facility personnel trained and certified to conduct ambient air monitoring demonstrated through successful completion of a course offered or approved by the Executive Officer. Sampling equipment shall be operated and maintained in accordance with U.S. EPA-approved equivalent methods.

(9) Cleaning activities including, but not limited to, wet washing and misting, that could result in damage or biases to samples collected shall not be conducted within 10 meters of any sampling site required under this subdivision.

(10) Beginning no later than 90 days after a Lead Ambient Air Monitoring and Sampling Plan as required by subdivision (l), is approved by the Executive Officer, the owner or operator of a lead processing facility shall report by the 15th of each month to the Executive Officer, the results of all ambient air lead and wind monitoring for each preceding month, or more frequently if determined necessary by the Executive Officer. The report shall include the results of individual valid 24-hour samples and 30-day rolling averages for each day within the reporting period.

(11) Any exceedances of ambient air lead concentrations specified in subdivision (d) shall be reported with a notification made to the 1-800-CUT-SMOG within seven (7) calendar days of receipt of the completed sample analysis required in paragraph (l)(6), followed by a written report to the Executive Officer no later than three (3) calendar days after the notification. The written report shall include the potential causes of the exceedance and the specific corrective actions implemented.

~~(k)~~(m) Exemptions

~~(1) Lead-processing facilities processing 2 tons or less of lead per year shall be exempt from subdivisions (e), (f), (g) and (h), and paragraphs (i)(2) and (i)(3) of this rule, provided the owner or operator demonstrates eligibility for this exemption to the satisfaction of the Executive Officer.~~

~~(2) Lead-processing facilities processing more than 2 tons of lead per year and with maximum daily lead emissions of less than 0.5 pound per day from all emission points and fugitive dust sources, as determined by a compliance plan approved by the Executive Officer and submitted pursuant to subdivision (f), recordkeeping pursuant to subdivision (i), and all other~~

~~District reporting requirements, shall be exempt from paragraphs (e)(1), (e)(2), (e)(5), (e)(6), and subdivisions (g) and (h) of this rule.~~

(1) A facility that processes materials with a monthly weighted average lead content of 0.05 percent or less is exempt from the requirements of this rule provided it maintains records consistent with (i)(2) for purposes of establishing ~~*their entitlement*~~ **the applicability of** ~~*to*~~ the exemption.

(2) Hand soldering operations are exempt from the requirements of this rule.

(3) Maintenance and repair activities, except for those associated with emission collection systems and emission control devices, and except any activities pursuant to subdivisions (g) and (h) that generate or have the potential to generate fugitive lead-dust, are exempt from the requirements of this rule.

(4) Lead Minimization

(A) If the owner or operator of a lead processing or metal melting facility that is otherwise subject to all provisions of this rule, obtains a permit condition limiting the amount of lead processed at the facility to two (2) tons per year or less, that facility shall only be subject to paragraphs (d)(1) and (d)(2) and subdivisions (h) and (i) of the rule

(B) If the owner or operator of a lead processing or metal melting facility that is otherwise subject to all provisions of this rule or only the provisions pursuant to paragraphs (d)(1) and (d)(2) and subdivisions (h) and (i) of the rule, obtains a permit condition limiting the lead content of the materials processed to less than or equal to 0.05 percent, that facility shall only be subject to subdivision (i) of the rule.

(5) Ambient Air Monitoring Relief Plan

An owner or operator of a lead processing or metal melting facility that demonstrates ambient air lead concentration levels of less than or equal to 0.07 $\mu g/m^3$ averaged over 30 consecutive days for 365 days, measured during normal conditions that are representative of the facility, may be exempt from the ambient air monitoring requirements set forth in subdivision (l) upon Executive Officer approval of an Air Monitoring Relief Plan, subject to plan fees specified in Rule 306 **– Plan Fees**, which shall be granted if the plan contains all of the following:

(A) Air dispersion modeling analysis that demonstrates an ambient air lead concentration that is less than or equal to 0.07 $\mu g/m^3$ averaged

over 30 consecutive days that is representative of normal facility operations;

(B) One year of ambient air lead monitoring data without a single 30 consecutive day average exceeding an ambient air lead concentration of 0.07 µg/m^3; **and**

(C) Most recent source tests approved by the SCAQMD that demonstrate a total facility mass lead emission rate from all lead point sources of less than 0.040 pound per hour. The total facility mass lead emissions shall be determined based on the sum of the average of triplicate samples for each lead point source, using the most recently approved source tests conducted on behalf of the facility or the SCAQMD, pursuant to subdivision (j).

(6) Rules 1420.1 and 1420.2

The owner or operator of a lead processing or metal melting facility subject to the requirements of Rules 1420.1 - Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities and 1420.2 - Emission Standards for Lead from Metal Melting Facilities, shall be exempt from the requirements of this rule.

Appendix 1 - Smoke Test to Demonstrate Capture Efficiency for Ventilation Systems of (an) Emission Control Device(s) Pursuant to Paragraph (k)(5).

1. Applicability and Principle

1.1 Applicability. This method is applicable to all point sources where an emission control device is used to capture and control emissions from lead processing operations.

1.2 Principle. Collection of emissions from lead processing sources is achieved by the ventilation system associated with the emission control device for lead processing equipment. Emission control efficiency at the exhaust of an emission control device is related to capture efficiency at the inlet of the ventilation system. For this reason, it is imperative that 100% capture efficiency is maintained. A smoke device placed within the area where collection of emissions by the ventilation system occurs reveals this capture efficiency.

2. Apparatus

2.1 Smoke Generator. The smoke generator shall be adequate to produce a persistent stream of visible smoke (e.g., Model S102 Regin Smoke Emitter Cartridges). The smoke generating device should not provide excessive momentum to the smoke stream that may create a bias in the determination of collection efficiency. If the device provides slight momentum to the smoke stream, it shall be released perpendicular to the direction of the collection velocity.

3. Testing Conditions

3.1 Equipment Operation. Any equipment to be smoke tested that is capable of generating heat as part of normal operation must be smoke tested under those normal operating conditions. Operating parameters of the equipment during the smoke test shall be recorded. The smoke test shall be conducted while the emission control device is in normal operation. The position of any adjustable dampers that can affect air flow shall be documented. Precautions should be taken by the facility to evaluate any potential physical hazards to ensure the smoke test is conducted in a safe manner.

3.2 Cross-Draft. The smoke test shall be conducted while the emission control device is in normal operation and under typical draft conditions representative of the facility's

lead processing operations. This includes cooling fans and openings affecting draft conditions around the metal grinding area including, but not limited to, vents, windows, doorways, bay doors, and roll-ups, as well as the operation of other work stations and traffic. The smoke generator must be at full generation during the entire test and operated according to manufacturer's suggested use.

4. Procedure

4.1 Collection Slots. For work stations equipped with collection slots or hoods, the smoke shall be released at points where lead processing emissions are generated (e.g. the point where melting occurs). Observe the collection of the smoke to the collection location(s) of the ventilation system. An acceptable smoke test shall demonstrate a direct stream to the collection location(s) of the ventilation system without meanderings out of this direct path. Smoke shall be released at points not to exceed 12 inches apart across ventilated work areas. Record these observations at each of the points providing a qualitative assessment of the collection of smoke to the ventilation system.

4.2 Equipment Enclosures. Equipment enclosures include equipment where emissions are generated inside the equipment, and the equipment is intended to have inward air flow through openings to prevent the escape of process emissions. The smoke shall be released at points outside of the plane of the opening of the equipment, over an evenly spaced matrix across all openings with points not to exceed 12 inches apart. Observe the inward movement of the smoke to the collection location(s) of the ventilation system. An acceptable smoke test shall demonstrate a direct stream into the equipment without meanderings out of this direct path. Record these observations at each of the points providing a qualitative assessment of the collection of smoke to the ventilation system.

5. Documentation. The smoke test shall be documented by photographs or video at each point that clearly show the path of the smoke. Documentation shall also include a list of equipment tested and any repairs that were performed in order to pass the smoke test. As previously discussed, the documentation shall include the position of adjustable dampers, cross-draft conditions, and the heat input of the equipment, if applicable. The documentation shall be signed and dated by the person performing the test. The records shall be maintained on site for at least two years and be made available to SCAQMD personnel upon request.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report
Proposed Amended Rule 1420 – Emissions Standard for Lead

December 2017

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EXECUTIVE SUMMARY

Rule 1420 was adopted approximately twenty-five years ago in September 1992 with the purpose of reducing lead emissions from non-vehicular sources. At the time of rule adoption, the National Ambient Air Quality Standard (NAAQS) for lead, previously established in 1978, was 1.5 $\mu g/m^3$ averaged over a calendar quarter. However, in 2008, the lead NAAQS was reduced ten-fold to 0.15 $\mu g/m^3$ averaged over 90 days based on more than 6,000 new health studies that were conducted since 1990. These studies identified lead as a probable carcinogen and showed that adverse health effects occurred at much lower levels than previously recognized. Studies also showed that children were found to be most vulnerable to lead exposure with low levels of exposure linked to poor IQ, learning, and memory in children. A broad range of health effects are also associated with lead exposure for both children and adults. In children, lead affects the nervous system and weakens their immune systems; whereas in adults lead exposure was found to cause increased blood pressure, cardiovascular disease and decreased kidney function.

On December 31, 2010, EPA designated a portion of Los Angeles County as nonattainment for the 2008 lead NAAQS based on exceedances at two (2) source-specific monitors located in Vernon and the City of Industry. These exceedances along with the revision of the lead NAAQS resulted in the SCAQMD Governing Board ~~*amending*~~adopting Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants at Large Lead-Acid Battery Recycling Facilities and adoption of a 2012 lead State Implementation Plan (SIP), which committed to a control measure to amend Rule 1420, lowering the lead concentration limit to 0.150 $\mu g/m^3$, and retaining a more stringent averaging period of a 30-day rolling average. Subsequently, SCAQMD staff was faced with the task of revising Rule 1420 to address a universe consisting of several different types of industries. To simplify the rulemaking task and to address the major lead contributors, staff adopted Rule 1420.2 in 2015 to address a subset of the Rule 1420 universe consisting of 13 large metal melting facilities, that each melt greater than 100 tons of lead per year.

Since the adoption of Rule 1420 and subsequent adoptions of Rules 1420.1 and 1420.2, there has been a considerable amount of source testing and monitoring conducted at lead processing and lead melting facilities. Stack testing has shown that lead emission control equipment has improved considerably to the point that achieving lead control efficiencies of 99 percent or greater is standard. It has also been discovered that fugitive emissions are a far greater contributor to lead emissions monitored at or beyond the fence line of lead processing and lead melting facilities. This factor has triggered a greater need for Proposed Amended Rule (PAR) 1420 to place more emphasis on expanding housekeeping requirements and for lead operations to be conducted in total enclosures.

In order to maintain consistency with Rules 1420.1 and 1420.2, PAR 1420 will require facilities to maintain ambient lead concentration limits below 0.150 $\mu g/m^3$ averaged over 30 consecutive days, upon rule adoption until December 31, 2020. On and after January 1, 2021, facilities will be required to maintain ambient lead concentration below 0.100 $\mu g/m^3$ averaged over 30 consecutive days. Establishing an ambient air lead concentration limit that is even less than the lead NAAQS is more health protective for communities that live around lead processing facilities, particularly for younger children. A detailed discussion with substantial scientific information and data is

presented in Chapter 1, Section "Justification for Lowering Ambient Air to 0.100 μg/m^3". This discussion is based on EPA's development of the 2008 Lead NAAQS and the 2016 Final Decision to Retain the Current Lead NAAQS evidence-based framework and supports the SCAQMD policy decision to set the ambient lead concentration limit at 0.100 μg/m^3\effective January 1, 2021.

Unlike Rules 1420.1 and 1420.2, PAR 1420 will not require mandatory ambient air monitoring, although conditional ambient air monitoring will be required if SCAQMD monitors detect an exceedance of the lead ambient concentration limit of 0.150 ug/m^3 averaged over any 30 days or applicable facilities fail two point source tests over a 36 month period. Source testing will be required on a biennial basis with testing frequency further reduced to quadrennial (from the date of the test) if a test determines that outlet emissions are less than 0.00015 pounds per hour. The rule amendment provides additional incentives for facilities by allowing owners or operators to test the stack outlet only to demonstrate lead emissions of less than 0.0003 pounds per hour, subsequent to the initial performance test of the control equipment. In addition, PAR 1420 establishes requirements for total enclosures where lead processing occurs, enhanced housekeeping measures, air pollution control device monitoring, and recordkeeping requirements.

PAR 1420 applies to lead processing and metal melting facilities as defined in the rule, in the SCAQMD that process materials that contain greater than 0.05% lead content by weight on average, calculated on a monthly basis. All requirements of PAR 1420 will apply to lead processing and metal melting facilities that process greater than 2 tons of lead per year. However, owners or operators that process 2 tons of lead per year or less will only be subject to the conditional ambient monitoring and sampling, housekeeping and recordkeeping requirements of the rule amendment. A summary of the applicability thresholds and rule amendment requirements are provided in Table ES-1, below:

Table ES-1. Summary of Applicability Thresholds and Requirements

Applicability Thresholds		Requirements
% Lead (1)	**Processing Rate (tons of lead per year)**	
≤ 0.05%	Any	• Exempt from ~~all~~ rule requirements
> 0.05%	2 tons or less	• Housekeeping • Recordkeeping • Conditional Ambient Monitoring and Sampling ○ Executive Officer Determination to Conduct Ambient Air Monitoring
> 0.05%	Greater than 2 tons	• Housekeeping • Recordkeeping • Conditional Ambient Monitoring and Sampling ○ Executive Officer Determination to Conduct Ambient Air Monitoring • Lead Point Source Emissions Control • Source Testing • Total Enclosures • Emission Control Device Monitoring

(1): A facility will be subject to the rule if the 0.05% lead content threshold is exceeded for any raw material during one month of the year and the lead processing rate for that year will be based on all raw materials used during the year

PAR 1420 will address lead emissions from lead smelters, foundries, smaller lead-acid battery manufacturers and recyclers, lead-oxide, brass, and bronze producers, and metal melting facilities. Of the 107 known facilities subject to PAR 1420, 92 facilities are associated with the manufacture of printed circuit boards, semiconductors, and other electronic components. Based on initial estimates these facilities are expected to process less than 2 tons of lead per year and will only be subject to the conditional ambient monitoring and sampling, housekeeping and recordkeeping provisions. Also, at the majority of the electronic-related businesses, the temperatures to which lead is heated are not substantial enough to promote vaporization and facilities in this category that were visited were found to already exercise good housekeeping practices.

The proposed amendments will implement the 2016 Air Quality Management Plan Control Measure TXM-07 (Control of Lead Emissions from Stationary Sources) and will be incorporated into the State Implementation Plan.

CHAPTER 1: BACKGROUND

INTRODUCTION
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INTRODUCTION

On October 15, 2008, the U.S. Environmental Protection Agency (EPA) amended both the primary (health-based) and secondary (welfare-based) NAAQS for lead from a level of 1.5 µg/m^3 averaged over a calendar quarter to 0.15 µg/m^3 averaged over a rolling 3-month period based on studies that demonstrate health effects at much lower levels of lead exposure than previously believed. The purpose of Proposed Amended Rule 1420 – Emissions Standard for Lead (PAR 1420) is to protect public health by reducing lead emissions from lead processing facilities which will minimize exposure to lead emissions from these facilities and ensure attainment and maintenance of the National Ambient Air Quality Standard (NAAQS) for lead. The new standard provides increased protection for children and other at-risk populations against an array of health effects, most notably neurological effects in children, including neurocognitive and neurobehavioral effects.

REGULATORY HISTORY

Rule 1420 was adopted in September 1992 and has not been amended since its adoption. Rule 1420 applies to facilities that process or use lead-containing materials. These include, but are not limited to, primary or secondary lead smelters, foundries, lead-acid battery manufacturers or recyclers, and lead-oxide, brass and bronze producers. Rule 1420 includes an ambient air quality standard of 1.5 µg/m^3 averaged over a 30-day period. As a result, the rule needs to be updated to reflect the current NAAQS of 0.15 µg/m^3. The rule includes requirements for point source controls, monitoring, sampling, recordkeeping, and reporting. Rule 1420 currently requires facilities that process more than two tons of lead per year to submit a Compliance Plan that provides information on how the facility will conduct monitoring, conduct air dispersion modeling, and implement requirements to install and implement point source controls.

Since the adoption of Rule 1420 in 1992, an abundance of new and updated information including, but not limited to, lead emissions data, ambient air monitoring data and emissions control techniques has become available. Ambient air quality data from 2007-2009 indicated a violation of the 2008 NAAQS near a large lead-acid battery recycling facility, and highlighted the need to establish stricter requirements for lead sources that were regulated under Rule 1420. Rule 1420 applied to a broad category of lead emitting sources where the control requirements would be generally the same, but larger sources with the potential of greater lead emissions needed additional requirements. As a result, two rules that represented the two largest subcategories of Rule 1420 were developed: Rule 1420.1 – Emission Standards for Lead and Large Lead-Acid Battery Recycling Facilities was adopted on November 5, 2010 and Rule 1420.2 – Emission Standards for Lead from Metal Melting Facilities was adopted on October 2, 2015. Rule 1420.1 applies to large lead-acid battery recycling facilities. However, currently there is only one such facility operating in the Basin. Rule 1420.2 addresses 13 of the largest metal melting facilities that each melt in excess of 100 tons of lead per year. Proposed Amended Rule (PAR) 1420 applies to the remaining lead emitting sources where the lead content of the material processed is greater than 0.05 percent by weight on average.

Lead sources have also been regulated by the California Air Resources Board and U.S. EPA. In January 1993, CARB adopted the Airborne Toxic Control Measure for Emissions of Toxic Metals from Non-Ferrous Metal Melting. The state regulation requires control devices for lead and other toxic metal emission point sources, control efficiency requirements for control devices, fugitive

emission control, and recordkeeping. In June 1997, the U.S. EPA adopted the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Secondary Lead Smelting. The federal regulation requires lead emission concentration limits for lead control devices, control of process fugitive emissions, monitoring, recordkeeping, and reporting. On July 16, 2007, EPA finalized a regulation affecting lead emissions from all lead-acid battery manufacturing facilities, several of which are regulated under Rule 1420.2. The federal regulation requires lead emission concentration limits, testing, monitoring, recordkeeping, and reporting requirements.

COMPLIANCE WITH THE LEAD NAAQS

In 1970, the California Air Resources Board (CARB) established a state ambient air quality standard for lead of 1.5 µg/m^3 averaged over 30 days. In October 1978, the U.S. EPA adopted the NAAQS for lead, requiring attainment with a lead ambient concentration of 1.5 µg/m^3 averaged over a calendar quarter. Thirty years after promulgation of lead NAAQS, U.S. EPA lowered the lead NAAQS to 0.15 µg/m^3 averaged over a rolling 3-month period.

On December 31, 2010, the EPA designated a portion of Los Angeles County as non-attainment for the 2008 NAAQS for lead based on monitored air quality data from 2007-2009 that indicated a violation of the NAAQS near a large lead-acid battery recycling facility. SCAQMD Rule 1420.1 – Emission Standards for Lead from Large Lead-acid Battery Recycling Facilities was adopted on November 5, 2010 to control emissions of lead from large lead-acid battery recycling facilities in order to reduce lead emissions and help ensure and maintain attainment with the 2008 NAAQS for lead of 0.15~~0~~ µg/m^3.

In 2012, the SCAQMD Governing Board adopted the lead State Implementation Plan (SIP) and committed to a control measure to amend Rule 1420, which was adopted in September 1992, in addition to a more stringent averaging period of a 30-day rolling average. The SCAQMD partially addressed the control measure commitment through the adoption of Rule 1420.2 in October 2015, which addressed 13 of the largest metal melting facilities that each melt in excess of 100 tons of lead per year and the amendments to Rule 1420.1 in 2014 and 2015. Rules 1420.1 and 1420.2 combined, addressed 15 of the largest lead sources in the SCAQMD, but there are other smaller sources that have not been addressed under the new lead NAAQS. Although existing federal and state regulations also control lead emissions from this source category, additional requirements similar to those that have effectively reduced emissions from large lead-acid battery recyclers and metal melting facilities would more adequately protect public health. Therefore, PAR 1420 seeks to address these facilities with the objective to further protect public health by minimizing public exposure to lead emissions and preventing exceedances of the 2008 lead NAAQS in the Basin.

PUBLIC PROCESS

PAR 1420 is being developed through a public process. A working group was formed to provide the public and stakeholders an opportunity to discuss the proposed rule amendment and provide the SCAQMD staff with important input during the rule development process. The working group and interested parties are comprised of a variety of stakeholders including representatives from industry, consultants, environmental groups, community groups, and public agency representatives. The SCAQMD staff has held four (4) working group meetings. To date, the working group has convened on March 8, 2017, May 31, 2017, July 6, 2017, and September 20, 2017. A Public Workshop was held on September 7, 2017 to present the proposed rule and

receive public comment. Response to comments that were received can be found in Appendix A of this document.

LEAD

Lead is a naturally occurring metal found in the earth's crust. The metal is grayish in color and is soft, malleable, and ductile. It is also a limited electrical conductor and highly impervious to corrosion. This unique combination of physical properties has made it desirable for many uses in industries such as construction, piping, roofing, and lead-acid storage battery manufacturing. As a result, some business operations solely recover lead from lead-bearing materials through secondary smelting operations for use in the abovementioned industries. For some industries, lead is undesirable and considered an impurity to its final product. Lead for these industries results from the melting of recycled scrap metal that either contains trace amounts of lead, or inadvertently enters the process even after inspection to identify scrap metal that may contain lead.

Lead can be released into the ambient air in the form of particles that fall out onto the ground or other surfaces by rain or gravitational settling. Lead is strongly adsorbed in the soil and is generally retained in the upper layers where it does not leach appreciably into the subsoil and groundwater. Lead compounds can be converted to other lead compounds in the environment; however, lead is an element and cannot be destroyed. Because lead does not degrade, previous uses of lead and its releases into the ambient air result in high concentrations of lead that persist in the environment.

Lead is a persistent pollutant, and once deposited out of the air, lead can subsequently be resuspended in the ambient air. In addition, because of the persistence of lead, lead emissions contribute to, in sufficient concentrations across multiple pathways, and cause impacts for some years into the future (73 FR 66971). This cycling of lead in the environment means people can be exposed to lead that was emitted just yesterday or emitted years ago (EPA, 2014). Furthermore, lead emitted into the air is predominantly in particulate form, which can be transported over long or short distances depending on particle size (73 FR 66971).

Thus, lead can affect communities surrounding lead melting facilities as well as those not immediately adjacent to these facilities. Reducing the ambient lead concentration limit to 0.100 $\mu g/m^3$ will minimize lead emissions from lead melting facilities from being directly inhaled as lead particulates, and further reduce the accumulation of lead dust on surfaces and in the soil that can over time re-enter the air through re-suspension.

HEALTH EFFECTS OF LEAD

Lead is classified as a "criteria pollutant" under the federal Clean Air Act. The OEHHA also identifies it as a carcinogenic TAC. Chronic health effects include problems such as nervous and reproductive system disorders, neurological and respiratory damage, cognitive and behavioral changes, and hypertension. Exposure to lead can also potentially increase the risk of contracting cancer. Lead is a multipathway toxic air contaminant. Exposure to lead emitted into the ambient air (air-related lead) can occur directly by inhalation, or indirectly by ingestion of lead-contaminated food, water or other materials including dust and soil. These exposures occur as lead emitted into the ambient air is distributed to other environmental media such as water or land. The emissions can contribute to human exposures via indoor and outdoor dusts, outdoor soil, and food and drinking water, as well as inhalation of air (73 FR 66971). Multiple studies of the

relationship between lead exposure and blood lead in children have shown young children's blood lead levels to reflect lead exposures from ambient air levels, as well as exposure due to lead in surface dust (EPA, 2014). Young children are especially susceptible to the effects of environmental lead because their bodies accumulate lead more readily than do those of adults, and because they are more vulnerable to certain biological effects of lead including learning disabilities, behavioral problems, and deficits in IQ.

JUSTIFICATION FOR LOWERING AMBIENT AIR TO 0.100 μg/m^3

SCAQMD staff is proposing that the final ambient concentration be set at 0.100 μg/m^3 for Proposed Amended Rule 1420, consistent with the ambient lead concentration limit in Rules 1420.1 and 1420.2. During the rulemaking for Rules 1420.1 and 1420.2, SCAQMD staff provided the justification for an ambient concentration lead limit of 0.100 μg/m^3. As discussed below, the SCAQMD staff relied on the EPA's 2008 review of the Lead NAAQS and the EPA's 2016 Final Decision to Retain the National Ambient Air Quality Standards (NAAQS) for Lead (Pb) (EPA, 2016) to retain the current Lead NAAQS as the basis for establishing the 0.100 μg/m^3 ambient lead limit. An ambient concentration limit of 0.100 μg/m^3 is supported by scientific information presented during the development of the 2008 Lead NAAQS and the EPA's Final Decision to Retain the Current Lead NAAQS. The following discusses the general approach and key assumptions that were the basis of EPA's evaluation of the Lead NAAQS. As explained in more detail below, establishing an ambient concentration limit of 0.100 μg/m^3, the SCAQMD made policy decisions that are more protective of human health than the choices made by EPA in proposing to retain an ambient concentration limit of 0.15 μg/m^3. In particular, the SCAQMD staff proposes a more prophylactic approach for protecting the health of children, particularly those under five years of age, that live in communities near lead metal facilities in the Basin.

Establishing the 2008 Lead NAAQS and EPA's 2016 Final Decision to Retain the Current Lead NAAQS

The 2008 Lead NAAQS and EPA's 2016 Final Decision to Retain the Current Lead NAAQS reflect an evidenced-based framework that took into consideration the much-expanded evidence on the neurocognitive health effects of lead in children. EPA focused on the developmental neurotoxicity in children, with IQ decrement as the risk metric. After examining the wide variety of health endpoints associated with lead exposures, EPA concluded that "there is general consensus that the developing nervous system in young children is the most sensitive and that neurobehavioral effects (specifically neurocognitive deficits), including IQ decrements, appear to occur at lower blood levels than previously believed (i.e., at levels <10 μg/dL)" (EPA, 2008).

In establishing the lead NAAQS, the EPA used an evidence-based framework, referred to as the air-related IQ loss framework, which shifts focus from identifying an appropriate target population mean blood lead level and instead focuses on the magnitude of effects of air-related lead on neurocognitive functions such as IQ loss (73 FR 66971). The two primary inputs to EPA's evidence-based, air-related IQ loss framework are air-to blood ratios and concentration-response (C-R) functions for the relationship between blood lead and IQ response in young children. The framework derives estimates of mean air-related IQ loss through multiplication of the following factors:

- Ambient lead standard level (μg/m^3),

- Air-to-blood ratio in terms of µg/dL blood lead per µg/m^3 air concentration, and
- Slope for the concentration-response (C-R) function in terms of points IQ decrement per µg/dL blood lead.

Application of the framework also entailed consideration of an appropriate level of protection from air-related IQ loss to be used in conjunction with the framework, such as an average level of IQ loss and an adequate margin of safety. The framework provides for estimation of a mean air-related IQ decrement for young children in the high end of the national distribution of air-related exposures. It does so by focusing on children exposed to air-related lead in those areas with elevated air lead concentrations equal to specific potential standard levels (EPA, 2014).

Air-to-Blood Level Ratio

The air-to-blood level ratio represents the relationship between the lead concentration in the air measured in µg/m^3 and the associated blood lead level measured in µg/deciliter (µg/dL). A ratio of 1:5 means that 1 µg/m^3 increase of lead in the air will result in a blood lead level of 5 µg/dL for a given population. In the 2008 Lead NAAQS and EPA's 2016 Rule to Retain the Current Lead NAAQS, EPA concluded that for each µg/m^3 increase of lead in air, children's blood lead levels increase by 5–10 µg/dL, i.e., the air-to-blood ratio ranged from 1:5 to 1:10. EPA selected an air-to-blood ratio of 1:7 "as a generally central value within this range." (73 FR 67002-67004).

Concentration-Response Functions

In establishing the 2008 Lead NAAQS and the EPA's 2016 Final Decision to Retain the Current Lead NAAQS, EPA considered the evidence regarding the quantitative relationships between IQ loss and blood lead levels. EPA focused on those concentration-response functions that are based on blood lead levels which most closely reflect today's population of children in the U.S., although recognizing that the evidence does not include analyses involving mean blood lead levels as low as the mean blood lead level for today's children. EPA identified four analyses that have a mean blood lead level closest to today's mean for U.S. children; these yielded four slopes ranging from -1.56 to -2.94, with a median of -1.75 IQ points per µg/dL. In addition, the EPA Administrator determined that it is appropriate to give more weight to the central estimate for this set of functions, which is the median of the set of functions, and not to rely on any one function (73 FR 67003-67004).

IQ Decrement

EPA also concluded that the concentration-response relationship between blood level and IQ loss is nonlinear, with greater incremental IQ loss occurring at lower blood lead levels. Accordingly since studies show that the average lead blood levels for children in the United States has decreased over the years, and that even at these lower levels there are significant neurocognitive impacts such as IQ loss, the analyses of children with blood lead levels closest to those of children in the United States today were most relevant. In selecting the lead NAAQS, the EPA Administrator concluded that, "an air-related IQ loss of 2 points should be used in conjunction with the evidence-based framework in selecting an appropriate level for the standard." (73 FR 67002 - 67005).

Establishing the 2008 Lead NAAQS

Table 1-1 summarizes the estimates of air-related mean IQ loss for children exposed to various ambient air lead concentrations and was used in establishing the 2008 Lead NAAQS. As previously discussed, EPA's evidence-based air-related IQ loss framework found that the air-to-

blood ratio ranged from 1:10 to 1:5 and the EPA Administrator selected a 1:7 air-to-blood ratio as a generally central value within this range. Based on an air-to-blood ratio of 1:7 and use of a mean air-related IQ loss of no more than 2 points, EPA selected an ambient lead concentration limit of 0.15 μg/m^3 (see highlighted box in Table 1-1). At this level, children's IQ levels would be decreased by 1.8 points, assuming a 1:7 air to blood ratio. At an ambient lead concentration of 0.10 μg/m^3, children's IQ level would be decreased by 1.2 points using the same 1:7 air to blood level ratio assumption.

Table 1-1
Estimates of Air-Related Mean IQ Loss for the Subpopulation of Children Exposed at the Level of the Standard – Highlighting an Ambient Lead Concentration Limit of 0.15*θ* μg/m^3 (Source: 73 FR 67005 and 67006)

Potential level for standard (μg/m³)	Air-related mean IQ loss (points) for the subpopulation of children exposed at level of the standard		
	IQ loss estimate is based on median slope of 4 C–R functions with blood Pb levels closer to those of today's U.S. children (range shown for estimates based on lowest and highest of 4 slopes)		
	Air-to-blood ratio		
	1:10	1:7	1:5
0.50	>5*	>5*	4.4 (3.9–7.4)
0.40		4.9 (4.4–8.2)	3.5 (3.1–5.9)
0.30	5.3 (4.7–8.8)	3.7 (3.3–6.2)	2.6 (2.3–4.4)
0.25	4.4 (3.9–7.4)	3.1 (2.7–5.1)	2.2 (2.0–3.7)
0.20	3.5 (3.1–5.9)	2.5 (2.2–4.1)	1.8 (1.6–2.9)
0.15	2.6 (2.3–4.4)	1.8 (1.6–3.1)	1.3 (1.2–2.2)
0.10	1.8 (1.6–2.9)	1.2 (1.1–2.1)	0.9 (0.8–1.5)
0.05	0.9 (0.8–1.5)	0.6 (0.5–1.0)	0.4 (0.4–0.7)
0.02	0.4 (0.3–0.6)	0.2 (0.2–0.4)	0.2 (0.2–0.3)

*For these combinations of standard levels and air-to-blood ratios, the appropriateness of the C–R function applied in this table becomes increasingly uncertain such that no greater precision than ">5" for the IQ loss estimate is warranted.

At a level of 0.15 μg/m^3, the Administrator recognized that use of a 1:10 ratio produces an estimate greater than 2 IQ points and use of a 1:5 ratio produces a lower IQ loss estimate. Given the uncertainties and limitations in the air-related IQ loss framework, the Administrator decided to place primary weight on the results from this central estimate (1:7 ratio) rather than estimates derived using air-to-blood ratios either higher or lower than this ratio (73 FR 67005).

The 2014 Policy Assessment concluded that, "The limited amount of new information available in this review has not appreciably altered the scientific conclusions reached in the last review regarding relationships between Pb in ambient air and Pb in children's blood or with regard to the range of ratios." As a result, the EPA Administrator is recommending to maintain the central estimate of 1:7 rather than estimates derived using higher air-to-blood ratios.

Selecting a 0.100 μg/m^3 Ambient Lead Limit for PAR 1420

PAR 1420 requires an ambient lead concentration limit of 0.150 μg/m^3 and then to 0.100 μg/m^3 effective January 1, 2021. This is a policy decision that is supported by the same evidence-based framework used to establish the 2008 Lead NAAQS and EPA's 2016 Rule to Retain the Current Lead NAAQS.

In developing the 2008 Lead NAAQS, EPA recognized that policy judgments must be made regarding the level of health protection and margin of safety. The available evidence supports a range of choices in setting that level. In reviewing all of the scientific information through the

development of the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS, the EPA Administrator made a series of policy decisions. For example, a "central value" between 1:10 and 1:15 to represent the air-to-blood lead ratio and a decrement of 2 IQ points, all within the evidence-based framework for establishing a "national" standard for ambient lead were used. The 2014 Policy Assessment for Review of the Lead NAAQS maintained the same approach and range of ratios stating that, "The limited amount of new information available in this review has not appreciably altered the scientific conclusions reached in the last review regarding relationships between lead in ambient air and lead in children's blood or with regard to the range of ratios. The currently available evidence continues to indicate ratios relevant to the population of young children in U.S. today, reflecting multiple air-related pathways in addition to inhalation, to be generally consistent with the approximate range of 1:5 to 1:10 given particular attention in the 2008 NAAQS decision, including the "generally central estimate" of 1:7." In doing so, the EPA Administrator recognized that:

> "…there are currently no commonly accepted guidelines or criteria within the public health community that would provide a clear basis for reaching a judgment as to the appropriate degree of public health protection that should be afforded to protect against risk of neurocognitive effects in sensitive populations, such as IQ loss in children." (73 FR 67004).

EPA further acknowledged that "different public health policy judgments could lead to different conclusions regarding the extent to which the current standard provides projection of public health with an adequate margin of safety." (EPA, 2014).

The NAAQS is a national standard for lead which applies uniformly to all parts of the United States, whereas PAR 1420 is a source-specific rule that regulates specific lead processing facilities. By establishing an ambient lead limit of 0.100 $\mu g/m^3$, and implementing other requirements in PAR 1420, the rule amendment is designed to minimize the release of point source and fugitive lead emissions from lead processing facilities, thereby minimizing the accumulation of lead on soil surface and in soil dust, which will potentially be more health protective. The proposed level considers communities with children living in close proximity to lead processing facilities, and it provides additional protection for the population most at-risk from lead emissions: pre-school children under the age of five. EPA has specifically recognized the significant health risks posed in this instance: "…situations of elevated exposure, such as residing near sources of ambient lead can also contribute to increased blood lead levels and increased risk of associated health effects from air-related lead." (73 FR 66976).

As discussed below, the EPA Administrator made a series of policy decisions based on evidenced-based air-related IQ loss framework. Two policy decisions that the SCAQMD staff has focused on are the air-to-blood lead ratio and the IQ decrement, particularly as these issues relate to PAR 1420 as a source-specific rule. In addition, as discussed below, SCAQMD staff further considered the vulnerability of children to lead and is recommending a more preventative approach with an ambient lead limit of 0.100 $\mu g/m^3$ to provide greater health protection for communities, and more specifically for young children, that live near lead processing facilities.

1:10 Air-to-Blood Lead Ratio

An air-to-blood lead ratio of 1:10 would support a more protective standard for children (CHPAC, 2008b). As discussed above, EPA's evidence-based air-related IQ loss framework found that the air-to-blood lead ratio ranges from 1:10 to 1:5, and the EPA Administrator selected a 1:7 air-to-blood ratio as a "generally central value within this range." (73 FR 67005 and 67006). As we now explain, the ambient lead concentration limit of 0.100 $\mu g/m^3$ under PR 1420.2 is supported by EPA's evidence-based air-related IQ loss framework, assuming EPA's judgment of air-related IQ loss of 2 points and an air-to-blood ratio of 1:10. The SCAQMD's policy decision to use an air-to-blood ratio of 1:10 is also supported by EPA's evidence based air-related IQ loss data and is even more health protective, particularly for young children living near lead melting facilities.

An air-to-blood ratio of 1:10 is supported by comments made by scientists, physicians, and researchers. During the development of the 2008 Lead NAAQS, EPA received scientific recommendations from the Clean Air Scientific Advisory Committee (CASAC), a federal advisory committee independently chartered to provide extramural scientific information and advice to the EPA Administrator and other officials of the EPA[1]. The CASAC recommended that EPA consider an air-to-blood ratio ''closer to 1:9 to 1:10 as being most reflective of current conditions.'' (73 FR 67001). The higher attained blood lead concentrations that are modeled with a ratio of 1:10 would support a more protective standard for children (CHPAC, 2008b). Similar to the advice from CASAC, many commenters, including EPA's Children's Health Protection Advisory Committee, the Northeast States For Coordinated Air Use Management (NESCAUM) and the Michigan Department of Environmental Quality recommended that EPA consider ratios higher than the upper end of the range used in the proposal (1:7), such as values on the order of 1:9 or 1:10 or somewhat higher. They also rejected the lower ratios used in the proposal as being inappropriate for application to today's children. Commenters supporting such higher ratios cited ratios resulting from a study noted by CASAC (Schwartz and Pitcher, 1989), as well as others by Hayes et al. (1994) and Brunekreef et al. (1983) They also cited air-to- blood ratio estimates from the exposure/risk assessment (73 FR 67001). The exposure/risk assessment evaluated the quantitative human exposure and health risk assessments in order to inform EPA during the 2008 review of the NAAQS for lead.

As shown in Table 1-2, when EPA's same evidence-based framework is employed using an air-to-blood ratio of 1:10, with a loss of less than 2 IQ points, the corresponding ambient limit of 0.100 $\mu g/m^3$ is necessary to protect public health.

[1] The CASAC for the 2008 NAAQS is made up of the following members: Rogene Henderson, Ph.D., Chair, Clean Air Scientific Advisory Committee, Scientist Emeritus, Lovelace Respiratory Research Institute; Donna Kenski, Ph.D., Director of Data Analysis, Lake Michigan Air Directors Consortium, (LADCO); Ellis Cowling, Ph.D., University Distinguished Professor At-Large, Emeritus, North Carolina State University; Armistead (Ted) Russell, Ph.D., Gerogia Power, Distinguished Professor of Environmental Engineering, Georgia Institute of Technology; James D. Crapo, M.D., Professor, Department of Medicine, National Jewish Medical and Research Center; Jonathan M. Samet, M.D., Professor and Chairman, Department of Epidemiology, Bloomberg School of Public Health, John Hopkins University; Douglas Crawford-Brown, Ph.D., Director, Institute for Environment; and Professor, Department of Environmental Sciences and Engineering, University of North Carolina at Chapel Hill

Table 1-2
Estimates of Air-Related Mean IQ Loss for the Subpopulation of Children Exposed at the Level of the Standard – Highlighting an Ambient Lead Concentration Limit of 0.100 µg/m^3 (Source: 73 FR 67005 and 67006)

Potential level for standard (µg/m³)	Air-related mean IQ loss (points) for the subpopulation of children exposed at level of the standard		
	IQ loss estimate is based on median slope of 4 C–R functions with blood Pb levels closer to those of today's U.S. children (range shown for estimates based on lowest and highest of 4 slopes)		
	Air-to-blood ratio		
	1:10	1:7	1:5
0.50	>5*	>5*	4.4 (3.9–7.4)
0.40		4.9 (4.4–8.2)	3.5 (3.1–5.9)
0.30	5.3 (4.7–8.8)	3.7 (3.3–6.2)	2.6 (2.3–4.4)
0.25	4.4 (3.9–7.4)	3.1 (2.7–5.1)	2.2 (2.0–3.7)
0.20	3.5 (3.1–5.9)	2.5 (2.2–4.1)	1.8 (1.6–2.9)
0.15	2.6 (2.3–4.4)	1.8 (1.6–3.1)	1.3 (1.2–2.2)
0.10	1.8 (1.6–2.9)	1.2 (1.1–2.1)	0.9 (0.8–1.5)
0.05	0.9 (0.8–1.5)	0.6 (0.5–1.0)	0.4 (0.4–0.7)
0.02	0.4 (0.3–0.6)	0.2 (0.2–0.4)	0.2 (0.2–0.3)

*For these combinations of standard levels and air-to-blood ratios, the appropriateness of the C–R function applied in this table becomes increasingly uncertain such that no greater precision than ">5" for the IQ loss estimate is warranted.

Population Significance of Loss of IQ Points

Communities that are near metal melting facilities can suffer a significant loss of IQ points. In its July 2008 advice to EPA, CASAC commented that ''a population loss of 1–2 IQ points is highly significant from a public health perspective.'' CASAC further emphasized its view that an IQ loss of 1–2 points should be ''prevented in all but a small percentile of the population—and certainly not accepted as a reasonable change in mean IQ scores across the entire population.'' Recommendations from several commenters, including the American Academy of Pediatrics (AAP) and state health agencies commenting on this issue, generally agreed with the view emphasized by CASAC that air-related IQ loss of a specific magnitude, such as on the order of 1 or 2 points, should be prevented in a very high percentage (e.g., 99.5%) of the population. (73 FR 67000).

The issue of individual-level versus population-level risk also pertains to the implications of the magnitude of decrease in cognitive function or increase in behavioral problems per unit increase in blood lead level. Although fractional changes in Full Scale Intelligence Quotient (FSIQ), memory, or attention may not be consequential for an individual, they may be consequential on a population level. At that level, small lead-associated decreases in cognitive function could increase the number of individuals at additional risk of educational, vocational, and social failure. It could also decrease the number of individuals with opportunities for academic and later-life success (EPA, 2013). Small shifts in the population mean IQ can be highly significant from a public health perspective. Such shifts could translate into a larger proportion of the population functioning at the low end of the IQ distribution, as well as a smaller proportion of the population functioning at the high end of the distribution (EPA, 2013). Additionally, small lead-associated increases in the population mean blood pressure could result in an increase in the proportion of the population with hypertension that is significant from a public health perspective (EPA, 2013).

Ambient Limit of 0.100 µg/m^3 is More Health Protective for Children

Establishing an ambient limit of 0.100 µg/m^3 will be more protective of children that live around facilities subject to PAR 1420, particularly younger children. Lead poisoning is a preventable disease. No safe blood level of lead in children has been identified (CDC, 2012a). Preventing lead exposure rather than responding after the exposure has taken place is consistent with recommendations from the Centers for Disease Control and Prevention's (CDC) Advisory Committee for Childhood Lead Poisoning Prevention, which recommends that the CDC as well as other local, state, and federal agencies "shift priorities to primary prevention." (CDC, 2012b).

Neurocognitive health effects in young children are recognized as the most sensitive endpoint associated with blood lead concentrations. Evidence continues to indicate that neurocognitive effects in young children may not be reversible and may have effects that persist into adulthood (EPA, 2014). In addition, in a letter to EPA in 2008 the Academy of Pediatrics stated that, "No study has determined a level of lead in blood that does not impair child cognition. Further, the effects are long-lasting. Damage to a child's developing brain from lead is not reversible." (AAP, 2008). Similarly, EPA states in its 2013 Integrated Science Assessment for Lead that, "Evidence suggests that some lead-related cognitive effects may be irreversible and that the neurodevelopmental effects of lead exposure may persist into adulthood." (EPA, 2013).

Among the wide variety of health endpoints associated with lead exposures, there is general consensus that the developing nervous system in children is among the sensitive-- if not the most sensitive-endpoints (73 FR 66976). Multiple epidemiologic studies conducted in diverse populations of children consistently demonstrate the harmful effects of lead exposure on cognitive function. The effects can be measured by IQ decrements, decreased academic performance and poorer performance on tests of executive function (EPA, 2013). Lead-associated decline of several points might be sufficient to drop that individual into the range associated with increased risk of educational, vocational, and social failure (EPA 2008). In addition, a study found that in a group of 7-year old children exposed to lead before the age of 3 years old, IQ continued to fall, even after the blood lead level had declined (AAP, 2008; Chen et al, 2005).

Compounding the effects of lead on developing children are studies indicating that children are more vulnerable than adults when exposed to lead. Air-to-blood ratios are generally higher for children than those for adults, and they are higher for young children than older children (EPA, 2014). Pre-school children or children under five years old are the most vulnerable to exposure and adverse health effects, and thereby represent the greatest at-risk population. Higher blood lead levels in pre-school aged children compared to the rest of childhood are related to behaviors that increase environmental exposure, such as hand-to-mouth activity. Children may have increased exposure to lead compared with adults because of children's behaviors and activities (including increased hand-to-mouth contact, crawling, and poor hand-washing), differences in diets, and biokinetic factors (absorption, distribution, metabolism, and excretion) (EPA, 2013).

In addition, younger children absorb substantially more lead than adults, especially children below 2 years of age. These children have a faster metabolic rate, resulting in a proportionately greater daily intake of lead through food. They also have a less developed blood-brain barrier and therefore greater neurological sensitivity; a faster resting inhalation rate; and a rapidly developing nervous system (OEHHA, 2009). As previously referenced, multiple studies of the relationship

between lead exposure and blood lead in children have shown young children's blood lead levels reflect lead exposures from ambient air levels as well as exposure due to lead in surface dust (EPA, 2014).

Blood lead levels are extensively used as an index or biomarker of exposure by national and international health agencies, as well as in epidemiological and toxicological studies of lead health effects and dose-response relationships. Blood lead concentrations, even those below 10 µg/dL, are inversely associated with children's IQ scores at three and five years of age, and associated declines in IQ are greater at these concentrations than at higher concentrations (Canfield, et al, 2003). Based on a growing body of studies concluding that blood lead levels <10 µg/dL harm children, the Centers for Disease Control and Prevention (CDC) Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) recommends a reference level of 5 µg/dL to identify children with blood lead levels that are much higher than most children's levels. This level is based on the 97.5th percentile of the National Health and Nutrition Examination Survey (NHANES)'s blood lead distribution in children. This recommendation is grounded on the weight of evidence that includes studies with a large number and diverse group of children with low blood lead levels and associated IQ deficits. Effects at blood lead levels < 10 µg/dL are also reported for other behavioral domains, particularly attention-related behaviors and poorer academic achievement. Furthermore, new findings suggest that the adverse health effects of blood lead levels at less than 10 µg/dL in children extend beyond cognitive function to include cardiovascular, immunological, and endocrine effects (CDC, 2012a).

The SCAQMD staff believes that the CDC's action to establish a reference level of 5 µg/dL, in lieu of the previous "level of concern" of 10 µg/dL, further substantiates the policy decision to establish an ambient lead concentration limit of 0.100 $\mu g/m^3$. EPA's 2014 Policy Assessment states that, "The CDC decision, while emphasizing the critical importance of primary prevention of lead exposure, provides no new guidelines or criteria with regard to the significance of specific IQ decrements…" (EPA, 2014). However, the Academy of Pediatrics cautioned against focusing solely on IQ loss or gain stating, "There are ramifications of lead exposure on other endpoints that have societal and individual implications of great importance." In addition, CASAC member Dr. Susan Korrick, stated that, "the discussion of health policy judgments needs to be carefully considered in light of the fundamental and far reaching public health value of childhood cognitive and neurobehavioral health." (CASAC, 2013).

EPA's Children's Health Protection Advisory Committee[2] (CHPAC) is a body of external researchers, academicians, health care providers, environmentalists, state and tribal government employees, and members of the public who advise EPA on regulations, research, and communications related to children's health. CHPAC stated in a letter to USEPA Administrator McCarthy that "lead affects children's IQs at exposure levels appreciably lower than recognized…" (CHPAC, 2015). In addition, in a letter to the EPA Administrator on June 16, 2008 regarding the Proposed Rulemaking for the National Ambient Air Quality Standards for Lead, CHPAC stated there is clear scientific evidence to support an ambient lead concentration of

[2] The legal authority for CHPAC is the Federal Advisory Committee Act (FACA), 5 USC App 2. CHPAC acts in the public interest and supports EPA in performing its duties and responsibilities under Executive Order 13045 of April 21, 1997 (62 Fed Reg 19885; April 23, 1997). CHPAC provides advice on topics such as air and water pollution regulations, chemical safety programs, risk assessment policies, and research, which reflect the wide ranging environmental issues which affect the health of children.

0.100 μg/m^3. The letter specifically referenced the special relevance of such a standard to children because there is a steeper dose-response curve for children's neurological effects at lower levels of exposure. This is due to the fact that a higher ratio of lead air-to-blood lead ratios has been observed in children at lower air lead concentrations (CHPAC, 2008b).

Summary Conclusion

An ambient lead concentration limit of 0.100 μg/m3 will be more health protective for communities that live, work, or recreate around metal melting facilities, particularly younger children. There is substantial scientific justification provided through EPA's development of the 2008 Lead NAAQS and EPA's Final Decision to Retain the Current Lead NAAQS evidence-based framework to support the policy decision to establish an ambient limit of 0.100 μg/m^3. The above discussion provides a description of EPA's evidence-based framework to establish the 2008 Lead NAAQS of 0.15 μg/m^3 and key policy judgments made regarding the level of health protection and margin of safety for the national standard. As previously stated, "…there are currently no commonly accepted guidelines or criteria within the public health community that would provide a clear basis for reaching a judgment as to the appropriate degree of public health protection that should be afforded to protect against risk of neurocognitive effects in sensitive populations, such as IQ loss in children." (73 FR 67004). As a regional air agency developing a source-specific-rule for lead processing facilities, the SCAQMD is recommending policy decisions that are more health protective for communities, particularly young children that are affected by lead emissions from lead processing facilities that will be regulated under PAR 1420. The above discussion substantiates the policy decision to establish an ambient lead concentration limit of 0.100 μg/m^3, with some key points of the above discussion highlighted below:

- No safe blood level of lead in children has been identified (CDC, 2012a)
- The developing nervous system in children is among the sensitive, if not the most sensitive-endpoints (73 FR 66976)
- Lead affects children's IQs at exposure levels appreciably lower than recognized (CHPAC, 2105)
- Pre-school children or children under five years old are the most vulnerable to exposure and adverse health effects, and thereby represent the greatest at-risk population (EPA, 2013)
- Younger children absorb substantially more lead than adults, especially children below 2 years of age (OEHHA, 2009)
- No study has determined a level of lead in blood that does not impair child cognition. Further, the effects are long-lasting. Damage to a child's developing brain from lead is not reversible (AAP, 2008)
- CASAC commented that ''a population loss of 1–2 IQ points is highly significant from a public health perspective.'' (EPA, 2008)
- Air-to-blood ratio of 1:10 is also supported by EPA's evidence based air-related IQ loss data and is even more health protective (CHPAC, 2008b)

Based on all the foregoing, the evidence supports the SCAQMD's policy decision to establish a final lead limit in ambient air at 0.100 μg/m^3.

CHAPTER 2: SUMMARY OF PROPOSED AMENDED RULE 1420

OVERALL APPROACH

PROPOSED AMENDED RULE 1420

OVERALL APPROACH

PAR 1420 establishes requirements for lead processing facilities, which include compliance with ambient air lead concentration limits, point source control requirements, housekeeping and maintenance requirements, and source testing. Many of the provisions in PAR 1420 are based on similar types of provisions for Rules 1420.1 and 1420.2. Although ambient monitoring is not required as a core requirement, there are triggers where a facility may be required to conduct ambient lead monitoring as discussed in more detail below.

PROPOSED AMENDED RULE 1420

PAR 1420 will reduce lead emissions generated from lead smelters, foundries, smaller lead acid battery manufacturers and recyclers, lead oxide, lead platers, brass and bronze producers, and metal melting facilities where the lead content of the material processed is greater than 0.05 percent by weight. The purpose of PAR 1420 is to reduce point and fugitive lead emissions, reduce public health impacts by reducing the exposure to lead, and to help maintain attainment of the NAAQS for lead. As a result, the rule proposes requirements for point source lead emission controls and an ambient air lead concentration limit. Fugitive lead emissions are addressed through housekeeping and maintenance activity requirements, and total enclosures of areas where lead processing and metal melting operations and associated processes are conducted. Additionally, periodic source testing, capture efficiency testing, conditional ambient air monitoring, and reporting and recordkeeping requirements are also being proposed to ensure continuous compliance. Lead processing and metal melting facilities that exceed the ambient air lead concentration limits of PAR 1420 will be subject to additional requirements to mitigate an exceedance of the ambient lead concentration limit established in PAR 1420.

Applicability

PAR 1420 applies to metal melting facilities and lead processing facilities, as defined in the rule, in the SCAQMD that process materials that contain greater than 0.05% lead content by weight on average. Facilities using materials with less than or equal to 0.05% lead content by weight are not subject to any requirements of the rule provided they maintain records sufficient to justify their exemption from the rule. Based on staff analysis of compliance and permitting data, there are approximately 107 facilities in the SCAQMD that meet the applicability requirements of the proposed rule amendment. The larger emitters such as large lead-acid battery recyclers and the metal melting facilities that melt greater than 100 tons of lead per year were addressed under Rules 1420.1 and 1420.2 respectively. All provisions of PAR 1420 will apply to lead processing facilities that process greater than 2 tons of lead per year of raw materials that contain greater than 0.05 percent lead by weight. However, owners or operators that process 2 tons of lead per year or less will be subject to conditional ambient air monitoring, housekeeping and recordkeeping requirements. These reduced requirements will also apply to facilities that previously processed greater than 2 tons of lead per year, but will reduce the amount of lead processed to below the 2 tons per year threshold, provided the owner or operator accepts a permit condition limiting the annual quantity of lead processed. A summary of the applicability thresholds and rule amendment requirements are provided in Table 2-1.

Table 2-1. Summary of Applicability Thresholds and Requirements

Applicability Thresholds		Requirements
% Lead (1)	**Processing Rate (tons of lead per year)**	
≤ 0.05%	Any	Exempt from ~~all~~ rule requirements
> 0.05%	2 tons or less	• Housekeeping • Recordkeeping • Conditional Ambient Air Monitoring and Sampling o Executive Officer Determination to Conduct Ambient Air Monitoring
> 0.05%	Greater than 2 tons	• Housekeeping • Recordkeeping • Conditional Ambient Air Monitoring and Sampling o Executive Officer Determination to Conduct Ambient Air Monitoring • Lead Point Source Emissions Control • Source Testing • Total Enclosures • Emission Control Device Monitoring

(1): A facility will be subject to the rule if the 0.05% lead content threshold is exceeded for any raw material during one month of the year and the lead processing rate for that year will be based on all raw materials used during the year

The universe of facilities affected by PAR 1420 was determined by review of the SCAQMD's permitting databases, which allowed staff to identify industry categories based on North American Industry Classification System (NAICS) codes. In addition, for facilities in each NAICS category, equipment lists were identified based on both basic equipment and control equipment. A breakdown of applicable facilities by industry classification is provided in Table 2-2.

Table 2-2: Types of Facilities Subject to PAR 1420

NAICS Code	Facility Type	# of Facilities
331314	Secondary Smelting and Alloying of Aluminum	1
331410	Nonferrous Metal (except Aluminum) Smelting and Refining	1
331511	Iron Foundries	2
331524	Aluminum Foundries (except Die-Casting)	5
331529	Other Nonferrous Metal Foundries (except Die-Casting)	5
332813	Electroplating, Plating, Polishing, Anodizing and Coloring	8
334413	Semiconductor and Related Device Manufacturing	1
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	70
334419	Other Electronic Component Manufacturing	9
336411	Aircraft Manufacturing	1
336413	Developing and Manufacturing of Prototypes for Aircraft Parts and Auxiliary Eqpt.	1
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	2
423930	Recyclable Material Merchant Wholesalers	1
Total Number of Facilities		107

Definitions

PAR 1420 includes definitions of the following terms used in the proposed rule. Please refer to subdivision (c) of PAR 1420 for the definitions:

- Bag Lead Detection System*
- Capture Velocity*
- Duct Section*
- Dust Suppressant*
- Emission Collection System
- Emission Control Device*
- Foundry
- Fugitive Lead-Dust Emissions
- Furnace*
- Lead
- Lead-Acid Battery Manufacturer
- Lead-Acid Battery Recycler
- Lead-Oxide Producer

- Lead Point Source*
- Lead Processing Facility
- Maintenance Activity*
- Metal*
- Metal Melting Facility*
- Primary Lead Smelter
- Repair
- Ringelmann Opacity
- Secondary Lead Smelter
- Slag*
- Smelting*
- Smelting Furnace*
- Total Enclosure*

*: Definitions added

Requirements

Subdivision (d) and subdivisions (f) through (l) of PAR 1420 establish the "core" requirements including ambient lead concentration limits, point source emissions controls, total enclosures, housekeeping measures, air pollution control device maintenance activity requirements, and source testing. Subdivision (e) includes requirements for conditional ambient air monitoring; subdivision (i) specifies recordkeeping requirements; subdivision (k) specifies emission control device monitoring requirements and subdivision (m) includes exemptions.

Subdivision (d) – Ambient Air Lead Concentration Limit

Upon adoption of PAR 1420 until December 31, 2020, facilities subject to PAR 1420 will be required to meet an ambient air lead concentration limit of 0.150 µg/m^3 averaged over any 30 consecutive days. On and after January 1, 2021, facilities subject to PAR 1420 will not be allowed to discharge into the atmosphere emissions which contribute to ambient air concentrations of lead that exceed 0.100 µg/m^3 averaged over any 30 consecutive days. The ambient concentration limits are consistent with Rules 1420.1 and 1420.2. The implementation time period for the final ambient air lead concentration limit of 0.100 µg/m^3 is based on the implementation time period under Rule 1420.2. Measurements may be obtained and recorded from an ambient air lead monitor installed by a facility or one that is installed by the SCAQMD. The visible emission standard will be retained.

Subdivision (e) – Executive Officer Determination to Conduct Ambient Air Monitoring

Rules 1420.1 and 1420.2 require ambient lead monitoring for all facilities affected by those rules. Since PAR 1420 applies to smaller lead emitting sources, PAR 1420 does not require ambient lead monitoring as a base requirement. Under PAR 1420, ambient lead monitoring is only required if a facility triggers specified criteria. The basis of the criteria is to identify those PAR 1420 facilities where the SCAQMD staff has information that there is, or there is the potential for exceedance of the ambient lead concentration. A facility that contributes to an ambient air lead concentration that exceeds 0.150 µg/m^3 averaged over any 30 consecutive days, or one that exceeds the lead point source emission limit based on two source tests over a rolling 36-month period, may be notified by the Executive Officer that ambient air monitoring may be required. However, within 30 days of the date of initial notification by the Executive Officer, the owner or operator may provide any additional information to substantiate that a monitoring trigger has not been met. Prior

to final determination, the Executive Officer will consider any additional information provided by the owner or operator, including any emissions data, updates from site visits, and findings from investigation of surrounding sources. The Executive Officer will notify the owner or operator in writing of the final determination. If ambient lead monitoring is required by the Executive Officer, the owner or operator will be required to prepare and submit a Lead Ambient Air Monitoring and Sampling Plan pursuant to subdivision (l) – Ambient Monitoring and Sampling Requirements for review and approval by the Executive Officer within 120 days of notification. Information required in the plan includes:

- Source test results of all lead point sources;
- Map of facility identifying the location of all lead emission sources, air pollution control devices, stacks, enclosures, openings of enclosures, storage of lead-containing materials, roadways where vehicles carrying lead-containing materials travel within the facility, vehicle egress and ingress locations, the property line of the facility, the fence line of the facility if it differs from the property line of the facility, and any areas within the property line of the facility that are publicly accessible; and
- Number and locations for sampling sites that meet the requirements of paragraph (l)(2).

Subdivision (f) – Lead Point Source Emissions Control

A lead point source is defined by the proposed rule as any process or equipment used at a metal melting or a lead processing facility that emits lead emissions that pass through a stack or a vent designed to direct or control its release into the ambient air. Proposed requirements for lead point sources that are vented to existing lead emissions control devices will be effective June 1, 2018. For lead point sources that are not currently vented to control, the owner or operator has six months after a Permit to Construct for the lead emissions control device is issued by the Executive Officer, to begin venting the lead point source to the control device for which compliance with paragraph (f)(1) is demonstrated. This allows enough time to secure permits and complete all the construction associated with getting the lead control devices into operation.

PAR 1420 requires that lead point source emission controls meet a minimum lead reduction efficiency of 99 percent or meet an outlet mass lead emissions rate of less than 0.0003 pounds per hour. Currently, Rule 1420 has a lead reduction efficiency of 98 percent or greater. The proposed 0.0003 pound per hour limit will apply to both uncontrolled and controlled lead point sources. Upon review of SCAQMD-approved source tests for lead point sources subject to Rule 1420.2, SCAQMD staff has determined that the more stringent 99 percent lead reduction efficiency being proposed for this source category is achievable with lead control devices that are currently available.

SCAQMD staff recognizes that some lead point sources with very low uncontrolled emissions may have difficulty demonstrating the 99 percent lead reduction efficiency requirement due to low inlet loading. Therefore, in lieu of complying with the 99 percent lead reduction efficiency, PAR 1420 will allow the owner or operator of a lead processing facility to demonstrate an outlet mass lead emission rate of less than 0.0003 pounds per hour. This allows owners or operators to better manage source-testing costs since a mass emissions limit will eliminate the cost associated with inlet sampling and testing.

Subdivision (g) – Total Enclosures

The owner or operator of a lead processing or metal melting facility will be required to conduct operations within a total enclosure that minimizes cross draft conditions. The areas may be enclosed individually or in groups. The intent of this requirement is to provide maximum containment and minimize fugitive lead-dust emissions generated in areas where lead processing, metal grinding, handling or storage of lead-containing materials occur.

A total enclosure is a permanent containment structure, completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, and run-off), with limited openings to allow access and egress for people and vehicles, that are free of breaks, cracks, gaps, or deterioration that could cause or result in fugitive metal dust.

Cross-draft conditions of a total enclosure shall be minimized by closing any openings that result in a decrease in the efficiency of an emission collection system, including, but not limited to, vents, windows, passages, doorways, bay doors, and roll-ups during lead processing operations. Alternative methods to closing openings, including use of automatic roll-up doors and installation of plastic strip curtains and vestibules may be used if the owner or operator can demonstrate to the Executive Officer equivalent or more effective ways to minimize cross-draft conditions.

The completion schedule for total enclosure will depend on whether the owner or operator is processing lead in a structure existing as of the date of adoption of PAR 1420 or if a new structure must be constructed. In the case of lead processing that is conducted in an existing structure that will be modified to a total enclosure to meet the provisions of paragraph (d)(2), construction should be completed by June 1, 2018. If, however, a new structure must be constructed to satisfy the requirements of paragraph (d)(2) the construction completion date is no later than 12 months after the date of adoption of PAR 1420. In addition, the owner or operator will also be required to provide the Executive Officer with a written notice that a new total enclosure will be constructed, within 60 days after the adoption of PAR 1420. A new facility starting operations after the date of adoption of PAR 1420 will be required to complete the construction of the total enclosure prior to starting operations. Any enclosure type will also be required to be designed in a manner that does not conflict with federal OSHA or Cal-OSHA worker safety guidelines.

PAR 1420 will require at least monthly inspection of any total enclosure and require the owner or operator to stop lead processing or metal melting activities that are conducted within a total enclosure if an inspection reveals any breaks, cracks, gaps, or deterioration that could result in fugitive lead dust releases. Lead processing or metal melting may not be resumed until the enclosure is repaired or until temporary measures are implemented to ensure that no fugitive lead dust results from the break, crack, gap or point of deterioration. Repairs are required to be completed within 72 hours of discovery and in the event that an extension is required, the Executive Officer may grant one provided the request is submitted before the 72-hour time limit has expired.

Subdivision (h) – Housekeeping Requirements

The following housekeeping requirements are proposed to minimize fugitive lead-dust emissions. All requirements will be effective within 30 days of rule adoption with the exception of the

requirement to conduct annual rooftop cleaning of structures, the prohibition for dry sweeping, and use of compressed air for housekeeping purposes. The existing requirements to conduct weekly cleaning of areas and surfaces that have lead-containing waste or dust and to store lead-containing materials and debris in closed containers will remain in effect upon adoption of PAR 1420. Only facilities that process greater than 10 tons of lead per year are required to conduct rooftop cleaning, which should be completed at least once annually and scheduled during the months of July through September.

- Cleaning by wet wash, wet mop or use of a vacuum in a manner that does not generate fugitive lead-dust of the areas listed below is required at the specified frequencies, unless located within a total enclosure vented to a lead emission control device. For mechanical sweepers, a dry vacuum recovery system shall be employed for all contact points to avoid creation of fugitive dust from rotating brushes.
- Weekly cleaning by wet wash, vacuum, wet-mop, or stabilization with a dust suppressant of all areas where lead-containing wastes generated from housekeeping activities are stored, disposed of, recovered, or recycled, and surfaces that accumulate lead-containing dust subject to foot or vehicular traffic.
- Quarterly cleaning of collection vents, ducting, and openings for lead emission control devices to prevent dust from building up and clogging.
- Removal of weather caps on any stack that is a lead emissions source.
- Storage of all materials capable of generating any amount of fugitive lead-dust in sealed, leak-proof containers, or stabilization of such materials with a dust suppressant approved in writing by the Executive Officer, unless located within a total enclosure. Examples of materials capable of generating fugitive lead dust, include slag, spent filters used in lead control devices, and lead-containing waste generated from housekeeping requirements.
- Transport of all materials capable of generating any amount of fugitive lead-dust emissions within closed conveyor systems or in sealed, leak-proof containers, or stabilization of such materials using a dust suppressant approved in writing by the Executive Officer, unless conducted within a total enclosure.
- Cleaning of paved areas where construction or maintenance occurs no later than one hour after completion unless located within a total enclosure vented to a lead emission control device.
- Except when inside a total enclosure, all lead-containing trash and debris shall be placed in covered containers that remain covered at all times except when trash or debris is actively deposited. Trash and debris containers shall be free of liquid or dust leaks.
- Posting of signs at all entrances and truck loading and unloading areas, indicating a facility speed limit of 5 miles per hour or less on any roadway located within 75 feet of the perimeter of a total enclosure.
- For any of the housekeeping requirements listed above, an alternative housekeeping measure can be used if the owner or operator demonstrates and receives written Executive Officer approval that the alternative (housekeeping) measure meets the same objective and effectiveness of the housekeeping requirement that it is replacing.
- An owner or operator that conducts grinding of metal that contains lead is required to conduct daily wet cleaning or vacuuming of:
  - Areas within 20 feet of a work station or work stations dedicated to the grinding operations;
  - Floors within 20 feet of any entrance or exit points of a temporary enclosure, building or total enclosure that houses the grinding operations; and

- Floors within 10 feet of an emission control device dedicated to the grinding operations

Subdivision (i) – Recordkeeping

PAR 1420 will require records be kept to indicate that facilities comply with the recordkeeping requirements. Owners and operators will be required to maintain records for the following:

- Monthly amounts of lead-containing raw materials processed at a facility, including but not limited to purchase records;
- Results of lead content analyses of feedstock, including ingots and scrap, of materials charged, baghouse catch analyses, or other SCAQMD-approved verification methods used to determine the monthly average weight percentage of lead;
- Ambient air lead monitoring and wind monitoring;
- Housekeeping pursuant to subdivision (h);
- Total enclosure construction, inspection and maintenance, including information related to repair activities;
- Lead control device inspection and maintenance;
- Bag Leak Detection Systems;
- Source test data;
- Air pollution control device monitoring and inspections; and
- Hot wire anemometer data collected including capture velocities, dates of measurement, and calibration documentation.

The annual amount of lead processed by the facility is calculated by summing the monthly amounts of lead processed for all lead point sources over a calendar year. The monthly amount of lead processed is determined by multiplying the monthly average weight percentage of lead content by the quantity of raw material processed each month at each lead point source.

Facilities may determine the amount the lead content of material processed by analyzing the feedstock, including ingots and scrap, used at each lead point source. Alternatively, a facility may analyze the baghouse catch, utilize methods approved by the EPA or any combination of these methods to determine lead content. An alternative method approved by the Executive Officer to demonstrate the lead content of materials processed, may also be used. All records shall be maintained for three years, with at least the two most recent years kept onsite.

Subdivision (j) – Source Tests

Effective upon the date of adoption of PAR 1420, the proposed rule amendment will require an initial source test and then biennial source tests afterwards to demonstrate compliance with the facility mass lead emissions standard of 0.0003 pound per hour specified in subdivision (f). This lead mass emission limit is consistent with limits in Rule 1420.2. If a biennial source test to demonstrate compliance with the lead point source standard results in a stack outlet mass lead emission of less than 0.00015 pounds per hour, then the next test for the lead point source control device shall be performed no later than 48 months after the date of the most recent test.

Prior to conducting the initial performance test or the subsequent biennial source tests on an existing or a new or modified lead control device, an owner or operator will be required to submit a source test protocol at least 60 calendar days prior to conducting the source test. Existing lead control devices in operation before the adoption date of the rule amendment will require a source

test no later than June 1, 2018, while a new or modified lead control device will require an initial source test no later than six (6) months after a Permit to Construct is issued. A source test for an existing lead control device, conducted on or after January 1, 2014 may be used as the initial source test, provided the test:

- Is the most recent conducted since January 1, 2014;
- Demonstrated compliance with the control requirements of subdivision (f);
- Is representative of a method used to test emissions from control devices currently in use; and
- Was conducted using applicable and approved test methods specified in paragraph (j)(6) through ((j)(8).

Source tests shall be conducted while the equipment is operating at a minimum of 80 percent of the equipment's permitted capacity and lists the following applicable test methods for testing for inorganic lead from stationary sources:

- SCAQMD Method 12.1;
- CARB Method 12;
- CARB Method 436; and
- EPA Method 12.

Use of an alternative or equivalent test method will be allowed as long as it is approved in writing by the Executive Officer, in addition to the California Air Resources Board, or the U.S. EPA, as applicable. Facilities will be required to submit a source test protocol to the Executive Officer at least 60 calendar days prior to conducting the source test. The source test protocol shall contain target lead mass emission standards, planned sampling parameters and information regarding equipment, logistics, personnel, and other resources necessary that facilitate an efficient test. The owner or operator is also required to provide written notification to the Executive Officer one week prior to conducting source tests required by paragraphs (j)(1) and (j)(2).

Subdivision (k) – Air Pollution Control Device Monitoring

Proposed Amended Rule 1420 includes parametric monitoring to ensure proper operation of the pollution control device. Operational parameters are generally expressed as a range of parametric measurements within which the air pollution control device functions best and realizes optimum efficiency. Parametric monitoring is conducted separate from source testing and provides a good indicator when there is an issue with the pollution control device during the period between source testing events.

Bag Leak Detection System

The owner or operator of a lead processing facility shall apply for a permit to install, operate, calibrate and maintain a Bag Leak Detection System (BLDS) pursuant to SCAQMD Rule 1155.

Pressure Across a Filter

The pressure across the filter of an emission control device shall be continuously measured with a mechanical gauge that is visible and in clear line of sight of the operator or maintenance personnel. The reading from the gauge provides an indication of whether the filters are operating within the proper range of pressure differential or the filters may be clogged or have leaks, thereby compromising their effectiveness. The monitoring device shall be required to:

- Be equipped with ports that allow for periodic calibration in accordance with manufacturer's specifications;
- Be maintained in accordance with manufacturer's specifications;
- Be calibrated according to manufacturer's specifications at least once every calendar year;
- Be equipped with a continuous data acquisition system (DAS). The DAS shall record the data output from the monitoring device at a frequency of at least once every sixty (60) minutes; and
- Generate a data file from the computer system interfaced with each DAS each calendar day. The data file shall be saved in electronic Microsoft Excel (xls or xlsx) format as approved by the Executive Officer. The file shall contain a table of chronological dates and time and the corresponding data output value from the monitoring device in inches of water column. The operator shall prepare a separate data file each day showing the 4-hour rolling average pressure readings recorded by this device each calendar day.

If the pressure across the filter (associated with the emission control device) is not maintained within the range specified in the Permit to Construct or Permit to Operate or the range specified by the manufacturer or the Executive Officer, based on hourly or more frequent recordings by the DAS for the averaging periods specified below, the owner or operator shall require additional source testing as discussed in source testing section of this chapter.

- A 4-hour time period on 3 or more separate days over 60 continuous days; or
- Any consecutive 24-hour period.

The acceptable range of pressure across the filter may be specified in the Permit to Construct or the Permit to Operate or shall be determined by the Executive Officer based on supporting documentation such as manufacturer specifications and source test results.

Verification of Air Flow to the Air Pollution Collection System

The corresponding duct static pressure for the minimum hood induced capture velocity for emission control devices shall be accurately measured once per operating day using the measurement procedures specified in the most current edition of the *Industrial Ventilation, A Manual of Recommended Practice for Operation and Maintenance*, published by the American Conference of Governmental Industrial Hygienists, at the time a permit application is deemed complete with the SCAQMD, or any more stringent methods required by OSHA or CAL-OSHA.

In addition, for each emission collection system required to be monitored under PAR 1420, confirmation of the capture velocity shall be conducted at least once monthly, pursuant to paragraphs (k)(4) and (k)(6). A smoke test shall be conducted during source testing and at least once every 3 months. The periodic smoke test provides a qualitative test for owners and operators to help determine whether cross draft conditions or other activities conducted at the facility are affecting the ability of the emission collection system or hood to effectively capture emissions. It also serves to verify that the airflow is moving towards the air pollution collection system, which in turn improves the effectiveness of the air pollution control device. Smoke test procedures are outlined in Appendix 1 of the proposed rule.

Hot Wire Anemometer

The capture velocity of each emission collection system shall be measured at least monthly using a calibrated hot wire anemometer. The emission collection system designed with a hood or enclosure shall maintain a capture velocity of at least 200 feet per minute as measured at the face of the enclosure or the minimum slot velocity measured in the most recent source test that verified complete collection efficiency as measured at the face of the enclosure. An emission collection system with slots, but without an enclosure or hood shall maintain a capture velocity of at least 2,000 feet per minute or the minimum slot velocity measured in the most recent source test that verified complete collection efficiency.

Subdivision (l) – Ambient Monitoring and Sampling Requirements

PAR 1420 facilities subject to Lead Ambient Air Monitoring and Sampling requirements will be required to collect and analyze ambient air lead samples to determine compliance with the ambient air quality lead concentration limits of the rule. This subdivision provides the requirements for submittal of an ambient air monitoring and sampling plan, the number of monitors, placement of monitors, and installation of monitors.

No later than 90 days after approval of a Lead Ambient Air Monitoring and Sampling Plan, facilities will be required to install monitors and conduct ambient air lead monitoring and sampling. Samples must be collected from a minimum of two sites with locations of the sampling sites based on maximum expected ground level lead concentrations, at or beyond the property line, as determined by Executive Officer-approved air dispersion modeling calculations and emission estimates from all lead point sources and fugitive lead-dust sources, and other factors including, but not limited to, population exposure and seasonal meteorology.

The Executive Officer may require a facility to relocate existing monitors or install additional monitors to those required as specified above in order to measure ambient air lead concentrations at locations that may contribute to the exceedance of an ambient air lead concentration limit specified in subdivision (d). The basis for relocating existing monitors or requiring installation of additional monitors shall be based on information showing:

- A new or existing lead source that was not previously identified or fully disclosed;
- An increase in lead emissions from an existing source where existing monitors are not capturing the potential ambient air lead concentration; or
- Inability of the existing monitors to capture the maximum expected ground level lead concentrations.

A facility that is required to conduct ambient air monitoring will be required to collect a valid 24-hour, midnight-to-midnight sample at all sites based on a sampling frequency of 1-in-6 days. Current ambient monitors are designed with timers that can be programmed to automatically begin and end sample collection and therefore they eliminate the concerns regarding the inconvenience associated with midnight-to-midnight sample collection. Facilities will also be required to continuously monitor wind speed and direction as described in the approved plan for the ambient air quality monitoring system at all times to supplement data analysis of the samples collected. Approval shall be based on guidelines for wind and speed direction monitoring as provided in the "*SCAQMD Rule 403 Implementation Handbook – Chapter 6: On-Site Wind Monitoring*

Equipment," or other relevant EPA reference documents such as the "*Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV, Meteorological Measurements*."

Only personnel approved by the Executive Officer, or facility personnel trained and certified to conduct ambient air monitoring demonstrated through successful completion of a course offered or approved by the Executive Officer will be allowed to conduct ambient air quality monitoring. Monitoring and sampling equipment shall be operated and maintained in accordance with U.S. EPA-referenced methods. An owner or operator of lead processing facilities will also be required to submit samples to laboratories within five calendar days of collection to allow sufficient time to submit samples. Facilities required to conduct ambient monitoring pursuant to subdivision (e) will be required to submit reports for monthly ambient air monitoring results for lead and wind data measured at each sampling location on a monthly basis. Beginning no later than 90 days after receiving Executive Officer approval of a Lead Ambient Air Monitoring and Sampling Plan, reports must be submitted by the 15th of each month for the preceding month, and must include the results of individual 24-hour samples and 30-day averages for each day within the reporting period.

Any exceedance of the ambient air quality concentration shall be reported to the Executive Officer (1-800-CUT-SMOG) within seven (7) days of receipt of completed sample analysis, followed by a written report to the Executive Officer no later than three (3) days after the notification.

Any existing ambient air monitoring network currently in use for Rule 1420 shall be used for compliance with PAR 1420 as long as all rule requirements for sampling and monitoring have been met. Monitoring may cease only when the conditions specified in (l)(2) are met.

Subdivision (m) – Exemptions

Facilities that process materials with a monthly weighted average lead content of 0.05 percent or less are exempt from the requirements of the rule provided they maintain records consistent with paragraph (i)(2) for the purpose of establishing the applicability of the exemption. The provision encourages facilities to use low-lead alloys where possible.

All hand soldering operations are exempt from the requirements of the proposed rule amendment. In addition, the proposed amendments also exempts any maintenance or repair activities conducted at a metal melting or a lead processing facility, except for maintenance and repair activities associated with emission collection systems and emission control devices, and except housekeeping and total enclosure activities that are capable of generating lead dust.

Provisions have been incorporated into PAR 1420 to allow the owner or operator of a lead processing or metal melting facility to accept permit conditions limiting the amount of lead processed to limit the applicability of rule requirements. Facilities may accept a facility-wide limit of processing two tons per year or less of lead to only be subject to housekeeping, recordkeeping, and conditional ambient air monitoring and sampling, pursuant to subdivision (l). In the instance where a facility previously using materials with a lead content below 0.05 percent by weight subsequently processes materials with a lead content greater than 0.05 percent by weight, that facility would be subject to some or all provisions of the rule indefinitely. However, such a facility may accept a permit limit for a lead point source of 0.05 percent by weight or less, which will exempt them from PAR 1420. Such a permit condition is not necessary if the facility can

demonstrate that the lead content of a lead point source has not exceeded 0.05 percent by weight since the adoption of PAR 1420.

Paragraph (m)(3) provides an off-ramp for facilities that have been required to conduct ambient monitoring pursuant to subdivision (e). If the facility can demonstrate ambient lead concentration levels of less than or equal to 0.070 $\mu g/m^3$ averaged over 30 consecutive days for 365 days when measured during normal operating conditions representative of the facility then the facility shall be granted exemption upon Executive Officer approval of an air monitoring relief plan that contains all of the following:

- Air dispersion modeling analysis that demonstrates an ambient air lead concentration of $\leq$ 0.070 $\mu g/m^3$ averaged over 30 consecutive days representative of normal facility operations; and
- One (1) year of ambient air lead monitoring data without a single 30 consecutive day average exceeding an ambient air lead concentration of 0.070 $\mu g/m^3$; and
- The facility's most recent source tests approved by the SCAQMD demonstrate that total facility mass lead emission rate from all lead point source control devices of less than 0.04 pound per hour. Total facility mass lead emissions are to be determined based on the sum of the average of triplicate samples for each lead point source located at the facility.

The proposed amendments also exclude facilities subject to the more stringent requirements of Rules 1420.1 and 1420.2 to avoid duplicative requirements.

Appendix 1 – Periodic Smoke Test

Appendix 1 specifies the requirements for periodic smoke tests to demonstrate capture efficiency for ventilation systems of add-on air pollution control device(s) pursuant to paragraph (j)(5). The periodic smoke test requirement of PAR 1420 will not be required if performing such test presents an unreasonable risk to safety. An example of such unreasonable risk to safety includes having to conduct a smoke test at collection sites that would be extremely dangerous, if not deadly, for somebody to work in that collection zone. Smoke test procedures are outlined in Appendix 1 of the proposed amended rule (PAR 1420).

CHAPTER 3: IMPACT ASSESSMENT

AFFECTED FACILITIES

EMISSIONS IMPACT

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SOCIOECONOMIC ASSESSMENT

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

REGULATORY COMPARATIVE ANALYIS

AFFECTED FACILITIES

PAR 1420 affects approximately 107 lead processing facilities. Source categories include lead smelters, foundries, smaller lead acid battery manufacturers and recyclers, lead oxide, brass, and bronze producers, and metal melting facilities.

The majority of affected facilities conduct lead soldering or tin/lead plating. Of the 107 facilities estimated to be impacted by the proposed rule, 92 are subject to the rule solely because of their lead soldering or tin/lead plating operations. Based on initial estimates these facilities are expected to process less than 2 tons of lead per year and will only be subject to conditional ambient monitoring and sampling, and housekeeping and recordkeeping provisions. Also, at the majority of the electronic-related businesses the temperatures to which lead is heated are not substantial enough to promote vaporization, and facilities in this category that were visited were found to already exercise good housekeeping practices.

EMISSIONS IMPACT

Implementation of PAR1420 will reduce point and fugitive emissions, resulting in reduced ambient air lead concentrations. Quantifying point and fugitive source emission reductions is difficult, as many sources do not have current source tests. PAR 1420 will require an ambient air lead concentration of 0.150 $\mu g/m^3$ averaged over any 30 consecutive days from the date of adoption through December 31, 2020 and an ambient lead concentration of 0.100 $\mu g/m^3$ averaged over any 30 consecutive days beginning January 1, 2021.

SOCIOECONOMIC IMPACT ASSESSMENT

The purpose of PAR 1420 is to protect public health by minimizing public exposure to lead emissions from point and fugitive lead emissions sources at metal melting and lead processing facilities, which would also ensure and maintain attainment of the National Ambient Air Quality Standard (NAAQS) for lead within the South Coast Air Basin. PAR 1420 proposes an initial ambient air lead concentration limit of 0.150 micrograms per cubic meter ($\mu g/m^3$) averaged over any consecutive 30 days which would be lowered to a final limit of 0.100 $\mu g/m^3$ by January 1, 2021. PAR 1420 also proposes requirements for point source lead emission controls, along with periodic source testing, capture efficiency testing, enhanced housekeeping requirements, and recordkeeping requirements to ensure continuous compliance.

Affected Facilities and Industries

The universe of facilities affected by PAR 1420 was determined by a review of the SCAQMD's permitting database, which allowed staff to identify industry categories based on the North American Industry Classification System (NAICS). In addition, staff identified equipment lists for facilities in each NAICS category based on both basic, and control equipment that could be lead-related. Based on this database, there are approximately 107 facilities in the SCAQMD that meet the applicability requirements of the proposed rule amendments.

PAR 1420 would affect existing metal melting and lead processing facilities that process raw materials with an average lead content greater than 0.05 percent by weight. The larger emitters such as large lead-acid battery recyclers and the metal melting facilities that melt greater than 100 tons of lead per year were addressed under Rules 1420.1 and 1420.2, respectively. All provisions of PAR 1420 will apply to lead processing and metal melting facilities that process greater than 2 tons of lead per year of raw materials that contain greater than 0.05 percent lead by weight. However, owners or operators that process 2 tons of lead per year or less will be subject to fewer requirements such as conditional ambient air monitoring and sampling, and housekeeping and recordkeeping provisions.

Table 3-1 lists the industry classifications of potentially affected facilities based on NAICS, and the number of such facilities. Among the 107 facilities that could be potentially affected by PAR 1420, one is classified as a Recyclable Material Merchant Wholesaler (NAICS 423930), with the remaining 106 facilities falling under the Manufacturing sector (NAICS 331-336). Out of the 107 affected facilities, 43 are in Los Angeles, 57 in Orange, four in Riverside and the remaining three are located in San Bernardino County.

Table 3-1:
PAR 1420 Affected Facilities

Facility Type (NAICS Codes)	# of Facilities
Secondary Smelting and Alloying of Aluminum (331314)	1
Nonferrous Metal (except Aluminum) Smelting and Refining (331410)	1
Iron Foundries (331511)	2
Aluminum Foundries (except Die-Casting) (331524)	5
Other Nonferrous Metal Foundries (except Die-Casting) (331529)	5
Electroplating, Plating, Polishing, Anodizing and Coloring (332813)	8
Semiconductor and Related Device Manufacturing (334413)	1
Printed Circuit Assembly (Electronic Assembly) Manufacturing (334418)	70
Other Electronic Component Manufacturing (334419)	9
Aircraft Manufacturing (336411)	1
Developing and Manufacturing of Prototypes for Aircraft Parts and Auxiliary Eqpt. (336413)	1
Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing (336419)	2
Recyclable Material Merchant Wholesalers (423930)	1
Total	**107**

Small Businesses

SCAQMD defines a "small business" in Rule 102 for purposes of fees as one which employs 10 or fewer persons and which earns less than $500,000 in gross annual receipts. SCAQMD also defines "small business" for the purpose of qualifying for access to services from SCAQMD's Small Business Assistance Office (SBAO) as a business with an annual receipt of $5 million or less, or with 100 or fewer employees. In addition to SCAQMD's definition of a small business, the federal Clean Air Act Amendments (CAAA) of 1990 and the federal Small Business Administration (SBA) also provide definitions of a small business.

The CAAA classifies a business as a "small business stationary source" if it: (1) employs 100 or fewer employees, (2) does not emit more than 10 tons per year of either VOC or NOx, and (3) is a small business as defined by SBA. The SBA definitions of small businesses vary by six-digit NAICS codes. In general terms, a small business must have no more than 500 employees for most manufacturing industries, and no more than $7 million in average annual receipts for most nonmanufacturing industries.[1] A business classified under NAICS codes beginning with 331-336 is considered a small business by SBA if it has no more than 750 to no more than 1,250 employees, depending on the specific NAICS code. A business classified under NAICS 423930 is considered a small business by SBA when it has no more than 100 employees.

Information on employees and sales for 90 out of 107 facilities is available, based on the 2017 Dun and Bradstreet data. Based on SCAQMD permit data, only 11 of the 90 facilities were determined to be small businesses as defined under SCAQMD Rule 102. These facilities will only be subject to the housekeeping and recordkeeping requirements. Using the SBA definition of small business, all 90 facilities are classified as small businesses. Under the CAAA definition of small business, all 90 facilities are small businesses assuming that all the facilities without the annual emission data emit less than 10 tons of VOC or NOx.

Compliance Cost

Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would incur cost impacts related to one or more of the following requirements: total enclosure, data acquisition systems, source tests, smoke and hot wire anemometer tests, and housekeeping and maintenance requirements. Out of these 15 facilities, 10 that conduct grinding operations would be required to make changes that satisfy the total enclosure requirements. Eight of these 10 facilities, are expected to make building improvements by constructing one wall at each facility, while the remaining two facilities are only expected to install strip curtains.

At the 15 facilities (including the 10 with grinding operations), all of the existing emission control devices currently operating would be required to install data acquisition systems and anemometers and undergo periodic source and smoke testing to demonstrate that the emission control devices meet minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance.

[1] See the SBA website (http://www.sba.gov/community/blogs/community-blogs/small-business-matters/what-small-business-what-you-need-know-and-wh).The latest SBA definition of small businesses by industry can be found at http://www.sba.gov/content/table-small-business-size-standards.

The annual compliance costs due to PAR1420 are estimated to range from $273,000 to $280,000, depending on the real interest rate assumed (1%-4%).[2] The source test requirement alone contributes to about 80% of the total annual cost. Table 3-2 presents average annual compliance cost of the PAR 1420 by requirement categories.

Table 3-2
Annual Compliance Cost of PAR 1420 by Category
(2017 Dollars)

One-Time Cost Category	One-Time Cost	Annualized at 4% Real Interest Rate	Annualized at 1% Real Interest Rate
Enclosures*	$402,000	$28,442	$22,056
Acquisition Data Systems**	$22,500	$4,860	$4,590
Anemometer **	$6,375	$1,377	$1,300
Recurring Cost Category			
	First Year	**Average Annual**	
Source Test***	$765,000	$223,500	
Smoke Test	$3,154	$3,154	
Housekeeping (Rooftop Cleaning)	$18,000	$18,000	
Total****		**$280,000**	**$273,000**

*Cost is annualized over 20 years
**Cost is annualized over 5 years
***The cost of source test is lower in subsequent (biennial) year, as such this cost was annualized over two years, then averaged over (2018-2035) for calculating the annual total.
****Numbers do not sum up due to rounding.

The remaining 92 facilities would only be subject to the housekeeping, recordkeeping, and conditional ambient monitoring and sampling requirements. These facilities already have housekeeping practices in place and they may only be expected to make very minor upgrades to their recordkeeping at nominal costs. In addition, since these facilities process very small amount of lead containing materials, they would not be expected to trigger any ambient lead exceedances that would require ambient air monitoring.

[2] In 1987, SCAQMD staff began to calculate cost-effectiveness of control measures and rules using the Discounted Cash Flow method with a discount rate of 4 percent. Although not formally documented, the discount rate is based on the 1987 real interest rate on 10-year Treasury Notes and Bonds, which was 3.8 percent. The maturity of 10 years was chosen because a typical control equipment life is 10 years; however, a longer equipment life would not have corresponded to a much higher rate-- the 1987 real interest rate on 30-year Treasury Notes and Bonds was 4.4 percent. Since 1987, the 4 percent discount rate has been used by SCAQMD staff for all cost-effectiveness calculations, including BACT analysis, for the purpose of consistency. The incremental cost reported in this assessment was thus annualized using a real interest rate of four percent as the discount rate. As a sensitivity test, a real interest rate of one percent will also be used, which is closer to the prevailing real interest rate.

Total Enclosures

PAR 1420 requires that no later than June 1, 2018, furnaces, refining, casting, grinding, and lead oxide production areas be located within a total enclosure. The areas may be enclosed individually or in groups. The intent of this requirement is to provide maximum containment and minimize fugitive lead-dust emissions generated in areas where melting, processing, handling and storage of lead-containing materials occur. In Rule 1420.2, SCAQMD staff assumed that it would cost $110[3] per square foot to construct a new total enclosure of about 4,300 square feet. However, no facilities are expected to construct a new total enclosure. Under PAR 1420, only eight facilities would need to make building improvements by constructing one wall at each facility to achieve the required total enclosure. Based on discussions with facilities potentially requiring building improvements and cost estimates for constructing one wall in Rule 1420.2, staff is estimating a cost of $18,000 for small enclosures, $80,000 for a medium-sized enclosure, and $140,000 for a large enclosure. Compared to Rule 1420.2 facilities, the enclosure construction for the PAR 1420 facilities is expected to fall into the small and medium size ranges. The total one-time cost of enclosures is estimated at $402,000.

Data Acquisition Systems

An emission control device subject to the requirements of PAR 1420 must have the pressure across its filter measured continuously with a mechanical gauge when it is in operation. The gauge reading provides an indication of whether the filters are operating within the proper range of pressure differential recommended by the manufacturer or whether they may be clogged or have leaks. The gauge is required to be equipped with a Data Acquisition System (DAS) that is capable of recording the data output from the gauge. This allows the pressure differential across the filter to be monitored and documented, and provides an indication of the effectiveness in which the emission control device is being operated. Based on the cost estimated by Omega Engineering (www.omega.com), the capital cost of each DAS is estimated to be $450, while the cost of installation is expected to be approximately $1,050. The total one-time cost of installing DAS systems for all the affected 15 facilities is estimated at $22,500.

Anemometer

The capture velocity of each emission collection system shall be measured at least monthly using a calibrated hot wire anemometer. An emission collection system designed with a hood or enclosure shall maintain a capture velocity of at least 200 feet per minute as measured at the face of the enclosure. An emission collection system with slots, but without an enclosure or hood shall maintain a capture velocity of at least 2,000 feet per minute or the minimum slot velocity measured in the most recent source test that verified complete collection efficiency, whichever is greater. According to estimates used in Rule 1420.2 each anemometer is estimated to cost approximately $425. The total one-time cost of anemometers is estimated to be $6,375.

[3] http://www.cmdgroup.com/market-intelligence/articles/rsmeans-dollar-per-square-foot-construction-costs-for-four-industrial-type/

Source Tests

The proposed amended rule will require biennial source tests for all lead control devices in order to demonstrate compliance with the lead control reduction efficiency for any lead point source emission control device of 99 percent or the mass outlet limit of 0.0003 pounds per hour. Initial source tests for new and modified lead control devices with an initial start-up date on or after the adoption date of the proposed rule will be required to be conducted within six (6) months after a Permit to Construct has been issued. Existing lead control devices in operation before the adoption date of the rule will require a source test no later than June 1, 2018. An existing source test for a lead control device, conducted on or after January 1, 2014 may be used as the initial source test if it meets certain criteria identified in the rule amendment.

It is further assumed that the initial source testing will consist of both stack inlet and outlet testing for each emission control device. Operators will only be required to test stack outlets in subsequent biennial or quadrennial source tests. Based on costs of inlet and outlet testing provided by Almega Testing (http://www.almegaenv.com/), the initial cost is estimated to range from $15,000 to $120,000 per facility, while the cost for the biennial source testing is estimated to range from $7,500 to $60,000 due to the fact that only outlet testing would be required to demonstrate compliance.

However, the proposed rule provides an incentive for lead control devices that demonstrate exemplary lead emission rate source test results. If an annual source test to demonstrate compliance with the lead point source emission standards of subdivision (f) is able to demonstrate an outlet concentration of 0.00015 pounds per hour or less, then the next test for all lead point sources shall be performed no later than 48 months after the date of the most recent source test. SCAQMD staff assumed that all facilities would be able to take advantage of this incentive, resulting in a combined first year source test cost totaling $765,000 and $382,500 every other year thereafter.

Smoke Test

PAR 1420 would also require a periodic smoke test at least once every 3 months to demonstrate capture efficiency for ventilation systems of add-on air pollution control devices. The periodic smoke test provides a qualitative test for owners and operators to help determine whether cross draft conditions or other activities conducted at the facility are affecting the ability of the emission collection system or hood to effectively capture emissions. It also serves to verify that the airflow is moving towards the air pollution collection system, which in turn improves the effectiveness of the air pollution control device. The 15 affected facilities that are expected to be subject to all of the requirements of the rule amendment will be expected to be currently operating with emission collection systems. As such, these facilities will be required to conduct smoke tests during source testing, and also at least once every three months. The total annual cost of smoke testing is estimated to be $3,154. The annual cost is based on estimates used in Rule 1420.2 and on the number of emission collection systems at each facility that are subject to the subdivision (k).

Recordkeeping

PAR 1420 would require owners and operators of all the 107 affected facilities to maintain records for three years, with at least the two most recent years kept onsite. Upon surveying many facilities subject to PAR 1420, SCAQMD staff concluded that all facilities currently conduct recordkeeping that is consistent with the proposed requirements and no additional costs are expected.

Housekeeping (Roof Cleaning)

PAR 1420 includes housekeeping requirements that are proposed to minimize fugitive lead-dust emissions. All requirements will be effective within 30 days of rule adoption with the exception of the requirements to conduct annual rooftop cleaning, which will be effective in July 2018 and are expected to be conducted during the months of July through September. The prohibition for dry sweeping and the use of compressed air for housekeeping will be effective upon adoption of PAR 1420. Only facilities that process greater than 10 tons of lead per year are required to conduct rooftop cleaning, which should be completed at least once annually. The cost of rooftop cleaning is estimated to be $1,250 based on estimates from Rule 1420.2.

Overall Compliance Costs

In order to compile the annual compliance costs for the additional enclosures and other equipment needed to comply with the PAR 1420, staff amortized the enclosures and other capital costs of control equipment at a real interest rate of four percent over the equipment life; as a sensitivity test, a real interest rate of one percent was also applied which is closer to the prevailing real interest rate. Table 3 reports the projected compliance costs, by potentially affected industries, due to the additional requirements needed for the 15 affected facilities. Each year, the compliance costs due to PAR1420 are estimated to range from $273,000 to $280,000, depending on the real interest rate assumed (1%-4%). The majority of the estimated annual compliance costs (93%) would be incurred by the industry identified as Primary Metal manufacturing (NAICS 311) where most of the affected metal melting or lead processing facilities fall under. The remaining costs (7%) are expected to be incurred by a recycler of auto and industrial scraps (NAICS 423930).

All of the costs discussed in this section are expressed in 2017 dollars. For the purpose of projecting future compliance costs, it was assumed that these costs would remain the same in the foreseeable future and may increase only with inflation.

Table 3-3
Projected Compliance Costs by Facility that Potentially Could Need Additional Pollution Controls
(2017 Dollars)

Industry that Typically Uses the Equipment (6-Digit NAICS Code)	**Projected Annual Compliance Costs**	
	4% Real Interest Rate	1% Real Interest Rate
Smelting and Refining Nonferrous Metal (except Aluminum) Smelting and Refining (331410)	$10,846	$10,823
Scrap Metal Recyclers Secondary Smelting and Alloying of Aluminum (331314)	$43,133	$41,839
Cast Iron Manufacturing Iron Foundries (331511)	$27,537	$27,125
Aluminum Product Manufacturing Aluminum Foundries (except Die-Casting) (331524)	$103,678	$101,720
Other Lead Product Manufacturing Other Nonferrous Metal Foundries (except Die-Casting) (331529)	$73,250	$71,498
Recycling of Auto and Industrial Scraps Recyclable Material Merchant Wholesalers (423930)	$20,889	$19,595
All 15 Affected Facilities*	**$280,000**	**$273,000**

*Numbers do not sum up due to rounding.

Table 4 shows the projected compliance costs by facility due to the additional requirements of the PAR 1420. The Aluminum Product Manufacturing classification (NAICS 331524) where five of the affected facilities belong, would bear about 37% of the compliance costs. On a per facility basis, it is estimated that each of the 15 affected facilities could incur an annual cost ranging from $4,800 to $43,000 depending on the number of lead point sources at the facility, and the level of construction necessary to enclose the buildings housing their lead processing areas.

Table 3- 4
Projected Compliance Costs by Industry for Affected Facilities that Potentially Could Need Additional Pollution Controls (2017 Dollars)

Facilities	Industry that Typically Uses the Equipment (6-Digit NAICS Code)	Projected Annual Compliance Costs	
		4% Real Interest Rate	1% Real Interest Rate
A	Smelting and Refining (331410)	$10,846	$10,823
B	Scrap Metal Recyclers (331314)	$43,133	$41,839
C	Cast Iron Manufacturing (331511)	$6,735	$6,632
D	Cast Iron Manufacturing (331511)	$20,802	$20,493
E	Aluminum Product Manufacturing (331524)	$20,968	$20,659
F	Aluminum Product Manufacturing (331524)	$28,542	$28,519
G	Aluminum Product Manufacturing (331524)	$43,133	$41,839
H	Aluminum Product Manufacturing (331524)	$6,155	$5,846
I	Aluminum Product Manufacturing (331524)	$20,889	$19,595
J	Other Nonferrous Metal Foundries (331529)	$10,846	$10,823
K	Other Nonferrous Metal Foundries (331529)	$20,048	$19,945
L	Other Nonferrous Metal Foundries (331529)	$10,846	$10,823
M	Other Nonferrous Metal Foundries (331529)	$10,620	$10,311
N	Other Nonferrous Metal Foundries (331529)	$4,881	$4,858
O	Recyclable Material Merchant Wholesalers (423930)	$20,889	$19,595
	All 15 Affected Facilities	**$280,000**	**$273,000**

*Numbers do not sum up due to rounding.

Macroeconomic Impacts on Regional Economy

It has been a standard socioeconomic practice that, when the annual compliance cost is less than one million current U.S. dollars, the Regional Economic 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 diminutive relative to the baseline regional economy.

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

PAR 1420 is considered a "project" as defined by the California Environmental Quality Act (CEQA), and the SCAQMD is the designated lead agency. Pursuant to CEQA Guidelines Sections 15252 and 15070 and SCAQMD Rule 110, the SCAQMD has prepared an Environmental Assessment (EA) for PAR 1420. The environmental analysis in the Draft EA concluded that PAR 1420 would not generate any significant adverse environmental impacts and therefore, no alternatives or mitigation measures are required. The Draft EA was released for a 30-day public review and comment period from September 19, 2017 to October 19, 2017. Two comment letters were received from the public relative to the Draft EA and responses to the comments have been prepared. The comment letters and the individual responses to the comments have been included in Appendix D of the Final EA.

Subsequent to release of the Draft EA, modifications were made to the proposed project. SCAQMD staff has reviewed the modifications to the proposed project and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the Draft EA. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, the Draft EA is now a Final EA and is included as an attachment to the Governing Board package. The SCAQMD Governing Board must review the adequacy of the Final EA, including responses to comments, prior to certification of the Final EA and adoption of PAR 1420.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity

PAR 1420 is needed to further protect public health by reducing lead emissions from lead processing facilities. For a toxic air contaminant, such as lead, for which there is no level of exposure that can yet be identified with confidence, as clearly not being associated with some risk of deleterious health effects, the intent of this proposed rule is to reduce emissions to the lowest level achievable through the most effective feasible control method. The proposed rule will reduce

ambient lead emissions from point sources as well as fugitive emissions from facility operations. In addition, the proposed rule will help ensure that violations of the NAAQS do not occur.
An ambient lead concentration limit of 0.100 μg/m^3 will be more health protective for communities that live, work, and recreate around metal melting facilities, particularly younger children. There is substantial scientific justification provided through EPA's development of the 2008 Lead NAAQS and the 2016 Final Decision to Retain the Current Lead NAAQS evidence-based framework to support the policy decision to establish an ambient limit of 0.100 μg/m^3. The above discussion provides a description of EPA's evidence-based framework to establish the 2008 Lead NAAQS of 0.15 μg/m^3 and key policy judgments made regarding the level of health protection and margin of safety for the national standard. As previously stated, there are currently no commonly accepted guidelines or criteria within the public health community that would provide a clear basis for reaching a judgment as to the appropriate degree of public health protection that should be afforded to protect against risk of neurocognitive effects in sensitive populations, such as IQ loss in children." (73 FR 67004). As a regional air agency, developing a source-specific-rule for lead processing facilities, the SCAQMD staff is recommending policy decisions that are more health protective for communities, particularly young children, that are affected by lead emissions from lead processing facilities regulated under Proposed Amended Rule 1420. The above discussion substantiates the policy decision to establish an ambient lead concentration limit of 0.100 μg/m^3, with some key points of the above discussion highlighted below:

- No safe blood level of lead in children has been identified (CDC, 2012a)
- The developing nervous system in children is among the sensitive-- if not the most sensitive-endpoints. (73 FR 66976)
- Lead affects children's IQs at exposure levels appreciably lower than recognized. (CHPAC, 2105)
- Pre-school children or children under five years old are the most vulnerable to exposure and adverse health effects, and thereby represent the greatest at-risk population. (EPA, 2013)
- Younger children absorb substantially more lead than adults, especially children below 2 years of age. (OEHHA, 2009)
- No study has determined a level of lead in blood that does not impair child cognition. Further, the effects are long-lasting. Damage to a child's developing brain from lead is not reversible. (AAP, 2008)
- CASAC commented that ''a population loss of 1–2 IQ points is highly significant from a public health perspective.'' (EPA, 2008)
- Air-to-blood ratio of 1:10 is also supported by EPA's evidence based air-related IQ loss data and is even more health protective (CHPAC, 2008b)

Based on all the foregoing, the evidence supports the SCAQMD's policy decision to establish a final lead limit in ambient air at 0.100 μg/m^3.

Authority

The SCAQMD Governing Board has authority to adopt PAR 1420 pursuant to the California Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41700 and 41706.

Clarity
PAR 1420 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency
PAR 1420 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations.

Non-Duplication
PAR 1420 will not impose the same requirements as any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD.

Reference
By adopting PAR 1420 the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Sections 40001 (rules to achieve and maintain ambient air quality standards), 41700 (nuisance), 41706(b) (emission standards for lead compounds from non-vehicular sources), Federal Clean Air Act (CAA) Section 112 (Hazardous Air Pollutants), and CAA Section 116 (more stringent state standards).

COMPARATIVE ANALYSIS

Health and Safety Code section 40727.2 requires a comparative analysis of the proposed rule with any Federal or SCAQMD rules and regulations applicable to the same source. See Table 3-5.

Table 3-5: Comparison of PAR 1420 with SCAQMD Rule 1420, SCAQMD Rule 1420.2, the CARB 1998-12-30 Non-Ferrous Metal Melting ATCM, the 2008 Lead NAAQS, and the NESHAP for Secondary Lead Smelters

Rule Element	PAR 1420	SCAQMD Rule 1420	SCAQMD Rule 1420.1	SCAQMD Rule 1420.2	CARB 1998-12-30 Non Ferrous Metal Melting ATCM	2008 Lead NAAQS	NESHAP from Secondary Lead Smelting
Applicability	Facilities that process materials lead content greater than 0.05 percent by weight	Facilities that use or process lead-containing materials	Lead-acid battery recycling facilities that have ever processed more than 50,000 lead-tons/year	Facilities that melt 100 tons or more of lead in any calendar year	Facilities that melt non-ferrous metals including lead	All States	Secondary lead smelters
Ambient Air Quality Standard	Date of Adoption - 12/31/20: 0.150 µg/m^3 averaged over 30 consecutive days; On or after 1/1/2021: 0.100 µg/m^3 averaged over 30 consecutive days;	1.5 µg/m^3 averaged over 30 days	January 1, 2016, to December 31, 2016 meet 0.110 µg/m^3 averaged over 30 consecutive days. On and after January 1, 2017 meet 0.100 µg/m^3 averaged over 30 consecutive days.	10/2/15 to 3/31/18: 0.150 µg/m^3 averaged over 30 consecutive days. facilities must meet the initial limit no later than 90 days after approval of ambient air monitoring and sampling sites by the Executive Officer. On and after January 1, 2018, all facilities must meet 0.100 µg/m^3 averaged over 30 consecutive days.	None	0.15 µg/m^3: 3-month rolling average Demonstrated over a 3-year period.	None

Total Enclosures Total Enclosures continued	Total enclosure required for lead processing areas	None	Total enclosures for main areas where processing, handling and storage of lead-containing materials occur	Total enclosure for furnace, refining, casting, lead oxide production and pasting areas	Enclosed storage area for dust-forming material including, but not limited to, dross, ash, or feed material	None	Total or partial enclosures for: - Smelting furnace and dryer charging hoppers, chutes, and skip hoists; - Smelting furnace lead taps, and molds during tapping; - Refining kettles; - Dryer transition pieces; and Agglomerating furnace product taps
Emission Standard and Requirements for Lead Control Devices	99% control efficiency for lead or meet an outlet mass lead emission rate of less than 0.00030 lb/hr	99% control efficiency for particulate matter; or 98% control efficiency for lead	Total facility mass emission rate of 0.003 lb/hour of lead from all lead point sources; Use of filters or bags that are rated by the manufacturer to achieve 99.97 percent control efficiency on 0.3 micron particles or made of PTFE membrane material	99% control efficiency for lead or meet an outlet mass lead emission rate of less than 0.00030 lb/hr	99% control efficiency	None	Concentration of 2.0 mg/dscm

			Secondary lead controls on dryer				
Compliance Plan	None Required	Specifies general facility information	Only required if a facility exceeds ambient lead concentration limit of 0.110 µg/m^3 from January 1, 2016 to December 31, 2016 or 0.100 µg/m^3 on or after January 1, 2017 identifies additional lead control measures beyond the rule. Additional Compliance Plan for Closure Activities required to address emissions during closure	Only required if a facility exceeds ambient lead concentration limit of 0.120 µg/m^3 from July 1, 2016 to December 31, 2017 or 0.100 µg/m^3 on or after January 1, 2018, or total facility point source emissions greater than 0.080 lb/hour after July 1, 2016. Identifies additional lead control measures beyond the rule.	None	None	None
Ambient Air Monitoring Requirements	Conditionally required if ambient air concentration exceeds 0.150 µg/m^3 as determined by SCAQMD monitor or lead point source limit exceeded two times over a rolling 36 month period. Samples collected every six days	Minimum of two monitors at facility locations approved by the Executive Officer Samples collected every six days Results reported quarterly	- Daily sampling for lead and arsenic - Provisions included for monitor failure - One year sample retention - Minimum of four monitors at facility locations approved by the	- Minimum of three monitors at facility locations approved by the Executive Officer - Provisions included for monitor failure - One year sample retention - Samples collected once every three days or daily depending on the exceedance of	None	For states, a minimum of: - One source-oriented monitor at all facilities emitting 1.0 tons of lead/year; and - One non-source-oriented monitor in urban areas with a population of at least 500,000 people	None

			Executive Officer - Samples collected at least once every three days - Results reported monthly - Daily sampling if 0.120 µg/m^3 is exceeded after January 1, 2015 - Monitoring required during facility closure activities	ambient air concentration limits, and the severity. Provisions included to cease monitoring if lead concentration is below 0.070 µg/m^3 average over 30 consecutive days, no single day exceeding 0.070 for one full, and total facility mass lead emissions are less than 0.040 lb/hour. - Results reported monthly		- Samples collected every six days	
Housekeeping and Maintenance Requirements	- Requirements for storage of dust-forming material - Daily cleaning of surfaces subject to vehicular traffic - Storage and disposal of lead or lead-containing wastes in closed containers - Posted facility vehicle speed limit of 5 miles per hour on any	- Requirements for storage of dust-forming material; weekly cleaning of surfaces subject to vehicular or foot traffic; and storage, disposal, recovery, and recycling of lead or lead-containing wastes generated from housekeeping activities	- Prescribed requirements for cleaning frequencies of specific areas; maintenance activity; building integrity inspections; storage and transport of lead-containing materials; onsite mobile sweeping; and surface	- Requirements for storage of dust-forming material - Daily cleaning of surfaces subject to vehicular traffic - Storage and disposal, lead or lead-containing wastes in closed containers - Posted facility vehicle speed limit of 5 miles per hour on any roadway located within 75 feet of	Surfaces subject to vehicular or foot traffic shall be vacuumed, wet mopped or otherwise maintained	None	Periodic wash down of plant roadways (lower frequency than Rule 1420.1); wet suppression of battery breaking area storage piles; vehicle wet washing of vehicles exiting the materials handling and storage areas

	roadway located within 75 feet of total enclosure - Prohibits use of compressed air for any housekeeping activities		impoundment cleanings	total enclosure; 15 miles per hour speed limit for roadways located more than 75 feet from total enclosure - All outside concrete or asphalt cutting performed under 100% wet conditions - Grading of soil only on soils sufficiently wet to prevent fugitive emissions			
Reporting Requirements	- Monthly ambient air monitoring reports - Exceedances of ambient air concentration to be reported within 7 days of receipt of collected sample - Failure to collect 24 hour sample to be reported within 2 hours of knowing the sample was not collected - Source test results to be	Ambient air lead and wind monitoring for any lead-processing facility that is required or elects to do ambient air monitoring	- Reporting to Executive Officer within 72 hours of daily ambient air lead concentration of 0.300 $\mu g/m^3$ with the following information: Date of the occurrence; Name of the monitor; Ambient lead concentration at the monitor for the 24 hour sample;	- Monthly ambient air monitoring reports - Exceedances of ambient air concentration to be reported within 24 hours - Failure to collect 24 hour sample to be reported within 2 hours of knowing the sample was not collected - Source test results to be reported within 90 days	- Source test results Amount of metal processed if requesting exemption	For states: - State Implementation Plan submittal; - Periodic emissions reports from stationary source monitors; - Ambient air quality data and associated assurance data	- Lead control alarm/failure reports including fugitive dust control measures performed during failures

	reported within 90 days		Potential cause or causes of the occurrence; and Potential remedies to prevent the reoccurrence. Caution signs posted at entrances and perimeter Notification of breach of total enclosure				
Exemptions	- Facilities that process materials with lead content less than 0.05 percent by weight - Facilities processing less than two tons per year subject only to conditional ambient monitoring, housekeeping, and recordkeeping	Facilities that process materials with lead content less than 0.5 percent by weight Facilities processing less than two tons per year subject to compliance plan, housekeeping, and recordkeeping	- Permanently closing facilities exempt from rule except for monitoring, housekeeping and closure provisions	- Facilities that process less than 50 tons per year of lead	- Facilities that process less than 200 tons per year of lead	- None	- Facilities that emit less than 10 tons per year of lead

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APPENDIX A: COMMENTS AND RESPONSES

PROMOTING EH&S COMPLIANCE BY ACHIEVING IMPROVED COMMUNICATION BETWEEN INDUSTRY AND GOVERNMENT

September 19, 2017

Mr. Kennard Ellis
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive Diamond Bar, CA 91765
Phone: (909) 396-2457
Email: kellis@aqmd.gov

Subject: Proposed Amended Rule 1420 Comments

Dear Mr. Ellis:

The Industrial Environmental Coalition of Orange County (IEC/OC) appreciates the opportunity to provide comments to the South Coast Air Quality Management District (SCAQMD) on Proposed Amended Rule (PAR) 1420, Emissions Standards for Lead. The IEC/OC represents diverse industrial businesses in Orange County, including aerospace companies, metal processing facilities, pharmaceutical companies, general manufacturing, and public utilities. Our mission is to facilitate communication between industry and government agencies on environmental issues impacting our member's business operations.

In pursuing rule developments and other actions under the Initiative, the IEC/OC requests that SCAQMD consider reasonable, fair, and cost-effective emission control requirements that will properly achieve the health protection goals of the SCAQMD's Air Toxic Initiative.

In general, IEC/OC's finding on PAR 1420 is that SCAQMD needs to tailor the emission reductions depending on the current emissions from the facilities covered. Where existing lead emissions are already very small and controls are not necessary for SCAQMD to achieve objectives, it is not equitable, and a substantial burden to small facilities, to require expensive measures such as high efficiency dust collectors, total enclosures, monitoring and extensive housekeeping requirements, that the much larger facilities are required to do. The compliance requirements in PAR 1420 should be scaled back substantially in fairness, and to reduce the burden on these small facilities.

IEC/OC has the following specific comments on PAR 1420.

1. **Comment 1 - The 0.05% by weight lead applicability threshold is not justified and should be stricken from PAR 1420.** In the *Preliminary Draft Staff Report*, the SCAQMD has not provided any explanation or scientific justification on why a 0.05% by weight lead content in materials processed should be utilized to support meeting the 0.1 $\mu g/m^3$ 30-day average concentration lead standard. The SCAQMD needs to provide a scientific analysis to support this threshold. In addition, the approach to use a lead content threshold for applicability is inconsistent with Rules 1420.1 and 1420.2. We suggest the changes in PAR 1420 should focus on the actual emissions from these facilities. 1-1

2. **Comment 2 – If a lead content threshold is used in PAR 1420, the value should be based upon no less than a 30-day weighted average.** The proposed 0.05% by weight threshold could be triggered by a single piece of melted material. If SCAQMD will use a lead content 1-2

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threshold, this threshold should be reflective of the ambient lead standard, which is based upon a 30-day average concentration. Therefore, the lead content should be a weighted average based upon no less than a 30-day period. 1-2 cont'd

3. **Comment 3 - The 2 tons/year threshold lead processed in PAR 1420 is not justified by SCAQMD.** The SCAQMD has not provided any explanation or scientific justification on why a 2 tons/year throughput should be utilized to support meeting the 0.1 $\mu g/m^3$ 30-day average concentration lead standard. The SCAQMD needs to provide a scientific analysis to support this threshold. 1-3

4. **Comment 4 - Facilities should have the incentive and opportunity to be exempted from rule applicability.** PAR 1420 triggers initial applicability based upon a 5-year lookback. There should be a provision for the facility to provide representative data to capture scenarios where a facility has recently install control equipment or modified operations going forward. In addition, SCAQMD should provide clear language that facilities can be exempted from rule applicability should the lead processed fall below the applicability thresholds. 1-4

5. **Comment 5 - The lead air monitoring requirement in PAR 1420 is unnecessary and should be removed.** Given the stringent point source emissions control and housekeeping requirements in PAR 1420, the ambient lead monitoring provisions should be removed. The lead emissions from these facilities will be substantially reduced through emission controls and housekeeping. 1-5

6. **Comment 6 - Building enclosures for small lead sources can be very costly and burdensome and may not be necessary to meet the lead standards.** The provisions in PAR 1420 such as point source emission controls and housekeeping measures are likely sufficient to address SCAQMD's concerns about meeting the 0.1 ug/m3 ambient lead standard. SCAQMD should provide scientific justification on the need to provide total enclosure for all lead melting sources. IEC/OC suggests considering a threshold, on a lbs of lead melted/hr basis, where such enclosures would be required. 1-6

The IEC/OC supports an open dialogue on SCAQMD's Air Toxics Initiative, PAR 1420, and other actions, to effect beneficial rule developments. If you have any questions, please do not hesitate to contact me at 858-774-2009.

Sincerely,

James A. Westbrook
IEC/OC Regulatory Committee Chair

Mission Statement: Our goal is to provide a forum for Orange County businesses to remain current on emerging issues and to exchange views with environmental and safety agencies in an open and informal setting.

Response to Comment 1-1:
The concentration of lead that can result from emissions released from lead processing and lead melting facilities is directly proportional to both the amount of raw materials processed and the lead content of the raw materials. Therefore, by limiting the lead content of materials and tracking the amounts processed, PAR 1420 will be able to reduce public health impacts by reducing the exposure to lead and to ensure the continued attainment and maintenance of the lead NAAQS. In addition, PAR 1420 does focus on actual emissions from these facilities. The 0.05% weight combined with the total amount of lead processed is an applicability threshold. Those facilities processing 2 tons per year or less are subject to lesser requirements which include conditional monitoring provisions, housekeeping, and recordkeeping requirements. Facilities that are processing more than 2 tons per year are subject to all requirements which include conditional monitoring provisions, housekeeping, recordkeeping, point source, periodic source testing, and enclosure requirements.

It should be noted that during site visits staff was made aware that some industries were moving away from products that contained lead and as such, manufacturers were making a conscious effort to minimize and in some cases eliminate the use of alloys containing lead. This was substantiated by Safety Data Sheets which indicated that there were alloys used that were in fact below 0.05% lead weight content.

Response to Comment 1-2:
The proposed lead content threshold of 0.05% is based on a monthly weighted average. Facilities are required to maintain records of both the quantities of raw materials processed monthly and the lead content of these raw materials. This data will used to calculate the weighted average of materials used.

Response to Comment 1-3:
Refer to Response to Comment #1

Response to Comment 1-4:
A provision has been added to PAR 1420 to allow a facility that has reduced its lead processing rate to two tons of lead per year or less, if the owner or operator accepts a permit condition limiting the amount of lead processed. A facility that elects to utilize this option would only be subject to the housekeeping, recordkeeping and conditional ambient lead concentration limits.

Response to Comment 1-5:
PAR 1420 does not require mandatory monitoring for lead as is the case in Rules 1420.1 and 1420.2. However, if SCAQMD monitoring detects lead concentrations from a facility that exceed the 0.150 $\mu g/m^3$ ambient air lead concentration limit, or if a facility fails to demonstrate compliance with the point source requirement twice within a 36-month period, monitoring and sampling requirements may be triggered. Ambient monitors provide an overall measurement of all emissions from a facility which include point and fugitive emissions. PAR 1420 has an ambient monitoring requirement as it is designed to ensure compliance with the lead NAAQS. The ambient concentration limits established in PAR 1420 are consistent with Rules 1420.1 and 1420.2.

Response to Comment 1-6:
Lead sources processing less than two tons per year are not subject to the building enclosure requirements. The majority of lead sources affected by PAR 1420 already operate in total enclosures, which are defined as a permanent containment structure, completely enclosed with a floor, walls and a roof with limited openings to allow ingress and egress of people and vehicles. Monitoring results from Rules 1420.1 and 1420.2 have also shown the importance of total enclosures in minimizing lead emissions. Also, since ambient monitoring is not a mandatory requirement of PAR 1420, it is important that both stack and fugitive lead emissions from facilities be minimized.

MFASC
METAL FINISHING ASSOCIATION OF SOUTHERN CALIFORNIA, INC.

September 22, 2017

Via Email to kellis@aqmd.gov

Mr. Kennard Ellis
Planning, Rule Development and Area Sources
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Re: Comments - Proposed Amended Rule [PAR] 1420 – Emissions Standard for Lead

Mr. Ellis:

This is to follow-up on the conversations in yesterday's Working Group Meeting #4 to provide the comments of the Metal Finishing Association of Southern California [MFASC] on the Proposed Amended Rule [PAR] 1420 – Emissions Standard for Lead.

The lead plating activities of metal finishing companies will be specifically addressed by the provisions of the amended rule. The phrases "lead platers" and "lead plating" are being added to the Applicability and Definition subdivisions [b] and [c] [15]. In addition, the existence of eight electroplating, plating, polishing, anodizing and coloring facilities [NAICS Code 332813] is noted in the list of the types of facilities subject to PAR 1420 in Table 2-1, on Page 2-2 of the Preliminary Draft Staff Report.

Our association offers the following comments:

- The district should address emissions from lead plating within its update to Rule 1426 [Emissions from Metal Finishing Operations]. This would be consistent with, and in furtherance of, the District's stated objective of addressing metal finishing operations in a comprehensive rule. This would also be helpful to the industry's effort to comply with the emission limits and housekeeping provisions. 2-1
- The district should clarify the text of subdivision [h][2] of the Housekeeping Requirements, so that the prohibition against dry sweeping and the use of compressed air is limited, as intended, to housekeeping. 2-2
- The district should clarify the text of subdivision [h][4] of the Housekeeping Requirements, so that it is clear that the prohibition against the use of "weather caps", as intended, does not prohibit other alternatives to prevent rain from entering into stacks. 2-3

Thank you for this opportunity to provide comments in this rulemaking and for the District's consideration. We recognize that the rulemaking is proceeding towards a potential adoption later this year, and that a number of other revisions were identified in yesterday's Working Group Meeting #4. I can be reached at 310-639-1621.

Sincerely,

Wesley Turnbow

Wesley Turnbow, MFASC President and E.M.E., Inc. CEO

MFASC • PO Box 6547 • Burbank CA 91510-6547 • 877-238-9490

Response to Comment 2-1:
PAR 1420 is intended to apply to lead processing and metal melting facilities excluding those subject to Rules 1420.1 and 1420.2. Facilities conducting lead plating operations have traditionally been subject to Rule 1420 depending on daily emissions of lead. More lead plating operations will likely be subject to PAR 1420 because the daily emission exemption has been replaced by exemptions for low-lead content and small quantities processed. Because lead plating operations are likely to process less than two tons per year of lead, PAR 1420 will only require housekeeping, recordkeeping, and conditional ambient air monitoring.

Early this year, SCAQMD staff initiated rulemaking for Rule 1426 with Rule 1469 for chrome electroplating and chromic acid anodizing operations, but decided to bifurcate the rulemaking to focus on Proposed Amended Rule 1469. Staff anticipates re-initiating rulemaking for Proposed Amended Rule 1426 in 2018. It is expected that requirements under Rule 1426 will be more comprehensive than PAR 1420. With the exception of lead, metals that will be covered under Proposed Amended Rule 1426 do not have national ambient air quality standards, so it is appropriate to keep lead plating in Rule 1420 to provide assurance these sources will not interfere with the Basin's lead attainment status.

Response to Comment 2-2:
The provisions of paragraph (h)(2) have been clarified to apply only to housekeeping activities.

Response to Comment 2-3:
Weather caps that restrict the flow of air exhausting from ventilation stacks are prohibited as they concentrate stack emissions. An exhaust cap that does not restrict the flow of exhaust air, such as a butterfly cap, is acceptable.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Environmental Assessment for Proposed Amended Rule 1420 – Emissions Standard for Lead

November 2017

SCAQMD No. 09182017DT
State Clearinghouse No: 2017091055

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PREFACE

This document constitutes the Final Environmental Assessment (EA) for Proposed Amended Rule (PAR) 1420 – Emissions Standard for Lead. A Draft EA was released for a 30-day public review and comment period from September 19, 2017 to October 19, 2017. Analysis of PAR 1420 in the Draft EA did not result in the identification of any environmental topic areas that would be significantly adversely affected. Two comment letters were received from the public regarding the analysis in the Draft EA. The comment letters received relative to the Draft EA and responses to individual comments are included in Appendix D of this document.

In addition, subsequent to the release of the Draft EA, modifications were made to PAR 1420 and some of the revisions were made in response to verbal and written comments received during the rule development process. To facilitate identification, modifications to the document are included as underlined text and text removed from the document is indicated by ~~strikethrough~~. To avoid confusion, minor formatting changes are not shown in underline or strikethrough mode.

Staff has reviewed the modifications to PAR 1420 and concluded that none of the revisions constitute: 1) significant new information; 2) a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the draft document. In addition, revisions to the proposed project in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, this document now constitutes the Final EA for PAR 1420.

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CHAPTER 1

PROJECT DESCRIPTION

Introduction

California Environmental Quality Act

Project Location

Project Background

Project Description

INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD or District) 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. By statute, SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the District[2]. Furthermore, SCAQMD must adopt rules and regulations that carry out the AQMP[3]. The AQMP is a regional blueprint for how SCAQMD will achieve air quality standards and healthful air and the 2016 AQMP[4] contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxics. In particular, the 2016 AQMP includes control measure TXM-07: Control of Lead Emissions from Stationary Sources. Lead emissions are currently regulated by SCAQMD Rule 1420 – Emissions Standard for Lead, which was adopted in 1992.

On October 15, 2008, the U.S. Environmental Protection Agency (U.S. EPA) amended the primary (health-based) and secondary (welfare-based) National Ambient Air Quality Standard (NAAQS) for lead[5] from 1.5 micrograms per cubic meter (µg/m^3) averaged over a calendar quarter to 0.15 µg/m^3 averaged over a rolling 90 day period. The NAAQS is a national standard for lead which applies uniformly to all parts of the United States. Studies conducted identified lead as a probable carcinogen and showed that adverse health effects occurred at much lower levels than previously recognized, in particular for children. To update Rule 1420, address control measure TXM-07, and U.S. EPA's amended lead emission standards, SCAQMD staff is currently proposing amendments to Rule 1420 which will protect public health by reducing emissions and ambient air concentrations of lead from non-vehicular sources, reduce public health impacts by reducing the exposure to lead, and help maintain attainment of the NAAQS for lead.

Proposed Amended Rule (PAR) 1420 applies to metal melting or lead processing facilities, including, ~~but not limited to~~ primary or secondary lead smelters, foundries, lead acid battery manufacturers or recyclers, lead platers, and lead-oxide, brass, and bronze producers that process lead-containing materials. Applicability is based on the greatest amount of lead processed at a facility in any one of five calendar years prior to the date of adoption of PAR 1420 or any year thereafter, where the lead content of the material processed is greater than 0.05 percent by weight. Average lead content will be determined based on the highest one-month average after the date of adoption of PAR 1420, or any month thereafter. Based on SCAQMD staff's analysis of compliance and permitting data, 107 facilities in the SCAQMD will be affected by ~~proposed amended rule (~~PAR~~)~~ 1420, with a majority of the facilities associated with the manufacturing of printed circuit boards, semiconductors and other electronic components~~conducting lead soldering or tin/lead plating~~.

The following table identifies the industry sectors, as classified by the North American Industry Classification System (NAICS) code, and the types and number of respective facilities subject to PAR 1420:

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1 The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., ch. 324 (codified at Health and Safety Code Section 40400-40540).

2 Health and Safety Code Section 40460(a).

3 Health and Safety Code Section 40440(a).

4 SCAQMD, 2016 Air Quality Management Plan. http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/final-2016-aqmp/final2016aqmp.pdf

5 U.S. EPA, National Ambient Air Quality Standards (NAAQS) for Lead (Pb), October 18, 2016. https://www.epa.gov/lead-air-pollution/national-ambient-air-quality-standards-naaqs-lead-pb

Table 1-1: Type of Facilities and Affected Industry Subject to PAR 1420

NAICS Code	Facility Type	Number of Facilities
331314	Secondary Smelting and Alloying of Aluminum	1
331410	Non-Ferrous Metal (except Aluminum) Smelting and Refining	1
331511	Iron Foundries	2
331524	Aluminum Foundries (except Die-Casting)	5~~4~~
331529	Other Non-Ferrous Metal Foundries (except (Die-Casting)	5
332813	Electroplating, Plating, Polishing, Anodizing, and Coloring	8
334413	Semiconductor and Related Device Manufacturing	1
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	70
334419	Other Electronic Component Manufacturing	9
336411	Aircraft Manufacturing	1
336413	Developing and Manufacturing of Prototypes for Aircraft Parts and Auxiliary Equipment	1
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	2
~~423500~~	~~Metal and Mineral Merchant Wholesalers~~	~~1~~
423930	Recyclable Material Merchant Wholesalers	1
	Total	**107**

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 PAR 1420 is a SCAQMD-proposed amended rule, the SCAQMD 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 impacts that could result from implementing PAR 1420 (the proposed project) and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The SCAQMD's

[6] The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*

regulatory program was certified by the Secretary of Resources Agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment.

PAR 1420 will reduce lead emissions from metal melting and lead processing facilities. Because PAR 1420 requires discretionary approval by a public agency, it is a "project" as defined by CEQA[7]. The proposed project will reduce lead emissions, reduce public health impacts by reducing exposure to lead, and will provide an overall environmental benefit to air quality. However, SCAQMD's review of the proposed project also shows that implementation of PAR 1420 would not have secondary adverse effects on the environment either directly or indirectly because: 1) aesthetic impacts were determined to be less than significant as analyzed in Section I - Aesthetics; 2) the air quality and greenhouse gas (GHG) impacts were determined to be less than the significance thresholds as analyzed in Section III – Air Quality and Greenhouse Gases; 3) energy impacts were determined to be less than significant as analyzed in Section VI – Energy; 4) geological and soil impacts were determined to be less than significant as analyzed in VII – Geology and Soils; 5) the hazards and hazardous materials impacts were determined to be less than significant as analyzed in Section VIII – Hazards and Hazardous Materials; 6) the increased water usage and wastewater discharge was determined to be less than significant as analyzed in Section IX – Hydrology and Water Quality; 7) the noise impacts were determined to be less than significant as analyzed in Section XII – Noise; 8) public services such as fire protection and police protection were determined to be less than the significance thresholds as analyzed in Section XIV – Public Services; 9) solid and hazardous waste impacts were determined to be less than significant as analyzed in Section XVI – Solid and Hazardous Waste; and 10) transportation and traffic impacts were determined to be less than the significant as analyzed in Section XVII – Transportation and Traffic. Thus, the type of CEQA document appropriate for the proposed project is an Environmental Assessment (EA). The EA is a substitute CEQA document, prepared in lieu of a Negative Declaration with no significant impacts (CEQA Guidelines Section 15252), pursuant to the SCAQMD's Certified Regulatory Program (CEQA Guidelines Section 15251(l); SCAQMD Rule 110). The EA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and, 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, prepared a Draft EA pursuant to its Certified Regulatory Program. The Draft EA includes 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 PAR 1420 is implemented. Because PAR 1420 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 September 19, 2017 to October 19, 2017 and two comment letters were received. All comments

[7] CEQA Guidelines Section 15378

received during the public comment period on the analysis presented in the Draft EA have~~will~~ been responded to and are included in ~~an~~ A~~a~~ppendix D to this~~e~~ Final EA.

Subsequent to the release of the Draft EA for public review and comment, minor modifications were made to PAR 1420 and some of the revisions were made in response to verbal and written comments received during the rule development process. The modifications include: 1) minor changes for rule clarification, including definition additions and revisions; 2) the reorganization of various provisions and sections of the rule; and 3) extended effective dates for initial source testing of existing lead control devices and compliance with total enclosures and PAR 1420 lead emission limits. Staff reviewed the modifications to PAR 1420 and concluded that none of the modifications constitute significant new information or substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the draft document. The Draft EA concluded no significant adverse environmental impacts and the revisions to PAR 1420 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these minor revisions do not require recirculation of the EA pursuant to CEQA Guidelines Section 15073.5 and 15088.5.

Prior to making a decision on the adoption of PAR 1420, the SCAQMD 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 PAR 1420.

PROJECT LOCATION

PAR 1420 applies to any owner or operator of metal melting or lead processing facilities that process lead-containing materials, where the lead content of the material processed is greater than 0.05 percent by weight. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county South Coast Air Basin (Basin) (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. A federal 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).

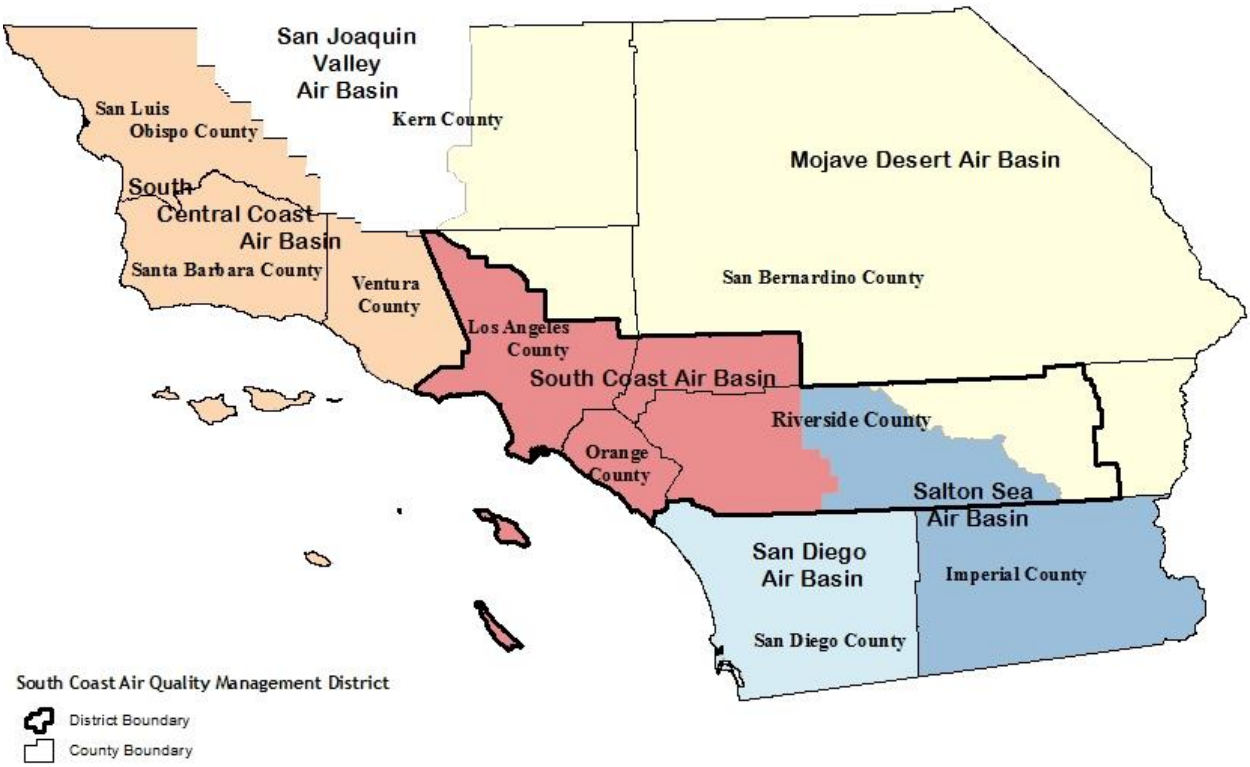


Figure 1-1
Southern California Air Basins

PROJECT BACKGROUND

Rule 1420 was adopted in September 1992 to reduce lead emissions from non-vehicular sources. At the time of the rule adoption, the California Air Resources Board (CARB), in 1970, set the state ambient air quality standard for lead at ~~was~~ 1.5 µg/m^3 averaged over 30 days and the NAAQS for lead, in 1978, was 1.5 µg/m^3 averaged over a calendar quarter. Since its adoption, many regulatory changes affecting sources of lead have occurred. For example, in January 1993, CARB adopted the Airborne Toxic Control Measure (ATCM) for Emissions of Toxic Metals from Non-Ferrous Metal Melting[8], which requires control devices for lead and other toxic metal emission points, control efficiency requirements for control devices, fugitive emission controls, and recordkeeping requirements. The U.S. EPA has also adopted regulations for limiting lead emissions from lead smelters and lead battery manufacturing sources, including the National Emission Standards for Hazardous Air Pollutants (NESHAP) for secondary lead smelting[9], in June 1997, which has since then been amended in January 2014[10] and the NESHAP for lead battery manufacturing area

[8] CARB, 1998-12-30 Non-Ferrous Metal Melting ATCM, January 14, 1993. https://www.arb.ca.gov/toxics/atcm/metaatcm.htm
[9] U.S. EPA, NESHAP from Secondary Lead Smelting, June 13, 1997. https://www.gpo.gov/fdsys/pkg/FR-1997-06-13/pdf/97-15570.pdf#page=1
[10] U.S. EPA, NESHAP from Secondary Lead Smelting, January 3, 2014. https://www.gpo.gov/fdsys/pkg/FR-2014-01-03/pdf/2013-31267.pdf#page=1

sources[11], in July 2007. Both regulations focus on limiting lead emissions by establishing requirements for lead emission concentration limits, and requirements for testing, monitoring, recordkeeping, and reporting.

In 2008, the U.S. EPA reduced the NAAQS for lead to 0.15 µg/m^3 averaged over 90 days. The NAAQS for lead was changed based on more than 6,000 new health studies that identified lead as a probable carcinogen, which showed that adverse health effects occurred at much lower levels than previously recognized, and also showed that children were found to be most vulnerable to lead exposure. In addition, on December 31, 2010, the U.S. EPA designated a portion of Los Angeles County as non-attainment for the 2008 NAAQS for lead, based on exceedances at two source-specific monitors located in Vernon and the City of Industry. These exceedances along with the revision of the NAAQS for lead resulted in committing to lowering the lead concentration limit to 0.150 µg/m^3 and retaining a more stringent averaging period (e.g., a 30-day rolling average).

Rule 1420 applies to a broad category of lead emitting sources where the control requirements are generally the same; however, larger sources with the potential to emit greater lead emissions needed additional requirements. As a result, SCAQMD adopted Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants at Large Lead-Acid Battery Recycling Facilities[12], and Rule 1420.2 – Emission Standard for Lead from Metal Melting Facilities[13], on November 5, 2010 and October 2, 2015, respectively, to regulate major emitters of lead. Also, in 2012, the SCAQMD Governing Board adopted the Lead State Implementation Plan (SIP)[14] which outlines the strategies and pollution control activities to demonstrate attainment of the NAAQS for lead. The 2012 Lead SIP committed to a control measure to amend Rule 1420 to ensure sources of lead will not exceed the 2008 NAAQS for lead. The control measure in the 2012 Lead SIP is only required for implementing lead control requirements similar to those in SCAQMD Rule 1420.1. Combined, the adoption of Rules 1420.1 and 1420.2 addressed 15 of the largest lead sources in the SCAQMD; however, there are smaller sources that are subject to Rule 1420 that need to be addressed in order to meet the 2008 NAAQS for lead and fulfill the 2012 Lead SIP. Since there have been a number of regulations that have gone into effect further limiting lead emissions beyond what is required in Rule 1420, amendments are proposed to Rule 1420 to ensure the attainment and maintenance of the NAAQS, address the 2012 Lead SIP, reduce public health impacts and exposure to lead, and maintain consistency with existing SCAQMD Rules 1420.1 and 1420.2.

PROJECT DESCRIPTION

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities, by establishing requirements, which include compliance with ambient air lead concentration limits and requirements for point source controls, housekeeping, maintenance, and source testing. The proposed limits in PAR 1420 are based on the NAAQS for lead. In addition, PAR 1420 is also being updated to follow the same preventative approach and corresponding emission limits as contained in SCAQMD Rules 1420.1 and 1420.2. In particular, PAR 1420 will require an ambient

[11] U.S. EPA, NESHAP for Lead Acid Battery Manufacturing Area Sources, July 16, 2007. https://www.gpo.gov/fdsys/pkg/FR-2007-07-16/pdf/E7-12018.pdf#page=1

[12] SCAQMD, Rule 1420.1 – Emissions Standards for lead and other Toxic Air Contaminants at Large Lead-Acid Battery Recycling Facilities, September 4, 2015. http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1420-1.pdf

[13] SCAQMD, Rule 1420.2 – Emissions Standards for Lead from Metal Melting Facilities, October 2, 2015. http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/Rule-1420-2rev.pdf

[14] SCAQMD, 2012 Lead SIP for Los Angeles County, May 4, 2012. http://www3.aqmd.gov/hb/attachments/2011-2015/2012May/2012-May4-030.pdf

air lead concentration of 0.150 µg/m^3 averaged over any 30 consecutive days from the date of adoption of PAR 1420 through December 31, 2020 and an ambient lead concentration of 0.100 µg/m^3 averaged over any 30 consecutive days on or after January 1, 2021. PAR 1420 has been crafted to be more health protective by minimizing the release of point source and fugitive lead emissions from lead processing facilities, thereby minimizing the accumulation of lead on soil surfaces and in soil dust.

PAR 1420 affects approximately 107 facilities, with a majority of the facilities associated with the manufacturing of printed circuit boards, semiconductors and other electronic components~~conducting lead soldering or tin/lead plating~~. Other affected facilities include lead smelters, foundries, smaller lead acid battery manufacturers and recyclers, lead oxide, brass, and bronze producers, and metal melting facilities. For the 92 facilities that process less than two tons of lead per year, PAR 1420 would only require compliance with the conditional ambient monitoring limits and the housekeeping and recordkeeping provisions. If PAR 1420 is adopted, the remaining 15 facilities would be required to install total enclosures and anemometers, and conduct biennial source testing, annual rooftop cleaning, and quarterly smoke tests.

The purpose of PAR 1420 is to protect public health by reducing emissions and ambient air concentrations of lead from non-vehicular sources, reduce public health impacts by reducing the exposure to lead, and to ensure continued attainment and maintenance of the NAAQS for lead. While implementation of PAR 1420 would be expected to reduce public health impacts from point and fugitive emissions, SCAQMD staff is unable to quantify the emission reductions at each point source per affected facility because many point sources have not recently undergone source tests to verify emissions levels.

The following is a detailed summary of the key elements contained in PAR 1420. It is important to note that PAR 1420 has been reorganized and the following subdivisions have been fully deleted and replaced because they contain obsolete requirements: subdivisions (e) – Requirements; (j) – Reporting: and (f) – Compliance Plan, have been removed. A draft of PAR 1420 can be found in Appendix A.

Preliminary draft rule language in PAR 1420 from August 18, 2017 had requirements in previous subdivision (i) – Ambient Monitoring and Sampling Requirements and previous subdivision (l) – Recordkeeping. The requirements remain similar; however, subsequent to the release of the Draft EA, the placement of the subdivisions have been switched and renumbered to provide more consistency with Rules 1420.1 and 1420.2.

Purpose – subdivision (a)

The proposed changes to subdivision (a) will clarify that the purpose of the rule is to protect public health by reducing emissions and ambient air concentrations of lead from non-vehicular sources, reduce public health impacts by reducing the exposure to lead, and to ensure the attainment and maintenance of the NAAQS for lead.

Applicability – subdivision (b)

The proposed changes to subdivision (b) will clarify that the rule applies to any owner or operator of a metal melting facility or lead processing facility that processes lead-containing materials, including, ~~but not limited to,~~ primary or secondary lead smelters, foundries, lead-acid battery manufacturers or recyclers, lead platers, and lead-oxide, brass, and bronze producers. The facility applicability will be based on the greatest amount of lead processed in any one of five calendar years prior to the date of adoption of PAR 1420 and any year thereafter, where the lead content of the material processed is greater than 0.05 percent by weight. The average lead content will be based on the highest one-month average after the date of adoption of PAR 1420, or any month thereafter using one of the methods specified in paragraph (i)(2).

Facilities that process two tons or less of lead per year will be subject to fewer requirements in the rule. In addition, facilities subject to Rule 1420.1 or 1420.2 will not be subject to PAR 1420.

Definitions – subdivision (c)

The following new definitions are proposed to be added: Bag Leak Detection System; Capture Velocity; Duct Section; Dust Suppressants; Emission Control Device; Furnace; Lead Point Source; Maintenance Activity; Metal; Metal Melting Facility; Slag; Smelting; Smelting Furnace; and Total Enclosure.

The following definitions are proposed to be revised to clarify the meaning of terms used throughout the rule: Emission Collection System; Fugitive Lead-Dust Emissions; and Lead-Processing Facility.

Additionally, the following definitions are proposed to be deleted: Dust Forming Material; Emission Point; Enclosed Storage Area; Molten Metal; Person; and Processes.

Ambient Air Lead Concentration Limit– subdivision (d)

The following changes to subdivision (d) are proposed:

> *Ambient Air Lead Concentration Limit:* Paragraph (d)(1) will limit the ambient air concentrations of lead (in $\mu g/m^3$), averaged over 30 consecutive days. Effective upon the date of the rule adoption to December 31, 2020, the ambient air concentrations of lead will be limited to 0.150 $\mu g/m^3$. On and after January 1, 2021, the ambient air concentrations of lead will be further limited to 0.100 $\mu g/m^3$.
>
> *Exceedances:* Paragraph (d)(2) will establish that an exceedance of an ambient air concentration limit for lead will constitute a violation of the rule. Any exceedances will be determined by the measurement by any monitor installed pursuant to subdivision (i) or by a SCAQMD-installed monitor.

Executive Officer Determination to Conduct Ambient Air Monitoring – subdivision (e)

New subdivision (e) will establish the following ambient air monitoring requirements for a facility subject to PAR 1420:

Notification by the Executive Officer: New paragraph (e)(1) will require the Executive Officer to notify the owner or operator that ambient air monitoring is required if either the ambient air lead concentration limit of 0.150 µg/m^3 averaged over 30 consecutive days, or the lead point source emission limit based on two~~ or more~~ source tests over a rolling 36-month period, is exceeded.

Response to Receiving a Notification: New paragraph (e)(2) will allow the owner or operator to provide additional substantiating information within 30 days of the date of initial notification by the Executive Officer to demonstrate that the criteria for an exceedance has not been met.

Consideration by the Executive Officer: New paragraph (e)(3) will require the Executive Officer to consider the following prior to making a final determination in accordance with new paragraph (e)(4): additional information provided by the owner or operator; any emissions data, including, but not limited to ambient air lead data or source test data; any facility site visit(s); and any findings from an investigation of surrounding sites.

Final Determination: New paragraph (e)(4) will require the Executive Officer to provide ~~written~~ notification to the owner or operator of a final determination If ambient lead monitoring is required, the owner or operator will be required to prepare and submit a Lead Ambient Air Monitoring and Sampling Plan (Plan) pursuant to subdivision (l~~i~~) – Ambient Monitoring and Sampling Requirements, for review and approval by the Executive Officer within 120 days of the date of the final determination.

Lead Point Source Emissions Control – subdivision (f)

Lead point sources are defined as any process or equipment used at a metal melting facility or lead-processing facility. New subdivision (f) will establish the following requirements for lead point source emissions controls:

Compliance Schedule: Paragraph (f)(1) will require all lead point sources to be vented to a lead emission control device to meet an outlet mass lead emission rate of less than 0.0003 pound per hour or reduce lead emissions by a minimum of 99 percent as determined by the most recent SCAQMD-approved source test conducted on behalf of the facility or the SCAQMD pursuant to subdivision (j) based on~~according to~~ the following schedule:

- No later than June 1~~May 1~~, 2018, if the lead point source is vented to an existing lead emissions control device: and
- No later than six months after a Permit to Construct for a lead emission control device is issued by the Executive Officer, if the lead point source is not vented to an existing lead emissions control device.

Control Efficiency or Outlet Mass Lead Emission Rate: ~~Paragraph (f)(2) will require all lead point source emission controls to reduce lead emissions by a minimum of 99 percent or meet an outlet mass lead emission rate of less than 0.00030 pound per hour, upon review of District-approved source tests.~~ In lieu of complying with paragraph (f)(1), p~~P~~aragraph (f)(2) will also

allow lead point sources with very low uncontrolled emissions to elect to demonstrate an outlet ~~avoid having to install emission control devices provided that an~~ emission rate of less than 0.0003~~0~~ pound per hour ~~can be demonstrated~~ as determined by a SCAQMD-approved source test conducted on behalf of the facility or the SCAQMD pursuant to subdivision (j) no later than June 1, 2018.

New paragraph (f)(3) will require any permit modification to the equipment or process vented to the lead emission control device, that may increase ~~affect~~ the amount of lead emissions, to undergo a new source test ~~at the inlet and outlet of the lead emission control device~~ to demonstrate~~ensure~~ compliance with paragraph (f)(1) and (f)(2).

~~New paragraph (f)(4) will require the total facility mass lead emissions to be determined be based on the average of triplicate samples, using the most recently approved source tests conducted.~~

Maintenance: New paragraph (f)(4~~5~~) will require each emission collection system and device to be approved, in writing, by the Executive Officer and, at a minimum, be inspected, maintained, and operated in accordance with manufacturer's specifications.

Total Enclosures – subdivision (g)

New subdivision (g) will establish the following requirements for total enclosures for facilities.

Minimizing Cross-Draft Conditions: A total enclosure is a permanent containment structure, ~~completely~~ enclosed with a floor, walls, and a roof to prevent exposure to the elements (e.g., precipitation, wind, or run-off), with limited openings to allow ingress and egress for people and vehicles, that is free of breaks, cracks, gaps, or deterioration that could cause or result in the escape of fugitive lead-dust emissions. Paragraph (g)(1) will require the owner or operator of a lead-processing or metal grinding facility to conduct operations including metal grinding within a total enclosure that minimizes cross-draft conditions, provides maximum containment, and minimizes fugitive lead-dust emissions generated in areas where lead processing, handling or storage of lead-containing materials occur. Subparagraph (g)(1)(A) will establish acceptable methods available to minimize cross-draft conditions, including, but not limited to, closing openings, except when moving parts, people, vehicles, or equipment move through the openings; using automatic roll-up doors; installing plastic strip curtains; or using vestibules. Equivalent or more effective alternative method(s) may be used to minimize cross-draft conditions. ~~Any enclosure type will also be required to be designed in a manner that does not conflict with federal Occupational Safety Health Assessment (OSHA) or Cal-OSHA worker safety guidelines as proposed in paragraph (g)(2).~~

Completion Schedule of Total Enclosures: ~~Subp~~Paragraph (g)(2~~1~~)~~(B)~~ will establish a completion schedule for any modification or construction made to complete the construction of a total enclosure. The completion schedule will depend on whether the owner or operator is processing lead in a structure~~building~~ existing as of the date of adoption of PAR 1420 or if a new structure~~building has~~ needs to be constructed. If an existing structure~~building~~ needs to be modified to become a total enclosure, construction will need to be completed by June 1~~May 3~~, 2018. If however, a new structure~~building~~ has to be constructed, the required completion date will be no later than twelve months after the date of adoption of PAR 1420. In addition, the owner or operator will also be required to provide the Executive Officer with a written notice that a new total enclosure will be constructed within 60 days after the adoption of PAR

1420. A new facility starting operations after the date of adoption of PAR 1420 will be required to complete the construction of the total enclosure prior to beginning operations.

Enclosure Type Design: Any enclosure type will also be required to be designed in a manner that does not conflict with federal Occupational Safety Health Assessment (OSHA) or Cal-OSHA worker safety guidelines as proposed in paragraph (g)(3).

Maintenance and Repairs: Paragraph (g)(4~~3~~) will establish requirements to inspect any total enclosure at least once per calendar month for breaks, cracks, gaps, or deterioration that could cause or result in fugitive lead-dust. In addition, paragraph (g)(5~~4~~) will require the repair of any breaks, cracks, gaps, or deterioration that could result in fugitive lead-dust within 72 hours of discovery. In the event an extension is required, the Executive Officer may approve a request if the request is submitted before the 72-hour time limit has expired and the owner or operator can provide information to substantiate that either the repair will take longer than 72 hours or the equipment, parts, or materials needed cannot be obtained within 72 hours.

Housekeeping Requirements – subdivision (h)

New subdivision (h) will establish the following housekeeping requirements to minimize fugitive lead-dust emissions. It is important to note that all of the housekeeping requirements, except the requirement to conduct annual rooftop cleanings of structures and the prohibition of dry sweeping and use of compressed air for housekeeping activities~~to clean~~ will go into effect within 30 days of after the adoption of PAR 1420 or unless otherwise stated.

Cleaning Requirements: Paragraph (h)(1) establishes cleaning requirements for facilities. The timing of rooftop cleanings varies by circumstance and is described below~~ in paragraph (h)(1)~~. Unless the facility has a total enclosure vented to a lead emission control device, the facility operator will be required to conduct cleaning by wet wash, wet mop, or with a vacuum in a manner that does not generate fugitive lead-dust according to the following frequencies:

- Facilities that process greater than 10 tons of lead per year are required to conduct rooftop cleanings at least once annually during the months of July through September.
- Effective on the date of adoption of PAR 1420, w~~W~~eekly cleanings by wet wash, wet mop, vacuum, or stabilization with dust suppressant of all areas where lead-containing wastes generated from housekeeping activities are stored, disposed of, recovered, or recycled, and surfaces that accumulate lead-containing dust subject to foot or vehicular traffic.
- Initiate immediate cleaning, no later than one hour after any construction or maintenance activity or event, including, but not limited to accidents, process upsets, or equipment malfunction that causes deposition of fugitive lead-dust emissions onto areas specified in subparagraphs (h)(1)(A) and (h)(1)(B). If the facility can demonstrate that delays were due to unreasonable risks to safety posed by earlier cleaning or inability to reasonably obtain equipment required to implement this requirement, immediate cleanings of rooftops will be required to be completed within 72 hours.

Paragraph (h)(2) specifies the prohibition for dry sweeping and use of compressed air to clean and will be effective upon the date of adoption of PAR 1420.

Lead Emission Control Device: Paragraph (h)(3) will require quarterly cleaning of collection vents, ducting, and openings of each lead emission control device according to procedures in the most current edition of the *Industrial Ventilation, A Manual of Recommended Practice for Operation and Maintenance*.

Weather Caps: Paragraph (h)(4) will require the removal of weather caps from any stack that is a source of lead emissions.

Storage and Transportation of Materials Capable of Generating Fugitive Lead-Dust or Lead-Containing Trash/Debris: Paragraphs (h)(5), (h)(6), and (h)(8) establish the following requirements for the storage and transportation of fugitive lead-dust or lead-containing trash or debris.

- Effective on the date of adoption of PAR 1420, a~~A~~ll materials capable of generating any amount of fugitive lead-dust will be required to be stored in sealed leak-proof containers or stabilized with a~~ non-chemical~~ dust suppressant approved in writing by the Executive Officer, unless located within a total enclosure.
- All materials capable of generating any amount of fugitive lead-dust will be required to be transported within closed conveyor systems or in sealed leak-proof containers, or stabilized using dust suppressants approved in writing by the Executive Officer, unless located within a total enclosure. The transportation of high temperature materials exceeding 500 degrees Fahrenheit where implementation of the specified control requirements is infeasible will not be applicable.
- Effective on the date of adoption of PAR 1420, e~~E~~xcept when inside a total enclosure, all lead-containing trash and debris will be required to be placed in covered containers that remain covered at all times, except when trash or debris is actively deposited~~transferred~~ into a receptacle. Trash and debris containers will be required to be free of liquid or dust leaks.

Total Enclosures Cleaning: Paragraph (h)(7) will require wet washing, wet scrubbing, or vacuum sweeping to be conducted for any paved area located outside of a total enclosure that is subject to vehicular traffic, no later than one hour after any construction or maintenance activity or event, including accidents, process upsets, or equipment malfunction that results in the deposition of fugitive lead-dust, unless located within a total enclosure vented to a lead emission control device. Wet scrubbing is not required during days of measurable precipitation.

Signage: Paragraph (h)(9) will require signs to be posted at all entrances and truck loading and unloading areas indicating a speed limit of five miles per hour or less on any roadway located within 75 feet of the perimeter of a total enclosure.

Alternative Housekeeping: Paragraph (h)(10) will allow an alternative housekeeping measure to be used, provided the owner or operator demonstrates and receives written approval from the Executive Officer.

Facilities Conducting Metal Grinding: Paragraph (h)(11) will require lead processing or metal melting facilities conducting metal grinding of lead-containing materials to wet wash, wet mop, or vacuum the following: floors within 20 feet of a work station or work stations dedicated to the metal grinding operations; floors within 20 feet of any entrance or exit point

of a temporary enclosure, building, or total enclosure the houses the grinding operations; and floors within 10 feet of an emission control device dedicated to the metal grinding operations.

RecordkeepingAmbient Monitoring and Sampling Requirements – subdivision (i)
Requirements in previous subdivision (i) – Ambient Monitoring and Sampling Requirements and previous subdivision (l) – Recordkeeping remain similar in PAR 1420; however, subsequent to the release of the Draft EA, the placement of the subdivisions have been switched and renumbered to provide more consistency with Rules 1420.1 and 1420.2.

Subdivision (i) contains the following proposed revisions to recordkeeping requirements for lead processing facilities:

Paragraph (i)(1) will require the owner or operator to keep records of data related to lead-containing raw materials used at the facility, including quantities processed monthly and the lead content of these raw materials, purchase records, results of analyses, source test data and other SCAQMD-approved verification to indicate amounts of lead-containing materials processed. The Executive Officer may approve other alternative methods to calculate the amount of lead processed and the percentages of lead contained within the lead-containing raw materials processed. The monthly amount of lead processed will need to be calculated by multiplying the monthly average weight percentage of lead by the quantity of raw material processed monthly at each lead point source. In addition, the annual amount of lead processed by the facility will need to be calculated based on summing the monthly amounts of lead processed for all lead point sources over a calendar year.

New paragraph (i)(2) will require monthly records to determine the monthly average weight percentage of lead contained in processed materials. The monthly average weight percentage of lead will be determined using one of these methods: EPA-approved method(s); metal analyses for bulk samples of baghouse catches; weighted monthly average of lead content from analysis of feedstock, including ingots and scrap; or an alternative method approved by the Executive Officer that can quantify the average weight percentage contained in processed materials.

Paragraph (i)(3) will require records which identify the results of all ambient air lead monitoring, wind monitoring, and other data specified in subdivision (l).

Paragraph (i)(4) will require the following records to be maintained:

- Construction, inspections, maintenance, and repairs of total enclosures pursuant to paragraphs (g)(2) through (g)(4);
- Housekeeping activities completed as required by paragraphs (h)(1), (h)(3), and (h)(7), excluding records associated with hand soldering operations;
- Source test data as required by subdivision (j) and paragraph (k)(3);
- Data files, inspection, and maintenance of emission collection devices as required by subdivision (k), including the name of the person conducting the activity and the dates and times at which specific activities were completed;
- Smoke test results as required by paragraph (k)(5); and
- Hot wire anemometer data collected, including capture velocities, dates of measurement and calibration documentation as required by paragraph (k)(6).

New paragraph (i)(5) will require records to be maintained for three years, with at least the two most recent years to be kept on-site and made available to SCAQMD personnel upon request.

~~New subdivision (i) will establish the following requirements to conduct ambient monitoring and sampling:~~

~~*Lead Ambient Air Monitoring Sampling Plan:* Paragraph (i)(1) will require the preparation of a Lead Ambient Air Monitoring Sampling Plan (Plan) to be submitted within 120 days of a final determination requiring ambient air monitoring to be conducted. The Plan shall contain the following information:~~

- ~~Source test results of all lead point sources, conducted pursuant to subdivision (j).~~
- ~~Map of the facility identifying the location of all lead emission sources, emission control devices, stacks, enclosures, openings of enclosures, storage of lead-containing materials, roadways where vehicles carrying lead-containing materials travel within the facility, vehicle egress and ingress locations, the property line of the facility, the fence line of the facility if it differs from the property line of the facility, and any areas within the property line of the facility that are publicly accessible; and~~
- ~~Number and locations for sampling sites that meet the requirements of paragraph (i)(2).~~

~~The Executive Officer will be required to notify the owner or operator in writing of whether the Plan has been approved or disapproved. If the Plan is disapproved, the owner or operator will be required to resubmit the Plan within 30 calendar days after notification of the disapproval of the Plan. The resubmitted Plan will need to include any information necessary to address the deficiencies identified in the disapproval letter. A facility will be in violation of the rule after a second successive denial of the Plan. If the resubmitted Plan is denied, an appeal may be submitted to the SCAQMD Hearing Board.~~

~~*Installing Monitors and Sampling:* Paragraphs (i)(2) and (i)(11) will require monitors to be installed and ambient air lead monitoring and sampling to be conducted within 90 days after approval of a Plan, meet in accordance with the following criteria and procedures:~~

- ~~Samples must be collected from a minimum of two sites, as approved by the Executive Officer. The locations will be based on the maximum expected ground level lead concentrations, at or beyond the property line, as determined by the Executive Officer-approved air dispersion modeling calculations and emission estimates from all lead point sources and fugitive lead-dust sources, and other factors, including, but not limited to, population exposure and seasonal meteorology.~~
- ~~One or more of the sampling sites may be at locations that are not based on maximum ground level lead concentrations and are instead at locations at or beyond the property line that are representative of upwind or background concentrations. Sampling sites at the property line may be located just inside the fence line on facility property if logistical constraints preclude placement outside the fence line at the point of maximum expected ground level lead concentrations.~~
- ~~A facility may be required by the Executive Officer to relocate existing monitors or install additional monitors in order to measure ambient air lead concentrations at~~

~~locations that may contribute to the exceedance of an ambient air lead concentration limit.~~

- ~~Facilities will be required to report by the 15th of each month to the Executive Officer, the results of all ambient air lead and wind monitoring for each preceding month, or more frequently, if determined necessary by the Executive Officer. The report will be required to include the results of individual valid 24-hour samples and 30-day rolling averages for each day within the reporting period.~~

~~Subparagraph (i)(2)(E) will require existing monitors to be relocate or additional monitors to be installed in order to measure ambient air lead concentrations at locations that may contribute to the exceedance of an ambient air lead concentration, if information becomes available showing any of the following:~~

- ~~A new or existing source of lead emissions that was not previously identified or full disclosed;~~
- ~~An increase in lead emission from an existing source where existing monitors are not capturing the potential ambient air lead concentration; or~~
- ~~That none of the existing monitors are capturing the maximum expected ground-level lead concentration.~~

~~*24-hour Sampling:* Paragraphs (i)(3), (i)(4), and (i)(8) will require all facilities to conduct ambient monitoring to collect one valid 24-hour, midnight-to-midnight sample at least once every six calendar days, on a schedule approved by the Executive Officer. If a 24-hour sample is not collected due to a monitor malfunction or other occurrence beyond the control of the facility, the owner or operator will be required to:~~

- ~~Notify the SCAQMD (1-800-CUT-SMOG) within two hours and providing the facility name, name of the monitor, date of occurrence, and reason that the 24-hour sample was not collected; and~~
- ~~Not miss a valid 24-hour sample for more than one day over a consecutive 30-day period for each of the monitors.~~

~~A valid 24-hour sample may be conducted on a different schedule, if it is demonstrated to and approved by the Executive Officer that the alternative schedule is adequate to routinely collect valid 24-hour samples and is conducted using the same sampling methods referenced in paragraph (i)(6). Approval may be temporarily suspended during days when the SCAQMD conducts concurrent sampling to verify monitor readings. The approval may also be permanently rescinded by the Executive Officer.~~

~~*Submitting Samples:* Paragraph (i)(5) will require collected samples to be submitted to an approved laboratory in accordance with the SCAQMD Laboratory Approval Program for analysis within three calendar days of collection and ambient lead concentrations to be calculated for individual valid 24-hour samples within 15 calendar days of the end of the calendar month in which the samples were collected. Split samples will be required to be made available and submitted to the SCAQMD upon request by the Executive Officer.~~

~~*Sample Collection and Analysis:* Paragraph (i)(6) establishes the following reference method requirements for sample collection and analysis:~~

- ~~Sample collection for lead will be required to be conducted using *Title 40, Code of Federal Regulations (CFR) Part 50, Appendix B – Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method)*, or U.S. EPA-approved equivalent methods~~
- ~~Sample analysis for lead will be required to be conducted *using Title 40 CFR Part 50, Appendix G – Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air*, or U.S. EPA - approved equivalent methods.~~

~~*Additional Requirements:* Paragraphs (i)(7), (i)(9), and (i)(10) establishes the following requirements for recording wind speed and direction, ambient air monitoring personnel and equipment, and cleaning activities when sampling is occurring:~~

- ~~Wind speed and direction will be required to be continuously recorded at all times using equipment approved by the Executive Officer at a minimum of one location approved by the Executive Officer.~~
- ~~Ambient air monitoring will be required to be to be conducted by trained and certified personnel. Sampling equipment will be required to be operated and maintained in accordance with U.S. EPA-approved equivalent methods.~~
- ~~Cleaning activities that could result in damage or biases to samples collected will be required to not be conducted within 10 meters of any sampling site.~~

~~*Exceedances:* Paragraph (i)(12) will require a facility operator to notify the SCAQMD of any exceedance of the ambient air lead concentrations specified in subdivision (d) by calling 1-800-CUT-SMOG within 24 hours of receipt of the completed sample analysis followed by submitting a written report to the Executive Officer no later than three calendar days after the telephone notification. The written report will need to include the potential causes of the exceedance and the specific corrective actions implemented.~~

Source Tests – subdivision (j)

New subdivision (j) will establish the following requirements for conducting source testing:

Source Testing Compliance Dates: Paragraphs (j)(1), (j)(2), and (j)(10) establish the following criteria and timeline~~ing~~ for when source tests need to be conducted:

- Effective upon the date of adoption of PAR 1420, the owner or operator will be required to conduct a source test once every 24 months after the initial source test to demonstrate that ~~the lead emission control device or a series of lead emission control devices will reduce~~ the lead emissions from the lead point source will be reduced by a minimum of 99 percent or will meet an outlet mass lead emission rate of less than 0.0003~~0~~ pounds per hour. If the source test demonstrates ~~a 99 percent or greater reduction of lead emissions and~~ a stack outlet mass lead emission of less than 0.00015 pounds per hour, then the next source test will be required to be performed no later than 48 months after the most recent source test.
- A facility with an existing lead emission control device in operation before the date of adoption of PAR 1420 will be required to conduct a source test by June 1~~February 3~~, 2018.

- A facility with a new or modified lead control device with initial start-up on or after the date of adoption of PAR 1420 will be required to conduct the initial source test within six months ~~60 calendar days~~ after initial start-up.

Paragraph (j)(10) will allow a source test conducted on or after January 1, 2014 for lead emission control devices, that was performed prior to the date of adoption of PAR 1420, to be used as the initial source test to demonstrate compliance with the lead emission control standards in subdivision (f), provided that the following criteria is also met:

- No additional source test has been conducted since January 1, 2014;
- The source test demonstrates compliance with the emission control requirements in subdivision (f);
- The source test is representative of a method used to test emissions from control devices currently in use; and
- The source test was conducted using applicable and approved test methods.

Source Test Protocol: Paragraph (j)(3) will require a source test protocol to be submitted to the Executive Officer for approval at least 60 calendar days prior to conducting a source test. The source test protocol will need to include the source test criteria of the end user, all assumptions, required data, calculated targets for testing, and all of the following:

- Target lead mass emission standard;
- Planned sampling parameters;
- Information on equipment, logistics, personnel, and other resources necessary for an efficient and coordinated source test; and
- Evaluation of emission collection system.

Notifications and Reporting: Paragraphs (j)(4), (j)(5), and (j)(12) will require the owner or operator of a lead processing or metal melting facility to submit notifications to the SCAQMD when conducting source testing and preparing and submitting source test reports, as follows:

- The owner or operator will need to notify the Executive Officer, in writing, of the intent to conduct source testing, one week prior to conducting any source test.
- The owner or operator will need to notify the Executive Officer within five~~three~~ calendar~~business~~ days ~~(Monday through Friday)~~ of when the facility is aware of or should have been aware of any source test result that exceeds any of the emission standards. Notifications will need to be made and followed up in writing with the results of the source tests within ten~~seven~~ calendar~~business~~ days of notification to the Executive Officer.
- Source testing reports must be submitted to the SCAQMD within 90 days of completion of source testing.

Test Methods and Protocols: Paragraph (j)(6) will require source tests to be conducted while operating at a minimum of 80 percent of the equipment's permitted capacity by using the following applicable test methods:

- SCAQMD Method 12.1 – *Determination of Inorganic Lead Emissions from Stationary Sources Using a Wet Impingement Train;*

- CARB Method 12 – *Determination of Inorganic Lead Emissions from Stationary Sources;* or
- U.S. EPA Method 12 – *Determination of Inorganic Lead Emissions from Stationary Sources*
- CARB Method 436 – *Determination of Multiple Metal Emissions from Stationary Sources*

Paragraph (j)(7) will allow an alternative or equivalent source test method, as defined in the U.S. EPA 40 CFR 60.2, may be used if it is approved in writing by the Executive Officer, in addition to the CARB, or the U.S. EPA, as applicable.

Paragraph (j)(8) will require the owner or operator to use a test laboratory approved under the SCAQMD Laboratory Approval Program. If there is no approved laboratory, then approval of the testing procedures used by the laboratory will be granted by the Executive Officer on a case-by-case basis based on SCAQMD protocols and procedures.

Paragraph (j)(9) will specify that for any testing when more than one source test method or set of source test methods are specified, the application of these source test methods to a specific set of test conditions is subject to the approval by the Executive Officer and any violation established by any one of the test methods constitutes a violation of the rule.

Paragraph (j)(11) will require a source test to be performed according to the most recent SCAQMD-approved source test protocol.

Emission Control Device Monitoring– subdivision (k)

New subdivision (k) will establish parametric monitoring requirements to ensure the proper operation of all emission control devices. Operational parameters are generally expressed as a range of criteria ~~measurements within~~ which allows any ~~the~~ emission control device to function~~s~~ at its best and reach~~es~~ optimum efficiency. Parametric monitoring will need to be conducted as a supplement to conducting source testing in order to alert the operator if an issue with an emission control device occurs during the period~~in~~ between source testing events~~dates~~.

Bag Leak Detection System: Paragraph (k)(1) will require the owner or operator to apply for a permit to install, operate, calibrate, and maintain a Bag Leak Detection System for baghouses subject to the requirements of SCAQMD Rule 1155 – Particulate Matter (PM) Control Devices[15].

Monitoring Device: Paragraph (k)(2) will require a monitoring device to continuously measure the pressure drop across the filter of an emission control device with a mechanical gauge that is visible and in clear sight. The owner and operator will also be required to ensure that the monitoring device meets all of the following criteria:

- Is equipped with ports to allow for periodic calibration in accordance with manufacturer's specifications;
- Is calibrated according to manufacturer's specifications at least once every calendar year;

[15] SCAQMD, Rule 1155 – Particulate Matter Control Devices, May 2, 2014. http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1155.pdf

- Is equipped with a continuous data acquisition system (DAS) and record the data output from the monitoring device at least~~no less than~~ once every 60 minutes;
- Generates a data file each calendar day, including a table of chronological date and time and the corresponding data output value from the monitoring device in inches of water column. A separate file will be required to be prepared showing the 4-hour average pressure readings each calendar day. The files will be saved in Microsoft Excel format or any other format as approved by the Executive Officer; and
- Is maintained in accordance to manufacturer's specifications.

Paragraph (k)(3) will require a source test to be conducted if the pressure across the filter is not maintained either within the range specified by the manufacturer or according to the conditions of the Permit to Construct or Permit to Operate for the emission control device as determined by hourly or more frequent recordings by the DAS for the averaging periods of: a 4-hour time period on three or more separate days over 60 continuous days; or any consecutive 24-hour period, no later than 30 days after a discrepancy is detected.

Capture Velocity: Paragraph (k)(4) will require the emission collection system associated with the lead emission control device to be at a minimum collection induced capture velocity specified in the most current edition of the *Industrial Ventilation, A Manual of Recommended Practice for Design, published by the American Conference of Governmental Industrial Hygienists*, at the time a permit application is deemed complete with the SCAQMD.

Periodic Smoke Testing: Paragraph (k)(5) will require a quarterly smoke test to be conducted during~~after~~ source testing and at least once every three months thereafter of each emission collection system using the procedures set forth in Appendix 1 of PAR 1420. If it is demonstrated to the Executive Officer that the smoke tests presents an unreasonable risk, the smoke test does not need to be performed.

Anemometer: Paragraph (k)(6) will require the installation of a calibrated hot wire anemometer to ~~monthly~~ measure the capture velocity of each emission collection system monthly. An emission collection system with a hood or enclosure will need to maintain a capture velocity of at least 200 feet per minute at the face of the enclosure or the minimum slow velocity measured in the most recent source test that verifies 100 percent collection efficiency. An emission collection system without an enclosing hood that is designed with collection slots will be required to maintain a capture velocity of at least 2,000 feet per minute, or the minimum slot velocity if the most recent source test verifies 100 percent collection efficiency~~, whichever is greater~~.

Ambient Monitoring and Sampling Requirements~~Recordkeeping~~ – subdivision (l)
Requirements in previous subdivision (i) – Ambient Monitoring and Sampling Requirements and previous subdivision (l) – Recordkeeping remain similar in PAR 1420; however, subsequent to the release of the Draft EA, the placement of the subdivisions have been switched and renumbered to provide more consistency with Rules 1420.1 and 1420.2. Previous paragraph (i)(8) has been removed.

New subdivision (l) will establish the following requirements to conduct ambient monitoring and sampling:

Lead Ambient Air Monitoring Sampling Plan: Paragraph (l)(1) will require the preparation of a Lead Ambient Air Monitoring Sampling Plan (Plan) to be submitted within 120 days of a final determination requiring ambient air monitoring to be conducted. The Plan shall contain the following information:

- Source test results of all lead point sources, conducted pursuant to subdivision (j).
- Map of the facility identifying the location of all lead emission sources, emission control devices, stacks, enclosures, openings of enclosures, storage of lead-containing materials, roadways where vehicles carrying lead-containing materials travel within the facility, vehicle egress and ingress locations, the property line of the facility, the fence line of the facility if it differs from the property line of the facility, and any areas within the property line of the facility that are publicly accessible; and
- Number and locations for sampling sites that meet the requirements of paragraph (l)(2).

The Executive Officer will be required to notify the owner or operator in writing of whether the Plan has been approved or disapproved. If the Plan is disapproved, the owner or operator will be required to resubmit the Plan within 30 calendar days after notification of the disapproval of the Plan. The resubmitted Plan will need to include any information necessary to address the deficiencies identified in the disapproval letter. A facility will be in violation of the rule after a second successive denial of the Plan. If the resubmitted Plan is denied, an appeal may be submitted to the SCAQMD Hearing Board.

Installing Monitors and Sampling: Paragraphs (l)(2) and (l)(10) will require monitors to be installed and ambient air lead monitoring and sampling to be conducted within 90 days after approval of a Plan, meet in accordance with the following criteria and procedures:

- Samples must be collected from a minimum of two sites, as approved by the Executive Officer. The locations will be based on the maximum expected ground level lead concentrations, at or beyond the property line, as determined by the Executive Officer-approved air dispersion modeling calculations and emission estimates from all lead point sources and fugitive lead-dust sources, and other factors, including, but not limited to, population exposure and seasonal meteorology.
- One or more of the sampling sites may be at locations that are not based on maximum ground level lead concentrations and are instead at locations at or beyond the property line that are representative of upwind or background concentrations. Sampling sites at the property line may be located just inside the fence line on facility property if logistical constraints preclude placement outside the fence line at the point of maximum expected ground level lead concentrations.
- A facility may be required by the Executive Officer to relocate existing monitors or install additional monitors in order to measure ambient air lead concentrations at locations that may contribute to the exceedance of an ambient air lead concentration limit.
- Facilities will be required to report by the 15th of each month to the Executive Officer, the results of all ambient air lead and wind monitoring for each preceding month, or more frequently, if determined necessary by the Executive Officer. The report will be required to include the results of individual valid 24-hour samples and 30-day rolling averages for each day within the reporting period.

Subparagraph (l)(2)(E) will require existing monitors to be relocate or additional monitors to be installed in order to measure ambient air lead concentrations at locations that may contribute to the exceedance of an ambient air lead concentration, if information becomes available showing any of the following:

- A new or existing source of lead emissions that was not previously identified or full disclosed;
- An increase in lead emission from an existing source where existing monitors are not capturing the potential ambient air lead concentration; or
- That none of the existing monitors are capturing the maximum expected ground-level lead concentration.

24-hour Sampling: Paragraphs (l)(3) and (l)(4) will require all facilities to conduct ambient monitoring to collect one valid 24-hour, midnight-to-midnight sample at least once every six calendar days, on a schedule approved by the Executive Officer. If a 24-hour sample is not collected due to a monitor malfunction or other occurrence beyond the control of the facility, the owner or operator will be required to:

- Notify the SCAQMD (1-800-CUT-SMOG) within two hours and providing the facility name, name of the monitor, date of occurrence, and reason that the 24-hour sample was not collected; and
- Not miss a valid 24-hour sample for more than one day over a consecutive 30-day period for each of the monitors.

Submitting Samples: Paragraph (l)(5) will require collected samples to be submitted to an approved laboratory in accordance with the SCAQMD Laboratory Approval Program for analysis within three calendar days of collection and ambient lead concentrations to be calculated for individual valid 24-hour samples within 15 calendar days of the end of the calendar month in which the samples were collected. Split samples will be required to be made available and submitted to the SCAQMD upon request by the Executive Officer.

Sample Collection and Analysis: Paragraph (l)(6) establishes the following reference method requirements for sample collection and analysis:

- Sample collection for lead will be required to be conducted using *Title 40, Code of Federal Regulations (CFR) Part 50, Appendix B – Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method)*, or U.S. EPA-approved equivalent methods
- Sample analysis for lead will be required to be conducted using *Title 40 CFR Part 50, Appendix G – Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air*, or U.S. EPA - approved equivalent methods.

Additional Requirements: Paragraphs (l)(7), (l)(9), and (l)(10) establishes the following requirements for recording wind speed and direction, ambient air monitoring personnel and equipment, and cleaning activities when sampling is occurring:

- Wind speed and direction will be required to be continuously recorded on sampling days using equipment approved by the Executive Officer at a minimum of one location approved by the Executive Officer.
- Ambient air monitoring will be required to be to be conducted by trained and certified personnel. Sampling equipment will be required to be operated and maintained in accordance with U.S. EPA-approved equivalent methods.
- Cleaning activities that could result in damage or biases to samples collected will not be conducted within 10 meters of any sampling site required by subdivision (l).

Exceedances: Paragraph (l)(11) will require a facility operator to notify the SCAQMD of any exceedance of the ambient air lead concentrations, specified in subdivision (d), by calling 1-800-CUT-SMOG within seven calendar days of receipt of the completed sample analysis followed by submitting a written report to the Executive Officer no later than three calendar days after the telephone notification. The written report will need to include the potential causes of the exceedance and the specific corrective actions implemented.

~~Subdivision (l) contains the following proposed revisions to recordkeeping requirements for lead processing facilities:~~

~~Paragraph (l)(1) will require the owner or operator to keep records of data related to lead-containing raw materials used at the facility, including quantities processed monthly and the lead content of these raw materials, purchase records, results of analyses, source test data and other SCAQMD-approved verification to indicate amounts of lead containing materials processed.~~

~~New paragraph (l)(2) will require monthly records which identify the weight of metal waste collected by the baghouse catch, including, if applicable, any metal analyses for bulk samples of baghouse catches conduction to subdivision (b).~~

~~Paragraph (l)(3) will require monthly records which identify the results of all ambient air lead monitoring, wind monitoring, and other data specified in subdivision (i).~~

~~Paragraph (l)(4) will require the following records to be maintained:~~

- ~~Inspections, maintenance, and repairs of total enclosures pursuant to paragraphs (g)(3) and (g)(4);~~
- ~~Housekeeping activities completed as required by paragraphs (h)(1), (h)(3), and (h)(7);~~
- ~~Source test data as required by subdivision (j) or paragraph (k)(3);~~
- ~~Data files, inspection, and maintenance of emission collection devices as required by subdivision (k), including the name of the person conducting the activity and the dates and times at which specific activities were completed;~~
- ~~Smoke test results as required by paragraph (k)(5); and~~
- ~~Hot wire anemometer data collected, including capture velocities, dates of measurement and calibration documentation as required by paragraph (k)(6).~~

~~New paragraph (l)(5) will require records to be maintained for three years, with at least the two most recent years to be kept onsite and made available to SCAQMD personnel upon request.~~

Exemptions – subdivision (m)

Paragraph (m)(1) has been added to clarify that a facility processing materials with a monthly weight average lead content of 0.05 percent or less is exempt from Rule 1420. Paragraphs (m)(2) and (m)(3) have been added to exempt hand soldering operations and maintenance and repair activities, respectively, from the rule.

Lead Minimization: Paragraph (m)(4) has been added to allow a lead processing or metal melting facility that obtains a permit condition limiting the amount of lead processed to be exempt from certain requirements of the rule. If a facility that obtains a permit condition limiting the amount of lead processed to two tons per year or less will only be subject to paragraphs (d)(1) and (d)(2) and subdivisions (h) and (i). If a facility obtains a permit condition limiting the lead content of the materials processed to less than or equal to 0.05 percent, the facility will only be subject to subdivision (i).

Ambient Air Monitoring Relief Plan: Paragraph~~Subdivision~~ (m)(5) will be revised to allow an owner or operator of a lead processing facility to be exempt from the ambient monitoring requirements set forth in subdivision (l~~i~~), provided that the ambient air lead concentration level can be demonstrated to be less than or equal to 0.07 µg/m^3, (averaged over 30 consecutive days for ~~12 rolling months~~ 365 days during normal facility conditions), subsequent to the Executive Officer's approval of an Air Monitoring Relief Plan. The Air Monitoring Relief Plan will need to contain all of the following:

- Air dispersion modeling analysis demonstrating an ambient air lead concentration less than or equal to 0.07 µg/m^3 (30 consecutive days~~ for 12 rolling months~~ during normal facility conditions);
- One year of ambient air lead monitoring data without a single 30 consecutive day average exceeding 0.07 µg/m^3; and
- ~~Most recent SCAQMD-approved source tests demonstrating a mass emission rate of less than 0.00030 pound per hour at each lead point source emission control device;~~
- Most recent SCAQMD-approved source tests demonstrating a total facility mass lead emission rate from all point sources of less than 0.040~~0030~~ pound per hour. The total facility mass lead emissions will be based on the sum of the average triplicate samples for each lead point source, using the most recently approved source tests conducted on behalf of the facility or the SCAQMD.

Rules 1420.1 and 1420.2: Paragraph (m)(6) has been added to clarify that any facility subject to Rules 1420.1 and 1420.2 are exempt from this rule.

Appendix

Periodic Smoke Test: Appendix 1 has been included to provide guidance for smoke tests to demonstrate capture efficiency for ventilation systems of emission control device(s) as specified in paragraph (k)(5).

CHAPTER 2

ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	~~Draft Environmental Assessment for~~ Proposed Amended Rule (PAR) 1420 – Emissions Standard for Lead
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Ms. Diana Thai, (909) 396-3443
PAR 1420 Contact Person	Mr. Kennard Ellis, (909) 396-2457
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 1420 has been developed to reduce public health impacts from point and fugitive lead emissions from metal melting or lead processing facilities by reducing the exposure to lead, and to ensure and maintain attainment of the NAAQS for lead within the South Coast Air Basin. PAR 1420 proposes an initial ambient air lead concentration limit of 0.150µg/m^3 averaged over any consecutive 30 days which will be lowered to a final limit of 0.100 µg/m^3 by January 1, 2021. PAR 1420 also proposes requirements for point source lead emission controls, along with periodic source testing, capture efficiency testing, conditional ambient air monitoring, and reporting and recordkeeping requirements to ensure continuous compliance. Fugitive lead emissions will be addressed through housekeeping and maintenance activity requirements and total enclosures of areas where lead processing operations and associated processes are being conducted. Any facility that exceeds the limits in PAR 1420 will be subject to additional mitigation requirements. Some sites affected by PAR 1420 may be identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5. The analysis of PAR 1420 in the Draft EA did not result in the identification of any environmental topic areas that would be significantly adversely affected.

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 Resources	☐	Mineral Resources	☐	Transportation and Traffic
☐	Energy	☐	Noise	☐	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: September 15, 2017 **Signature:** Barbara Radlein

Barbara Radlein
Program Supervisor, CEQA Special Projects
Planning, Rules, and Area Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

Rule 1420 applies to metal melting or lead processing facilities, including, ~~but not limited to~~ primary or secondary lead smelters, foundries, lead acid battery manufacturers or recyclers, lead platers, and lead-oxide, brass, and bronze producers. Applicability is based on the greatest amount of lead processed at a facility in any one of five calendar years, prior to the date of adoption of PAR 1420 and any year thereafter, where the lead content of the material processed is greater than 0.05 percent by weight. As discussed in Chapter 1, the main focus of PAR 1420 is to reduce public health impacts from point and fugitive lead emissions, by reducing the exposure to lead, and to ensure and maintain attainment of the NAAQS for lead within SCAQMD's jurisdiction. To accomplish this goal, PAR 1420 proposes requirements for point source lead emission control devices and to lower the ambient lead concentration limit to 0.150 $\mu g/m^3$ and even further to 0.100 $\mu g/m^3$ after January 1, 2021, averaged over 30 consecutive days. PAR 1420 also contains new requirements for periodic source testing, capture efficiency testing, conditional ambient air monitoring, and reporting and recordkeeping to ensure continuous compliance. Implementing PAR 1420 would be expected to result in some facilities making building improvements to meet the total enclosure requirement and the activities associated with making these physical changes may also create secondary adverse environmental impacts. Similarly, activities associated with conducting source tests and smoke tests, and implementing housekeeping and maintenance requirements may also create secondary adverse environmental impacts.

While there are other requirements in PAR 1420 that are necessary to support compliance with the rule, the following components of PAR 1420 are administrative or procedural in nature and as such, would not be expected to cause any physical changes: revising, adding, or deleting definitions; clarifying applicability; adding test methods; conducting monitoring of the emission collection system; recordkeeping; posting signage; applying for permit applications; and preparing and submitting source testing protocols. As such, these components of PAR 1420 would not be expected to create any secondary adverse environmental impacts.

For these reasons, the analysis in this EA focuses on the potential secondary adverse environmental impacts associated with constructing total enclosures, conducting source tests and smoke tests, and implementing housekeeping and maintenance requirements. The effects of implementing these key rule components in PAR 1420 have been evaluated relative to the environmental topics identified in the following environmental checklist (e.g., aesthetics, agriculture and forestry resources, biological resources, etc.). To evaluate these impacts, the following assumptions were relied upon in the foregoing analyses.

Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420:

- Fifteen facilities are assumed to be subject to all of the requirements that would require physical changes (e.g., constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements). Constructing total enclosures are treated as construction impacts while conducting source tests and smoke tests, and implementing housekeeping and maintenance requirements are considered operational impacts.

- Eight of the 15 facilities do not currently have a total enclosure in place. As such, each facility is assumed to need to construct one wall of an existing building to meet the requirements for building a total enclosure. Because these facilities are required to comply with the total enclosure requirement within six months after the date of adoption of PAR

1420 (June 1~~May 3~~, 2018), construction of the total enclosures is expected to occur during this six-month period.

- Ten of the 15 facilities currently conduct lead or metal grinding operations inside a building that may not necessarily qualify as a total enclosure. To comply with PAR 1420, the grinding operations would also need to occur either inside a building that already qualifies as a total enclosure (seven of the 15 facilities), in a building that needs to be modified to qualify as a total enclosure (eight of the 15 facilities), or within a smaller enclosure or room located within an existing or to be modified total enclosure. The enclosure that would be needed to house each grinding operation would have a relatively small footprint (e.g., approximately 100 square feet) relative to the construction that would be required to build a total enclosures. For this reason, the construction impacts associated with building a total enclosure includes the impacts that may occur from also building smaller enclosures to accommodate the grinding operations.

- All 107 facilities have existing emission control devices (baghouses); thus, no additional emission control devices would be required to be installed because of PAR 1420. Of these 107 facilities, 15 facilities are required to meet the initial source testing requirements no later than six~~three~~ months after the date of adoption of PAR 1420 (June 1~~February 3~~, 2018). All baghouses will be subject to periodic source testing requirements because of PAR 1420. Implementing source testing requirements will have associated worker trips to visit each facility to conduct the source tests and these activities are considered operational impacts.

- Ninety-two facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping and recordkeeping requirements in PAR 1420. Implementing housekeeping and recordkeeping activities are considered operational impacts. The 92 facilities are under two tons per year and are not required to vent point sources to emission control devices.

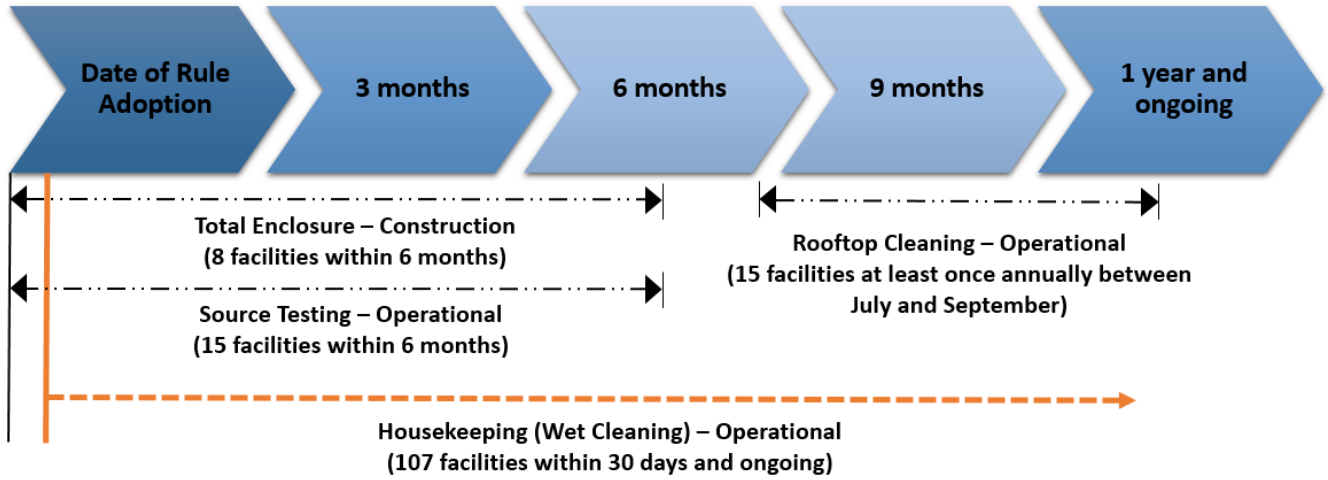
- The housekeeping activities, which apply to all 107 facilities, could require the use of some water to conduct periodic cleaning. Housekeeping requirements would begin no later than 30 days after the date of adoption of PAR 1420. Fifteen facilities will be subject to an additional housekeeping requirement of rooftop cleaning. The rooftop cleaning will occur at least one time per year during the months of July through September.

- Any facility that exceeds the limits in PAR 1420 will be subject to additional monitoring requirements. Although it is not expected, if a facility exceeds the limits in PAR 1420, it is required to install monitors and conduct ambient air lead sampling. The installation of the monitors will have associated vehicle equipment to complete the installation and these activities are considered construction impacts. Implementing sampling requirements will have associated worker trips to visit each facility to collect the samples and these activities are considered operational impacts. It is not anticipated that any facility will exceed the limits in PAR 1420; thus, impacts from conditional ambient air monitoring was not included.

- No additional employees are expected to be hired as a result of PAR 1420.

Figure 2-1 summarizes the implementation dates of PAR 1420 requirements, the type of impact (construction or operational), and the number of affected facilities.

Figure 2-1
Timeline of Implementation of PAR 1420 Requirements and Number of Affected Facilities[16]



Subsequent to the release of the Draft EA for public review and comment, minor modifications were made to PAR 1420 that are described in the Project Description section in Chapter 1. These modifications are indicated in the strikeout/underlined text. Staff has reviewed these modifications and concluded that overall, no new impacts are anticipated to result from these modifications. Further, the impacts previously evaluated in the Draft EA would not be made substantially worse and the conclusions reached in the Draft EA remain unchanged in the Final EA with respect to the current version of PAR 1420. Thus, staff has concluded that none of the modifications constitute significant new information of substantial importance relative to the Draft EA. In addition, revisions to PAR 1420 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5.

[16] Subsequent to the release of the Draft EA, modifications were made to PAR 1420; thus Figure 2-1 has been replaced to incorporate the modifications. The only modification to Figure 2-1 includes extending the source testing compliance deadline to six months (June 1, 2018).

		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)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	☑
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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

I. a), b), & c) No Impact. To reduce fugitive lead emissions from affected facilities, eight facilities would need to complete the construction of total enclosures. Construction will require

the use of heavy-duty construction equipment such as forklifts, tractors/loaders/backhoes, and cement mixers. The construction equipment is expected to be low in height and not substantially visible to the surrounding area due to construction occurring within the existing facility's property line, existing fencing along property lines, and existing structures currently within the facilities that may buffer the views of the construction activities.

Since the affected facilities are located at existing industrial areas, the construction equipment is not expected to be substantially discernable from what exists on-site for routine operations and maintenance activities. Further, the construction activities are not expected to adversely impact views and aesthetics resources since most of the construction equipment and activities are expected to occur within the confines of each existing facility and are expected to introduce only minor visual changes to areas outside each facility, if at all, depending on the location of the construction activities within the facility. In addition, the construction activities are expected to be temporary in nature and will cease following the completion of the total enclosure. Once construction is completed, all construction equipment will be removed from each facility. Construction is expected to be completed within six months after the date of rule adoption of PAR 1420. The construction of total enclosures would be expected to reduce lead emissions and minimize cross-draft conditions, thus reducing visible emissions at facilities.

PAR 1420 also contains requirements for housekeeping and maintenance activities and source testing. These activities would be low-profile and limited to each facility's property and would be expected to blend in with regular day-to-day activities. Thus, they would not be expected to affect any scenic vistas. Any potential construction would not be expected to damage or obstruct scenic resources or degrade the existing visual character of a site of any site in the vicinity of affected facilities.

I. d) Less Than Significant Impact. PAR 1420 does not include any components that would require construction activities at night. Further, cities often have their own limitations and prohibitions that restrict construction from occurring during evening hours and weekends. Therefore, no additional temporary construction lighting at the facility would be expected. However, if facility operators determine that the construction schedule requires nighttime activities, temporary lighting may be required. Nonetheless, since construction of the proposed project would be completely located within the boundaries of each affected facility, additional temporary lighting is not expected to be discernable from the existing permanent night lighting. Further, while the proposed project has no provisions that would require affected equipment to operate at night, some facilities currently operate multiple shifts and existing lighting is utilized during the nighttime shifts. Additional permanent light sources may be installed on each new wall constructed, to provide illumination for operations personnel at night, in accordance with applicable safety standards. However, any new lighting that may be installed will be consistent in intensity and type with existing lighting on the existing buildings and other structures within each affected facility. Further, any additional lighting, if installed will be placed in a manner to provide lighting within the facility and would not be expected to create substantial light or glare off of each facility's property. For these reasons, the proposed project would not create a new source of substantial light or glare at any of the affected facilities in a manner that would adversely affect day or nighttime views in the surrounding areas.

Conclusion

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing PAR 1420. 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 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))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on agriculture and forestry 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 Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

II. a), b), c), & d) No Impact. The affected facilities and their immediately surrounding areas are not located 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. Therefore, the proposed project would not result in any construction of new buildings or other structures that would require converting farmland to non-agricultural use or conflict with zoning for agriculture use or a Williamson Act contract. The construction and operation activities would be expected to occur within the confines of existing industrial facilities, thus the proposed project is not expected to result in converting farmland to non-agricultural use; conflict with existing zoning for agricultural use, or a Williamson Act Control.

All of the facilities are located in industrial use areas in the urban portion of the Basin that is not 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. Consequently, the proposed project would not create any significant adverse agriculture or forestry impacts.

Conclusion

Based upon these considerations, significant adverse agriculture and forestry resources impacts are not expected from implementing PAR 1420. 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) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑	☐
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
h) 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 PAR 1420 are significant, impacts will be evaluated and compared to the criteria in Table 2-1. PAR 1420 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
SCAQMD 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 SCAQMD 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	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)
PM_{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	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)
Lead 30-day Average Rolling 3-month average	1.5 μg/m^3 (state) 0.15 μg/m^3 (federal)

[a] Source: SCAQMD CEQA Handbook (SCAQMD, 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 SCAQMD Rule 1303, Table A-2 unless otherwise stated.
[e] Ambient air quality threshold based on SCAQMD 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: March 2015

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

III. a) No Impact. The SCAQMD 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 SCAQMD 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 SCAQMD will achieve air quality standards and healthful air is outlined in the 2016 AQMP[17] which contains multiple goals of promoting reductions of criteria air pollutants, greenhouse gases, and toxics. In particular, the 2016 AQMP contains control measure TXM-07: Control of Lead Emissions from Stationary Sources, which will reduce lead emissions through the implementation of PAR 1420.

Compliance with PAR 1420 is expected to occur through the reduction of ambient lead concentration combined with increased housekeeping requirements and best management practices. Conditional ambient air monitoring requirements are also included. Facilities affected by PAR 1420 will need to employ total enclosures at 15 facilities by adding one wall, implement housekeeping and maintenance requirements, and conduct source testing. Eight of the 15 facilities will need to construct one wall to meet the total enclosure requirements. No additional emission control devices are expected to be constructed. Existing facilities have emission control devices and will be subject to source testing requirements to demonstrate compliance with control efficiency requirements or mass outlet lead emissions.

For these reasons, PAR 1420 is not expected to obstruct or conflict with the implementation of the 2016 AQMP because the emission reductions from implementing PAR 1420 are in accordance

[17] SCAQMD, 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

with the emission reduction goals in the 2016 AQMP. PAR 1420 would reduce lead emissions and therefore, be consistent with the goals of the 2016 AQMP. Therefore, implementing PAR 1420 to reduce lead emissions from metal melting and lead processing facilities would not conflict with or obstruct implementation of the applicable air quality plans. Upon implementation, PAR 1420 would be expected to be more health protective because the ambient air lead concentration limit is more stringent than the NAAQS for lead. Since no significant impacts were identified for this issue, no mitigation measures are necessary or required.

III. b) and f) Less Than Significant Impact.

While PAR 1420 is designed to reduce lead emissions, secondary air quality impacts are expected from its implementation due to physical activities that may need to occur. For example, the requirements in PAR 1420 to employ total enclosures would be expected to result in construction impacts from building/installing one new wall at eight facilities. Further, secondary air quality impacts are also expected to occur as a result of facilities conducting source testing and implementing housekeeping and maintenance requirements, such as wet cleaning or vacuuming.

Table 2-2 summarizes the key requirements in PAR 1420 that may result in secondary adverse air quality and greenhouse gas (GHG) impacts during construction and operation.

Table 2-2
Sources of Potential Secondary Adverse Air Quality and GHG Impacts During Construction and Operation

Key Requirements in PAR 1420	Physical Actions Anticipated During:	
	Construction	**Operation**
Total Enclosures	Construct building improvements to assure compliance with total enclosure requirements	None needed
Point Source Emission Controls	No new emissions control devices are required	1. More frequent filter replacement increasing the amount of filter waste to be disposed of 2. Increased amounts of PM waste disposal and/or recycling
Housekeeping Requirements	1. Vehicle trips due to hauling waste and delivering supplies 2. Cleaning equipment	1. Vehicle trips due to hauling waste and delivering supplies 2. Cleaning equipment
Source Testing	None needed	Vehicle trips due to periodic source testing

For the purpose of conducting a worst-case CEQA analysis for the lead processing and metal melting facilities that will be subject to PAR 1420, the following assumptions have been made:

- Eight of the 15 facilities do not currently have a total enclosure in place. As such, each facility is assumed to need to construct one wall of an existing building to meet the requirements for building a total enclosure. Because these facilities are required to comply with the total enclosure requirement within six months after the date of adoption of PAR 1420 (June 1~~May 3~~, 2018), construction of the total enclosures is expected to occur during this six-month period.

- Ten of the 15 facilities currently conduct lead or metal grinding operations inside a building that may not necessarily qualify as a total enclosure. To comply with PAR 1420, the grinding operations would also need to occur either inside a building that already qualifies as a total enclosure (seven of the 15 facilities), in a building that needs to be modified to qualify as a total enclosure (eight of the 15 facilities), or within a smaller enclosure or room located within an existing or to be modified total enclosure. The enclosure that would be needed to house each grinding operation would have a relatively small footprint (e.g., approximately 100 square feet) relative to the construction that would be required to build a total enclosures. For this reason, the construction impacts associated with building a total enclosure includes the impacts that may occur from also building smaller enclosures to accommodate the grinding operations.

- It is assumed that not all eight facilities would make building improvements to complete the total enclosure on the same day, since there is a six-month period to complete construction. It is expected the construction between facilities would be staggered during the six months. Thus, as a worst case scenario it was assumed 50 percent of facilities (four) would construct one wall in one day.

- All 107 facilities have existing emission control devices (e.g., baghouses); thus no additional emission control devices would be required to be installed because of PAR 1420.

Construction Impacts

Compliance with PAR 1420 for affected facilities is expected to be met by building improvements to complete total enclosures. Each facility is assumed to need to construct one wall of an existing building to meet the requirements for building a total enclosure.

In addition, criteria pollutant emissions were also calculated for all on-road vehicles transporting workers, vendors, and material removal and delivery during construction using the California Emissions Estimator Model[18]® version 2016.3.2 (CalEEMod). The detailed output reports for the CalEEMod runs are included in Appendix B. Table 2-3 presents the results of the construction air quality analysis. Appendix B also contains the spreadsheets with the results and assumptions used for this analysis.

The construction impact analysis assumes that construction will take one to two days to complete the construction of one wall at an existing building to attain a total enclosure. Given the affected

[18] CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.

facilities would only need to make minor building improvements (one additional wall) complete a total enclosure and the six-month timeframe for all affected facilities to comply with the requirements in PAR 1420, it is conservatively assumed that the construction phase for some facilities would overlap and result in construction occurring at as many 50 percent of facilities on a peak day. It is unlikely four facilities would not construct on the same day and instead stagger their construction over the six-month period.

Table 2-3 summarizes the peak daily emissions associated with construction at all affected facilities. The air quality impacts due to construction do not exceed any significance threshold, thus the impact is expected to be less than significant.

Table 2-3
Peak Daily Construction Emissions[d]

Peak Daily Construction Emissions by Pollutant (lb/day)						
Building Improvement for Total Enclosures[a,b,c]	VOC	NOx	CO	SOx	PM10	PM2.5
	4.30	31.01	24.74	0.04	2.27	2.11
Significance Threshold for Construction	75	100	550	150	150	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:

a. All of the construction activities would be expected to be completed within six months after date of rule adoption of PAR 1420.

b. Fifteen facilities are subject to the total enclosure requirement; however, only eight facilities currently do not have a total enclosure in place. These facilities are assumed to only need building improvements, which include the construction of one wall of an existing building to complete the total enclosure requirement.

c. Ten of the 15 facilities currently conduct lead or metal grinding operations inside a building that may not necessarily qualify as a total enclosure. These grinding operations would need to occur inside a building that already qualifies as a total enclosure or a building that needs to be modified as a total enclosure. Regardless, these grinding operations are of a relatively small footprint (e.g. approximately 100 square feet) relative to the construction that would be required to build a total enclosure. For this reason, the construction impacts associated with building a total enclosure includes the impacts that may occur from also building smaller enclosures to house the grinding operations.

d. Additional details and calculations can be found in Appendix B.

Operational Impacts

Secondary air quality operational impacts are expected to occur from the following activities that may be implemented to comply with PAR 1420: maintenance of the existing emission control devices; housekeeping; and conducting source tests and smoke tests. Facility operators currently maintain their existing emission control devices (e.g., baghouses) by sending the collected lead and the spent filters, which are considered hazardous waste, to a certified landfill or recycling facility for proper disposal or recycling. Since PAR 1420 lowers the lead emission standards, facility operators will be expected to collect more lead for disposal and increase the frequency for replacing the spent filters. To account for the expected increased maintenance and inspection of the emission control devices and the anticipated increases in filter replacement frequency and the

amount of collected waste and spent filters to be disposed of, the analysis assumes that two additional vehicles per facility on a peak day may be needed. The associated vehicle emissions are considered secondary operational air quality impacts.

Housekeeping requirements in PAR 1420 are applicable to all 107 facilities. Housekeeping may be accomplished by utilizing wet vacuuming, wet mopping or high efficiency particulate air (HEPA) vacuuming. If wet vacuuming or wet mopping are employed, wastewater will be generated and it will either need to be collected and treated on-site for facilities that already have this capability, or collected and stored to be picked up by a waste disposal truck if no wastewater treatment and disposal system exists. If HEPA vacuuming is employed, spent HEPA filters will need to be collected and sent to a certified landfill for proper disposal as hazardous waste. While the implementation of housekeeping requirements in PAR 1420 would result in the collection of additional waste, each facility would be expected to continue their existing practices for handling waste. For this reason, no additional vehicle trips to handle the collection and disposal of additional waste on a peak day would be expected.

In addition, there are 15 facilities that will be subject to an additional housekeeping requirement to conduct rooftop cleaning at least once per year during the months of July through September. In order to safely access rooftops, aerial lifts are assumed to be necessary equipment for conducting rooftop cleaning.

PAR 1420 requires all emission control devices to be source tested. Of the 107 facilities, 15 have existing emission control devices. Facility owners/operators will be required to meet the initial source testing requirements no later than six~~three~~ months after the date of adoption of PAR 1420 (June 1~~February 3~~, 2018). PAR 1420 also requires all baghouses to be subject to periodic source testing requirements. This analysis assumes that implementation of these source testing requirements will require additional vehicle trips to and from each of the 15 facilities on the day that source testing occurs.

Total operational emissions were estimated using CARB's OFFROAD 2011 for the off-road equipment (aerial lift) for the annual rooftop cleaning (housekeeping) requirement and EMFAC2014[19] for the mobile sources (source testing trucks, waste disposal trucks and filter replacement and inspection trucks), for conducting source tests and smoke tests, and employing other housekeeping requirements.

To conduct a worst-case analysis, each facility has been assumed to utilize the following vehicles and off-road equipment on a peak day: one aerial lift, one source testing truck, one waste/wastewater disposal truck, one filter replacement truck, and one filter inspection truck. If all the affected facilities complete their requirements on the same day: 122 medium duty trucks, 15 aerial lifts, and 30 light duty trucks would be used on a peak day. Since PAR 1420 does not require additional emission control devices or negative air conditions in the total enclosures, no changes to additional indirect criteria pollutant and GHG emissions are expected from the generation of electricity needed to operate existing air pollution control equipment.

Table 2-4 summarizes the peak daily emissions associated with operation. Additional details of the assumptions and spreadsheets can be found in Appendix B. Since the total emissions from

[19] CARB, EMFAC2014 Web Database. https://www.arb.ca.gov/emfac/2014/

operational activities do not exceed any operational air quality significance thresholds, less than significant air quality impacts are expected during operation.

Table 2-4
Peak Daily Operational Emissions[d, e]

Peak Daily Operational Emissions by Pollutant (lb/day)						
Key Requirements:	VOC	NOx	CO	SOx	PM10	PM2.5
Point Source Emission Controls[a]	0.39	1.96	3.02	0.03	2.43	0.84
Housekeeping[b]	4.14	22.01	14.02	0.05	3.45	1.93
Source Testing[e]	0.27	1.55	1.56	0.01	0.47	0.27
Total Operational Emissions	4.80	25.52	18.60	0.09	6.35	3.04
Significance Threshold for Operation	55	55	550	150	150	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:

a. The occasional delivery, recycling and disposal of filters for emission control devices (baghouses) and source testing trips are expected to generate mobile source emissions.

b. All facilities would be required to meet housekeeping requirements (107 facilities), with another 15 facilities required to do additional annual rooftop cleaning at least once between July through September.

c. No additional emission control devices would be installed. Source testing would only be conducted on existing emission control devices and is assumed to be performed within six~~three~~ months after the date of adoption of PAR 1420 (June 1~~February 3~~, 2018).

d. No negative air conditions are required by PAR 1420.

e. Additional details and calculations can be found in Appendix B.

Construction and Operation Overlap Impact

With 107 affected facilities and the varying requirements for these facilities to comply with PAR 1420 requirements, there is a possibility that construction activities occurring at some facilities will overlap with operational activities at other facilities. As ~~previously~~ illustrated in Figure 2-1, the source testing of existing emission control devices would need to be completed within six~~three~~ months of the date of adoption of PAR 1420; while housekeeping requirements occurring throughout the year ~~and~~ would need to be ~~first~~ implemented within the first 30 days after the date of adoption of PAR 1420. In addition, building improvements to complete the construction of total enclosures would need to be completed within ~~the~~ six months after~~of~~ the date of adoption of PAR 1420. Thus, the largest overlap would be expected to occur sometime in the first six~~three~~ months when facilities are conducting: 1) building improvements to complete eight total enclosures; 2) source testing of the 15 existing emission control devices; 3) maintenance of existing emission control devices (filter change out/inspection); and, 4) disposal of wastewater resulting from water-based housekeeping requirements. In addition, the larger lead processing facilities (greater than 10 tons per year) are required to conduct rooftop cleaning at least one time per year during the months of July through September. Facilities could conduct rooftop cleaning more often; however PAR 1420 requirements for rooftop cleaning would not be triggered until July or September. However, as a conservative estimate the rooftop cleaning was included and assumed to occur on a peak day.

During this overlap period of Month 1 through Month 6~~3~~ following the adoption of PAR 1420, the analysis assumes that half of the affected facilities will construct walls to build total enclosures

and half of the affected facilities will conduct the aforementioned operational activities, because it is unlikely that each of the eight facilities requiring total enclosure would compete the construction of all eight walls on the same day within a six-month period. Further, the 15 facilities with existing emission control devices are required to submit a source test protocol for approval before conducting source testing. Facilities would also need to temporarily halt operations to allow source testing set up to take place and thus, it is unlikely all the affected facilities would have a similar operation schedule and temporarily halt operations at the same time to be source tested on the same day. For these reasons, source testing would likely be staggered.

In order to conduct housekeeping that requires rooftop cleaning with an aerial lift, advance arrangements would need to be made to bring the aerial lift to a facility. Since rooftop cleaning is required to occur anytime between the months of July through September, it is unlikely that all 15 affected facilities would arrange to have 15 aerial lifts to be delivered on the same day.

All the facilities are required to conduct general housekeeping requirements, and if wet vacuuming or wet mopping are employed, wastewater will be generated and it will either need to be collected and treated on-site for facilities that already have this capability, or collect and stored to be picked up by a waste disposal truck if no wastewater treatment and disposal system exists. As previously explained, while implementation of housekeeping requirements in PAR 1420 would result in the collection of additional waste, each facility would be expected to continue their existing practices for handling waste. For this reason, no additional vehicle trips to handle the collection and disposal of additional waste on a peak day would be expected.

Finally, 15 facilities with existing emission control devices would require filter change out, but not all 15 would be expected to occur on the same day because each facility has different operating schedules, equipment and process lines, and process different amounts of lead. To account for the expected increased maintenance and inspection of the emission control devices and the anticipated increases in filter replacement frequency and the amount of collected waste and spent filters to be disposed of, the analysis assumes that two additional vehicles per facility on a peak day may be needed.

With all of these activities overlapping, a peak overlap day is assumed to need 61 medium duty trucks, 7 aerial lifts, and 15 light duty trucks. Table 2-5 summarizes the peak daily overlap emissions from construction and operational activities.

Table 2-5
Peak Daily Emissions in Construction and Operation Overlap Phase

Peak Daily Emissions During Overlap Phase (lb/day)						
Phase:	VOC	NOx	CO	SOx	PM10	PM2.5
Construction Emissions[a]	4.30	31.01	24.74	0.04	2.27	2.11
Operational Emissions[b]	2.40	12.76	9.30	0.05	3.18	1.52
Total Overlap Emissions	6.70	43.77	34.04	0.09	5.45	3.63
Significance Threshold During Operation[c]	55	55	550	150	150	55
Significant?	**No**	**No**	**No**	**No**	**No**	**No**

Notes:

a. The maximum construction impacts during the overlap phase is expected to occur when four facilities or 50 percent of facilities are undergoing building improvements for the total enclosure.

b. The maximum operational impacts during the overlap phase occur when 50 percent of the affected facilities are conducting their applicable housekeeping, maintenance, and source testing requirements.

c. When there is overlap of construction and operation, the significance thresholds during operation apply.

As indicated in Table 2-5, the emissions during the construction and operational overlap period anticipated from implementing PAR 1420 do not exceed the SCAQMD's CEQA air quality significance thresholds. Therefore, the air quality impacts from construction and operation are considered less than significant. The proposed project is not expected to result in significant adverse air quality impacts during the construction and operation overlap period.

III. c) Less Than Significant Impact.

Cumulatively Considerable Impacts

Based on the foregoing analysis, since criteria pollutant project-specific air quality impacts from implementing PAR 1420 would not be expected to exceed the air quality significance thresholds in Table 2-1, cumulative air quality impacts are also expected to be less than significant. SCAQMD cumulative significance thresholds are the same as project-specific significance thresholds. Therefore, potential adverse impacts from implementing PAR 1420 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 SCAQMD's guidance on addressing cumulative impacts for air quality is as follows: "As Lead Agency, the SCAQMD 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 SCAQMD 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."[20]

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 Air Quality Management District'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 SCAQMD has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established SCAQMD 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 SCAQMD'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.

III. d) Less Than Significant Impact.

Toxic Air Contaminants (TACs) During Construction

Diesel powered vehicles would be utilized to complete the building improvements for the total enclosure requirements in PAR 1420. Diesel PM is considered a carcinogenic and chronic TAC. The construction activities will be completed within six months at all of the eight affected facilities, thus a Health Risk Assessment (HRA) was not conducted, which is consistent with the Office of Environmental Health Hazard Assessment (OEHHA) Guidance Manual (2015)[21]. Construction related activities are not expected to increase toxic fugitives, because the construction includes building one wall at each of the eight facilities to complete a total enclosure compared to installing an entirely new facility or total enclosure. In addition, these facilities in PAR 1420 process material with a lead content lower than those expected at large lead-battery recycling facilities subject to Rule 1420.1 and the Final EA of Rule 1420.1[22] determined PAR 1420.1 would result in less than significant impacts. Overall, the implementation of PAR 1420 will reduce TACs by reducing lead emissions. Therefore, PAR 1420 is not expected to generate significant adverse TAC impacts from construction or expose sensitive receptors to substantial pollutant concentrations.

[20] SCAQMD 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

[21] OEHHA, Air Toxics Hot Spots Program Guidance Manual for the Preparation of Health Risk Assessments, March 6, 2015. https://oehha.ca.gov/air/crnr/notice-adoption-air-toxics-hot-spots-program-guidance-manual-preparation-health-risk-0

[22] SCAQMD, Final Environmental Assessment for Proposed Rule 1420.1 – Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities, August 2015. http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2015/par-1420_1-final-seac3e4a0efc2b66f27bf6fff00004a91a9.pdf

TACs During Operation

The implementation of PAR 1420 will reduce lead emissions from lead and metal processing facilities. Facilities already have existing emission control devices. Among the 15 affected facilities required to conduct building improvements to complete a total enclosure, 15 grinding operations within buildings will be further enclosed amongst a smaller enclosure. In addition, total enclosures would be expected to minimize cross-draft conditions, thus reducing fugitive lead emissions. Additional housekeeping, maintenance, and source testing requirements will ensure compliance of emission control devices and that facility operations do not exceed ambient air lead concentrations. Thus, overall TAC emissions are expected to be reduced. PAR 1420 is not expected to be significant for exposing sensitive receptors to substantial concentrations.

III. e) Less Than Significant Impact.

Odor Impacts

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).

During construction and operation, diesel-fueled equipment and vehicles will be operated. However, the diesel fuel is required to have a low sulfur content (e.g., 15 ppm by weigh or less) in accordance with SCAQMD Rule 431.2 – Sulfur Content of Liquid Fuels[23], thus the fuel is expected to minimize odor. The operation of construction equipment will occur within the confines of existing affected facilities. It would be expected sufficient dispersion of diesel emissions over distance generally occurs such that odors associated with diesel emissions may not be discernable to off-site receptors, depending on the location of the equipment and its distance relative to the nearest off-site receptor. The diesel trucks that will be operated on-site as a part of construction activities will not be allowed to idle longer than five minutes per any one location in accordance with the CARB idling regulation[24], so odors from these vehicles would not be expected. In addition, construction for building improvements for total enclosure would be temporary (within six months of the date of adoption of PAR 1420). Operation within total enclosures would be expected to reduce any odors from facilities. The additional operation of trucks to maintain operational facility activities (source testing, filter replacement, etc.) would be intermittent and over a relatively short period of time; therefore, the proposed project would not be expected to generate diesel exhaust odor greater than what is already typically present at the affected facilities. Thus, PAR 1420 is not expected to create significant adverse objectionable odors during construction or operation. Since no significant impacts were identified for this issue, no mitigation measures for odors are necessary or required.

[23] SCAQMD, Rule 431.2 – Sulfur Content of Liquid Fuels, September 15, 2000. http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf

[24] CARB, Multi-Regulation Summary (MRS) Requirements for Diesel Truck and Equipment Owners, https://www.arb.ca.gov/msprog/onrdiesel/documents/multirule.pdf

III. g) and h) Less Than Significant Impacts.

Greenhouse Gas (GHG) Impacts

Significant changes in global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming. 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.

Traditionally, GHGs and other global warming pollutants are perceived as solely global in their impacts and that increasing emissions anywhere in the world contributes to climate change anywhere in the world. A study conducted on the health impacts of CO2 "domes" that form over urban areas cause increases in local temperatures and local criteria pollutants, which have adverse health effects[25].

The analysis of GHGs is a different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants, the significance thresholds are based on daily emissions because attainment or non-attainment is primarily based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health (e.g., one-hour and eight-hour standards). Since the half-life of CO2 is approximately 100 years, for example, the effects of GHGs occur over a longer term which means they affect the global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate the effects of GHGs over a longer timeframe than a single day (i.e., annual emissions). GHG emissions are typically considered to be cumulative impacts because they contribute to global climate effects.

GHG emission impacts from the implementation of PAR 1420 were calculated at the project-specific level during construction and operational activities. The SCAQMD convened a "Greenhouse Gas CEQA Significance Threshold Working Group" to consider a variety of benchmarks and potential significant thresholds to evaluate GHG impacts. On December 5, 2008, the SCAQMD adopted an interim CEQA GHG Significance Threshold for projects where the SCAQMD is the lead agency (SCAQMD 2008). This GHG interim threshold is set at 10,000 metric tons (MT) of CO2 equivalent emissions (CO2e) per year. Projects with incremental increases below this threshold will not be cumulatively considerable.

[25] Jacobsen, Mark Z. "Enhancement of Local Air Pollution by Urban CO2 Domes," Environmental Science and Technology, as describe in Stanford University press release on March 16, 2010 available at: http://news.stanford.edu/news/2010/march/urban-carbon-domes-031610.html.

Table 2-6 summarizes the GHG analysis which shows that PAR 1420 may result in the generation of 0.64 amortized[26] MT per year of CO2e emissions during construction and seven MT per year of CO2e during operation, for a total of 26 MT per year of CO2e emissions, which is less than the CEQA significance threshold. The detailed calculations of project GHG emissions can be found in Appendix B.

Table 2-6
GHG Emissions from Affected Facilities

Activity	CO2e (MT/year[a])
Construction[b]	0.64
Operation	7
Total Project Emissions	7.64
Significance Threshold	10,000
Significant?	**No**

Note:
a. 1 metric ton =2,205 pounds
b. GHGs from short-term construction activities are amortized over 30 years

As shown in Table 2-6, the CEQA GHG significance threshold for industrial sources 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 PAR 1420 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 PAR 1420. Therefore, GHG impacts are not considered significant.

Conclusion
Based upon these considerations, significant air quality and GHG emissions impacts are not expected from implementing PAR 1420. Since no significant air quality and GHG emissions impacts were identified, no mitigation measures are necessary or required.

[26] GHGs from short-term construction activities amortized over 30 years. To amortize GHGs from temporary construction activities over a 30-year period (est. life of the project/equipment), the amount of CO_2e emissions during construction are calculated and then divided by 30.

		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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

IV. a), b), c), & d) No Impact. Implementation of PAR 1420 would occur at existing affected facilities, which are located in industrial areas. Thus, PAR 1420 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 Game or U.S. Fish and Wildlife Service are not expected to be found on or in close proximity to affected facilities. Therefore, PAR 1420 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely. PAR 1420 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, any construction from the implementation of PAR 1420 would take place at the existing facilities and would not be built on or near a wetland or in the path of migratory 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 PAR 1420. Additionally, PAR 1420 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 PAR 1420 would occur at existing facilities in previously disturbed areas 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 PAR 1420. 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 RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☑
b)	Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	☐	☐	☐	☑
c)	Directly or indirectly destroy a unique paleontological resource, site, or feature?	☐	☐	☐	☑
d)	Disturb any human remains, including those interred outside formal cemeteries?	☐	☐	☐	☑
e)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?	☐	☐	☐	☑

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass

emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

V. a) 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 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. Buildings or structures that may be affected by PAR 1420 are used for industrial purposes and would generally not be considered to be historically significant, since they would not have any of the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values. Therefore, PAR 1420 is not expected to cause any impacts to significant historic cultural resources.

V. b), c), & d) No Impact. Construction-related activities are expected to be confined within the affected existing industrial facilities with the implementation of PAR 1420. Thus, PAR 1420 is not expected to require physical changes to the environment which may disturb paleontological or archaeological resources. Furthermore, it is envisioned that these areas are already either devoid of significant cultural resources or whose cultural resources have been previously disturbed. Therefore, PAR 1420 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 PAR 1420 is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources.

V. e) No Impact. Construction-related activities are expected to be confined within the affected existing industrial facilities with the implementation of PAR 1420. Therefore, no impacts to historical or cultural resources are anticipated to occur. PAR 1420 is not expected to require physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, PAR 1420 is not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. For these reasons, PAR 1420 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 SCAQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes)

that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code 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 SCAQMD 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 [see 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 resources impacts are not expected from implementing PAR 1420. Since no significant 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 adopted energy conservation plans?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

VI. a) & e) No Impact. PAR 1420 is not expected to conflict with any adopted energy conservation plans or violate any energy conservation standards because existing facilities would be expected to continue implementing any existing energy conservation plans that are currently in place regardless of whether PAR 1420 is implemented. The implementation of PAR 1420 will apply to existing facilities; however, it will also apply to any new lead processing or metal melting facilities in the future. SCAQMD staff is not aware of any new facilities planned to be constructed in the immediate future and is unable to predict or forecast, when, if any, would be built in the long-term. Any energy resources that may be necessary to install total enclosures, conduct source tests, conduct monitoring and employ housekeeping would be used to achieve reductions in lead; and therefore, would not be using non-renewable resources in a wasteful manner. For these reasons, PAR 1420 is not expected to conflict with energy conservation plans or existing energy standards, or use non-renewable resources in a wasteful manner.

VI. b), c), & d) Less Than Significant Impact. Implementation of PAR 1420 will increase the use of electricity from construction-related impacts to provide power to electric construction equipment needed to implement building improvements to complete the total enclosure requirement and to provide electricity to additional lighting, if any, that may be installed after each wall is constructed for the total enclosures. Since, no additional emission control devices or ventilation systems would be required at existing facilities from the implementation of PAR 1420, no additional electricity would be needed for these purposes.

The air quality and health protective benefits that would be expected to occur as a result of implementing these activities would not require utilities that would provide additional electricity to the affected facilities to substantially alter power system because any additional energy needed to implement PAR 1420 can be provided from existing supplies. Further, since natural gas would not be needed to implement any of the physical changes that may occur as part of implementing PAR 1420, no change to existing natural gas supplies and usage would be expected to occur.

Implementation of PAR 1420 will also increase the use of diesel fuel and gasoline to operate construction equipment and diesel-fueled trucks, and gasoline for construction worker vehicles. After construction is complete, operational activities would also increase the use diesel fuel by delivery and haul trucks and aerial lifts.

Construction-Related Impacts

During the various phases of construction, diesel and gasoline fuel will be consumed by portable construction equipment (e.g., air compressors, cement and mortar mixers, concrete/industrial saws, forklifts, tractors/loaders/backhoes, welders etc.) for building improvements to complete the total enclosures by construction workers' vehicles and delivery/haul trucks traveling to and from each construction site. To estimate the "worst-case" energy impacts associated with construction activities, the total construction oxides of sulfur (SOx) emissions were taken to scale to the total diesel fuel usage since the estimated SOx emissions during construction are derived from CARB's OFFROAD2011 and EMFAC2014 models. These two models both calculate the SOx emissions based on the mass-balance method and the sulfur content in the fuel. By scaling the SOx emissions from one single piece of construction equipment with known diesel fuel usage in gallons per day to the total construction SOx emissions, the total diesel fuel consumption from construction associated equipment and trucks can be estimated. Assumptions and calculations used for estimating fuel usage associated with construction can be found in Appendix B.

The fuel usage per construction worker commute round trip was calculated by assuming that each workers' gasoline vehicle would get a fuel rate of approximately 15 miles per gallon and would travel 30 miles round trip to and from the construction site in one day, thus each vehicle would use two gallons per day. It is expected six construction workers would be working at each affected facility. The implementation of PAR 1420 would be expected to result in eight affected facilities that would need to complete building improvements to complete a total enclosure.

Table 2-7 lists the projected energy impacts associated with the construction from the affected facilities.

Table 2-7
Total Projected Fuel Usage for Construction Activities

Fuel Type	Year 2015 Estimated Basin Fuel Demand[a] (mmgal/year)	Fuel Usage[b] (mmgal/year)	Total Increase Above Baseline (%)	Significant?[c]
Diesel	756	0.00005	0.000006	**No**
Gasoline	6,783	0.0001	0.000001	**No**

Notes:

a. California Energy Commission, California Annual Retail Fuel Outlet Report Results Year 2015, (http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx). Accessed on September 11, 2017.

b. Estimated peak fuel usage from construction activities. Diesel usage estimates are based on the usage of portable construction equipment and on-road vehicles conducting haul/delivery trips. Gasoline usage estimates are from construction workers' vehicle daily trips to and from work.

c. SCAQMD's energy threshold for both types of fuel used is 1 percent of fuel supply.

As indicated in Table 2-7, the fuel usage during construction anticipated from implementing PAR 1420, does not exceed the SCAQMD's CEQA significance thresholds for energy.

Operational-Related Impacts

Additional truck trips are expected to be needed for additional source testing, filter replacement or inspection, and disposal of waste. Each truck is assumed to drive approximately 40 miles, round trip, with a fuel economy of approximately five miles per gallon (mpg) which would mean that each truck would use approximately eight gallons of diesel fuel per round trip. Each facility was assumed to need at least one waste/wastewater disposal truck a year to meet housekeeping requirements and 15 facilities would be subject to source testing and filter inspection/replacement requirements, thus, needing three additional trucks for each affected facility. The total trucks per year would be 152 and the corresponding annual total diesel use would be 1,216 gallons per year.

PAR 1420 requires each affected facility to conduct rooftop cleaning at least once between July and September. Aerial lifts are assumed to be needed in order for facility employees to be able to access the rooftops. For this analysis, aerial lifts are assumed to be used for four hours per year at each facility. Diesel fuel use was estimated using a 1.4 gallon per hour fuel consumption rate from CARB's OFFROAD2007 database, which is an older version of OFFROAD2011, is the only model which provides the fuel usage data as an output. The diesel fuel use from one aerial lift is

estimated to be approximately 5.6 gallons per year. The worst case for all 15 facilities utilizing aerial lifts according to the annual roof cleaning schedule would be 84 gallons per year of diesel fuel consumed.

Table 2-8
Annual Total Projected Diesel Fuel Usage for Operational Activities

Type of Equipment	Diesel Usage (gal/year)
Trucks	1,216
Aerial Lifts	84
Total Usage	1,300
Year 2015 Estimated Basin Fuel Demand (gal/year)[a]	585,000,000
Total Above Baseline (%)	0.0002
Significant?[b]	**No**

Notes:

a. California Energy Commission, California Annual Retail Fuel Outlet Report Results Year 2015, (http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx). Accessed on September 11, 2017.

b. SCAQMD's energy threshold for both types of fuel used is 1 percent of fuel supply.

As indicated in Table 2-8, the diesel fuel usage during operation anticipated from implementing PAR 1420, does not exceed the SCAQMD's CEQA significance thresholds for energy.

Since no new permanent employees are expected from implementing PAR 1420, no additional workers and no additional gasoline-powered vehicles are expected to occur. Thus, no additional gasoline use would be expected during operations.

As explained in Section I. – Aesthetics, it is possible that some permanent lighting may be installed on the eight additional walls that are anticipated to be constructed to comply with the requirements for total enclosures in PAR 1420. If the eight affected facilities used two 100 watts (W) LED lightbulbs for an assumed 12 hours of nighttime lighting, a total of 16 100W LED lightbulbs would be used. As such, for this small amount of electricity that will be needed to supply power to these additional lights, less than significant electricity demand would be expected to operate this additional lighting. In addition as explained in Section III – Air Quality and Greenhouse Gas Emissions, construction of an additional wall to complete the total enclosure would result in construction equipment using electricity. Table 2-9 summarizes the total electricity consumption for PAR 1420 which is less than the energy threshold for electricity.

Table 2-9
PAR 1420 Electricity Consumption from Construction and Operation

Energy Use	Consumption (GW-h)
Construction - Electricity Use[a]	0.0023
LED Light Bulbs	0.000019
Total Use:	0.0024
SCAQMD Basin Electricity End Use Consumption[b,c]	120,210
Total Impact % of Capacity	0.000002
Significant?[d]	No

Notes:
a. From CalEEMod, calculations and assumptions can be found in Appendix B.
b. 2016 Draft Final SCAQMD AQMD Chapter 10, 2012 Electricity use in gigawatt-hour (GW-h), (http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/2016-air-quality-management-plan/draft-final-aqmp/strikeout/11ch10-draft-final-120116.pdf).
c. It is assumed the energy supply is equal to energy consumption.
d. SCAQMD's energy threshold for both types of fuel used is 1 percent of supply.

Based on the foregoing analyses, the construction- and operational-related activities associated with the implementation of PAR 1420 would not use energy in a wasteful manner and would not result in substantial depletion of existing energy resource supplies, create a significant demand of energy when compared to existing supplies. Thus, there are no significant adverse energy impacts associated with the implementation of PAR 1420.

Conclusion
Based upon these considerations, significant adverse energy impacts are not expected from implementing PAR 1420. 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) Expose people or structures to 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?	☐	☐	☐	☑
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 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?	☐	☐	☐	☑

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.
- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

VII. a) No Impact. PAR 1420 would result in construction activities at existing affected facilities located in developed industrial settings. Affected facilities are expected to make building improvements on existing structures to complete total enclosures, such that only minor site preparation is anticipated. Further, the proposed project does not cause or require a new facility to be constructed. Therefore, PAR 1420 is not expected to adversely affect geophysical conditions in the District.

Southern California is an area of known seismic activity. As part of the issuance of building permits, local jurisdictions are responsible for assuring that the Uniform Building Code is adhered to and can conduct inspections to ensure compliance. The Uniform Building code is considered to be a standard safeguard against major structural failures and loss of life. The basic formulas used for the Uniform building Code seismic design require determination of the seismic zone and site coefficient, which represents the foundation condition at the site. The Uniform Building Code requirements also consider liquefaction potential and establish stringent requirements for building foundations in areas potentially subject to liquefaction. The modification of existing structures at existing facilities to construct eight new walls to make eight total enclosures would be expected to conform to the Uniform Building Code and all other applicable state and local building codes. Structures must be designed to comply with the Uniform Building Code Zone 4 requirements if they are located in a seismically active area. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. Thus, PAR 1420 would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or

structures to the risk of loss, injury, or death involving the rupture of an earthquake fault, seismic ground shaking, ground failure or landslides is not anticipated.

VII. b) Less than Significant Impact. Since PAR 1420 would require the modification of existing buildings to complete the total enclosure, construction activities such as minor grading may be necessary to prepare a level foundation. As such, temporary erosion resulting from grading activities may be expected. However, these grading activities and any associated temporary erosion that may occur are expected to be relatively minimal since the existing facilities are generally flat and have previously been graded and paved. In addition, the eight affected facilities only require the addition of one wall per facility to be constructed on eight existing partial enclosures and each existing partial enclosure would be expected to already be on a relatively level foundation. For this reason, no unstable earth conditions or changes in geologic substructures are expected to result from implementing PAR 1420. Therefore, impacts to the loss of topsoil and soil erosion are less than significant.

VII. c) No Impact. Since PAR 1420 will affect existing facilities, it is expected that the soil types present at the affected facilities will not be made further susceptible to expansion or liquefaction. Furthermore, subsidence is not anticipated to be a problem since only minor construction for building improvements are expected to occur at affected facilities. The areas, where the existing facilities are located are not envisioned to be prone to new landslide impacts or have unique geologic features since the existing facilities are currently operational. Thus, the proposed project would not be expected to increase or exacerbate any existing risks at the affected facility locations. Implementation of PAR 1420 would not involve locating facilities on 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. No impacts are anticipated.

VII. d) & e) No Impact. The implementation of PAR 1420 includes building improvements to complete eight total enclosures, conducting source testing and maintenance of emission control devices, and housekeeping activities, such as wet vacuuming or rooftop cleaning. These activities are expected to be confined within the affected existing industrial facilities. Further, PAR 1420 would not require the installation of septic tanks or other alternative wastewater disposal systems since each affected facility would be expected to have an existing sewer system. 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 PAR 1420 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 PAR 1420. 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, and disposal of hazardous materials?	☐	☐	☑	☐
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	☐	☐	☑	☐
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 Section 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 use airport or a private airstrip, 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)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑
h)	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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

VIII. a) & b) Less than Significant Impact. PAR 1420 has been developed to reduce public health impacts and exposure to lead. Eight facilities are expected to conduct building improvements to complete total enclosures and minimize cross-draft conditions, thereby reducing fugitive emissions of lead being released. Additionally, facilities will be required to comply with the new housekeeping requirements in PAR 1420 which will also have the effect of preventing fugitive emissions of lead emissions and consequently reducing the potential for the public and the environment to be exposed to lead.

Facilities with existing air pollution control equipment currently recycle or haul away hazardous waste or materials off-site to a hazardous waste landfill and there are no requirements in PAR 1420 that would be required for these current hazardous waste handling practices to change. Thus, no new significant hazards are expected to the public or environment through the continued routine transport, disposal or recycling of lead waste generated at lead processing facilities. Therefore, PAR 1420 is not expected to create a new significant hazard to the public or environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment.

VIII. c) Less than Significant Impact. Of the 15 facilities assumed to be subject to all the requirements that would require physical changes (e.g., construction total enclosure, conducting

initial source tests and smoke tests, and implementing housekeeping and maintenance requirements), there are two facilities located within one-quarter mile of a school. These facilities and the names of the schools and their proximities are identified in Appendix C. PAR 1420, if implemented, would reduce exposure to lead by reducing the ambient air lead concentration to 0.100 $\mu g/m^3$, averaged over 30 consecutive days by January 1, 2021. Housekeeping requirements and building improvements to complete total enclosures will minimize fugitive lead emissions. However, PAR 1420 does not include new requirements of alter existing requirements for hazardous waste disposal. For this reason, all 15 facilities, including the two that are located within one quarter mile of a school, are expected to continue to take the appropriate and required actions to ensure proper handling of existing quantities of hazardous or acutely hazardous materials, substances or wastes that are currently generated.

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). Three of the 15 facilities, presented in Appendix C are identified on lists of California Department of Toxics Substances Control hazardous waste facilities per Government Code Section 65962.5. Implementation of PAR 1420 will limit the exposure to lead through building improvements for total enclosures, implementing housekeeping requirements, and conducting source testing and maintenance of emission control equipment will reduce public health impacts from point and fugitive lead emissions. PAR 1420 would not alter how existing lead waste is stored while awaiting to be transported off-site to a recycling facility or hazardous waste landfill. PAR 1420 is not expected to 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 PAR 1420 would not create a new significant hazard to the public or environment.

VIII. e) No Impact. None of the 15 facilities identified in Appendix C are located within two miles of an airport. Therefore, implementation of PAR 1420 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 existing facilities. The building improvements necessary at eight existing facilities to complete a total enclosure in accordance with PAR 1420 may require an update of each affected facility's existing emergency response plan to reflect the building modifications; however, the act of modifying an emergency response plan to reflect these anticipated building modifications will not create any environmental impacts. Therefore, PAR 1420 is not expected to impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

VIII. g) No Impact. The facilities affected by PAR 1420 are typically located in existing industrial use areas and are not located near wildlands; therefore, PAR 1420 is not expected to be significant for exposing people or structures to risk of loss, injury or death involving wildland fires.

VIII. h) 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. PAR 1420 would not change the existing requirements and permit conditions for the proper handling of flammable materials. Further, PAR 1420 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. Therefore, operators of lead processing and metal melting facilities that utilize baghouse emission control technologies are already required to have reliable, economical and effective means of explosion control such as baghouse explosion suppression, containment, and venting in place. Also, PAR 1420 is not expected to result in the new installation of baghouses, since affected facilities currently have baghouses installed. Additional information pertaining to these types of protective measures is available in Chapter 8 of the *Industrial Ventilation, A Manual for Recommended Practice for Design*, 28th Edition, published by the American Conference of Governmental Industrial Hygienists, ©2013.

Conclusion

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not expected from implementing PAR 1420. 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, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	☐	☐	☑	☐
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	☑
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	☐	☐	☐	☑
d)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
e)	Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	☐	☐	☐	☑

f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☑	☐
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☑	☐

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

<u>Water Demand:</u>

- 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.

<u>Water Quality:</u>

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.

- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

IX. a) Less than Significant Impact. PAR 1420 would require eight facilities to conduct lead processing and metal melting operations within total enclosures that minimize cross-draft conditions. The lead point source emissions would be required to be vented to emission control devices. All facilities currently employ emission control devices (e.g., baghouses) to control lead emissions and PAR 1420 does not require new emission control devices to be installed. Also, since baghouse technology does not utilize water as part of its function, wastewater is not generated from this type of emission control device. Thus PAR 1420 would not be expected to generate wastewater from operating existing emission control devices.

However, PAR 1420 contains housekeeping requirements that require any facility, not located within a total enclosure, to conduct weekly wet cleaning of areas where lead-containing wastes generated from housekeeping activities are stored, dispose of, recovered, or recycled and surfaces accumulating lead-containing dust subject to vehicular or foot traffic, and initiate immediate cleaning, no later than one hour after any construction or maintenance activity or event. Facilities that process more than 10 tons per year or lead would also be required to complete rooftop cleaning. All facilities would be required to conduct quarterly cleaning of collection vents, ducting, and openings of each lead emission control device and conduct wet cleaning of any paved area located outside of a total enclosure that is subject to vehicular traffic, no later than one hour after any construction or maintenance activity or event. Wet cleaning or wet vacuuming utilized water and as such PAR 1420 may result in increased water usage and the corresponding generation of wastewater that may require treatment or cleaning prior to disposal.

Any facility that conducts wet cleaning, but that does not currently have a wastewater treatment system or a wastewater discharge permit, the dirty water resulting from wet cleaning would need to be collected, stored and disposed of as hazardous materials and these facilities would be required to comply with applicable hazardous waste disposal regulations. Thus, the collected dirty water

at these facilities would not be allowed to be discharged as wastewater. Any facility that conducts wet cleaning and has a wastewater discharge permit would be expected to comply with the permitted effluent discharge concentration and flow limits which means the wastewater generated from wet cleaning would likely need to be treated prior to discharge. For these reasons, implementing PAR 1420 would not be expected to violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality.

IX. b) No Impact. As previously explained in Section IX. a), water is not needed to operate the total enclosures and vent the lead processing and metal melting operations to emission control devices. However, PAR 1420 includes wet cleaning with water as an option for conducting housekeeping. The additional water for conducting wet cleaning, is expected to be supplied by each facility's current water supplier. The quality of water that would likely be supplied at each affected facility would be potable water since potable water is currently supplied at all of the affected facilities in order to provide drinking water for employees, water for sinks and toilets, and water for any landscaping, if applicable. Should any facility have a groundwater well on-site with groundwater pumping rights, the facility would likely not use groundwater for wet cleaning, because groundwater contains sand and other particles or debris which is not suitable for wet cleaning. Therefore, implementing PAR 1420 would not be expected to cause facilities to utilize groundwater for conducting wet cleaning, substantially deplete groundwater supplies, or interfere substantially with groundwater recharge.

IX. c) & d) No Impact. Implementation of PAR 1420 is expected to take place at existing affected facilities. In particular, PAR 1420 would require eight facilities to make building improvements to install one wall per facility to create total enclosures. As part of installing these walls, the operator may also install rain gutters or rain drains to connect to each facility's existing storm drain system. Currently, all affected facilities are venting lead point source emissions to existing emission control devices. Neither the total enclosures nor the operation of the existing emission control devices require water as part of the day-to-day function.

For these reasons, implementation of PAR 1420 would not be expected to substantially alter the existing drainage pattern of the site or area beyond what currently exists at existing facilities. No streams or rivers are expected to run through existing facilities, because these facilities operate in urban industrial areas. Thus, PAR 1420 would not cause an alteration of the course of a stream or river. Building improvements to complete total enclosures may require some minor earthwork to prepare affected areas at the affected facility. Any construction activities, however would not be expected to permanently create unpaved areas that would be vulnerable to surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site. In addition, PAR 1420 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 PAR 1420 does not contain any requirements that would change existing drainage patterns or the procedures for how surface runoff is handled.

IX. e) & f) No Impact. As previously explained in Section IV – Biological Resources, PAR 1420 would not require new development in undeveloped areas. Construction of the eight new walls at affected facilities would be short-term and take place within existing facility settings. Therefore, PAR 1420 would not be expected to cause placing housing or structures to be placed within 100-year flood hazard areas as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate

Map or other flood hazard delineation map, which would impede or redirect flood flows. Similarly, PAR 1420 would also 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 PAR 1420.

IX. g) & i) Less than Significant Impact. Affected facilities would be required to conduct housekeeping requirements, such as wet cleaning or rooftop cleaning, as outlined in PAR 1420. Because PAR 1420 contains similar housekeeping requirements for facilities requiring rooftop cleaning as SCAQMD Rule 1420.2 – Emissions Standards for Lead from Metal Melting Facilities, water demand and water quality (wastewater) impacts for PAR 1420 would be expected to be similar to those analyzed in the Final EA for Rule 1420.2 (October 2015)[27]. The analysis in the Rule 1420.2 Final EA estimated that 13 facilities would need 82,372 gallons per day of water and an equivalent corresponding amount of wastewater would be generated as a result of conducting cleaning for the 15 facilities that would incorporate rooftop cleaning in addition to their weekly housekeeping requirements of wet mop/wet vacuuming. For each facility conducting housekeeping requirements including rooftop cleaning per Rule 1420.2, approximately 6,406 gallons per day of water would be needed and the same amount of wastewater would be generated. If the maximum amount of water that could be used by 15 facilities on a peak day to conduct rooftop cleaning in response to PAR 1420 is equivalent to the analysis in Rule 1420.2, then PAR 1430 could require 96,090 gallons of water per day to conduct wet cleaning and could generate the same amount as wastewater (e.g., 15 facilities x 6,406 gallons per day). In addition, all the facilities are subject to weekly cleanings by wet wash, wet mop, or vacuum, which consists of a basic commercial mop bucket. A typical commercial mop bucket can hold 35 quarts or approximately nine gallons. If on a peak day, all the facilities decided to conduct their weekly cleaning, a total of 936 additional gallons of water would be used and result in the same amount of wastewater. Thus, as a conservative estimate on a peak day 97,053 gallons per day would be used if all affected facilities conducted their applicable housekeeping requirements.

However, while PAR 1420 has similar housekeeping requirements as in Rule 1420.2, wet cleaning is not the only option. PAR 1420 also would allow dry HEPA vacuuming to occur. Because each facility will have the option to choose wet or dry cleaning to satisfy the housekeeping requirements, the decision to conduct wet cleaning will largely depend on whether each affected facility has the capacity to handle an additional wastewater stream. Also, based on the facility owner/operator~~,~~ in past rules~~,~~ indicating preferences to use dry HEPA vacuuming, SCAQMD staff believes that the estimated use of water and the corresponding generation of wastewater on a peak day probably substantially overestimates what the actual impact may be. Thus, PAR 1420 would not be expected to require the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or cause the expansion of existing facilities.

IX. h) Less Than Significant Impact. However, as explained in Section IX g) and i) the maximum amount of water that may be needed per facility conducting rooftop cleaning would be 6,406 gallons per day or 96,090 gallons per day for 15 facilities. The maximum amount of water for all the facilities conducting housekeeping requirements on a peak day would be 97,053 gallons per day. Table 2-10 shows the projected water demand from implementing PAR 1420.

[27] SCAQMD, Final Environmental Assessment for Proposed Rule 1420.2 – Emissions Standards for Lead Melting Facilities, certified October 2, 2015. http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2015/pr-1420_2-final-ea.pdf

Table 2-10
Projected Water Demand

Wet Cleaning Activity	Additional Water Demand on a Peak Day (gal/day)
PAR 1420 Housekeeping Requirements	97,053
Significance Threshold for Potable Water:	262,820
Significant for Potable Water?	**No**
Significance for Threshold for Total Water:	5,000,000
Significant for Total Water?	**No**

Therefore, since the estimated potable water demand and total water demands would be less than significance thresholds for potable and total water, respectively, the water demand impacts that are expected from implementing PAR 1420 would be less than significant. Further, existing water supplies are expected to be sufficiently available from existing entitlements and resources without requiring any new or expanded entitlements because the projected increased water demand is based on a peak day, but that amount will not be needed every day for every facility that conducts wet cleaning. Therefore, PAR 1420 is not expected to have significant adverse water demand impacts.

Conclusion
Based upon these considerations, significant adverse hydrology and water quality impacts are not expected from implementing PAR 1420. 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

X. a) & b) No Impact. PAR 1420 does not require the construction of new facilities and the physical effects that will result from PAR 1420 will occur at existing facilities located industrial areas and would not be expected to go beyond existing boundaries. For this reason, implementation of PAR 1420 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 PAR 1420 does not alter any land use or planning requirements. Compliance with PAR 1420 would take place within existing facilities. Thus, it 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 PAR 1420. 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420 but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XI. a) & b) No Impact. There are no provisions in PAR 1420 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. Some examples of mineral resources are gravel, asphalt, bauxite, and gypsum, which are commonly used for construction activities or industrial processes. The proposed project would require the construction of eight walls to create eight total enclosures, implementation of housekeeping and maintenance activity requirements, and source testing, which would have no effects on the use of important minerals, such as those described above. Therefore, no new demand on mineral resources is expected to occur and significant adverse mineral resources impacts from implementing PAR 1420 are not anticipated.

Conclusion

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementing PAR 1420. 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) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☑

Significance Criteria

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are

assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XII. a), b), & c) Less than Significant Impact. The facilities affected by PAR 1420 are located in urbanized industrial areas. The existing noise environment at each of the facilities is typically dominated by noise from existing equipment on-site, vehicular traffic around the facilities, and trucks entering and existing facility premises. Large, potentially noise-intensive construction equipment would be needed temporarily to modify eight existing enclosures at eight facilities as part of implementing PAR 1420. Operation of the construction equipment would be expected to comply with all existing noise control laws and ordinances. Since the facilities are located in industrial areas, which have a higher background noise level when compared to other areas, the noise generated during construction will likely be indistinguishable from the background noise levels at the property line. In addition, as the construction of total enclosures at the eight affected facilities is completed, the overall noise profile would be expected to lessen when compared to baseline noise levels from day-to-day operations at these facilities because the noise generating activities will occur fully inside. Further, Occupational Safety and Health Administration (OSHA) and California-OSHA have established noise standards to protect worker health both indoors and outdoors. Furthermore, compliance with local noise ordinances typically limit the hours of construction to reduce the temporary noise impacts from construction to sensitive and offsite receptors. These potential noise increases would only be temporary until construction is completed and would be expected to be within the allowable noise levels established by the local noise ordinances for industrial areas; thus, impacts are expected to be less than significant.

XII. d) No Impact. The 15 affected facilities are located within urbanized industrial areas but none are located within two miles of an airport, as noted in Appendix C. The existing noise environment at each of these facilities is dominated by noise from existing equipment on-site, vehicular traffic around the facilities, and trucks entering and exiting facility premises. Thus, any new noise impacts would from construction activities would be temporary and likely to generate noise that is indistinguishable from the background levels at the property line. Thus, PAR 1420 is not expected to expose persons residing or working within two miles of a public airport or private airstrip to excessive noise levels.

Conclusion

Based upon these considerations, significant adverse noise impacts are not expected from the implementing PAR 1420. 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XIII. a) No Impact. The construction activities associated with PAR 1420 at each of the eight affected facilities are not expected to involve the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. It would be anticipated only a handful workers per facility may be needed to perform construction activities to comply with PAR 1420 and these workers can be supplied from the existing labor pool in the local Southern California area. In addition, once the temporary construction activities of the eight total enclosures

are completed, no additional permanent employees would be needed since PAR 1420 does not require additional emission control devices (baghouses) to be installed and operated. Housekeeping and maintenance activities resulting from PAR 1420 would also not be expected to result in the need for additional employees because facilities have existing personnel trained in maintaining the existing emission control devices and associated day-to-day operations. In the event that new employees are hired, it is expected that the number of new employees hired at any one facility would be relatively small, perhaps no more than one or two per facility. Regardless of implementing PAR 1420, human population within the jurisdiction of the SCAQMD. As such, PAR 1420 is not anticipated to not result in changes in population densities, population distribution, or induce significant growth in population.

XIII. b) No Impact. PAR 1420 would result in construction activities within the confines of existing facilities. Additional housekeeping and maintenance requirements would not be expected to substantially alter existing operations at lead processing facilities. Consequently, PAR 1420 is not expected to result in the creation of any industry that would affect population growth, directly or indirectly induce the construction of single- or multiple-family units, or require the displacement of persons or housing elsewhere within the SCAQMD's jurisdiction.

Conclusion

Based upon these considerations, significant adverse population and housing impacts are not expected from implementing PAR 1420. 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 proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☑	☐
b) Police protection?	☐	☐	☑	☐
c) Schools?	☐	☐	☐	☑
d) 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XIV. a) & b) Less Than Significant Impact. Implementation of PAR 1420 is expected to cause modifications to eight existing buildings to install eight walls to make total enclosures, all while continuing current operations at the eight facilities. In order to construct the eight new walls, each facility will be required to obtain a building permit from the local city or county with jurisdiction over the construction. As each step in the construction process progresses, a building inspector will periodically check in with each facility to verify that construction is proceeding according the specifications in the building permit. Because applications for building permits typically undergo a thorough "plan check" process before a permit to build is issued, new safety hazards are not expected to occur during construction. Further, PAR 1420 does not require the use or handling of hazardous materials, so no special circumstances with handling sensitive materials during construction would be expected. For these reasons, implementation of PAR 1420 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) No Impact. As explained in Section XIII. a), PAR 1420 is not anticipated to generate any significant effects, either direct or indirect, on the population or population distribution within SCAQMD's jurisdiction as no additional workers are anticipated to be required to comply with PAR 1420. Because PAR 1420 is not expected to induce population growth in any way, and because the local labor pool (e.g., workforce) would remain the same since PAR 1420 would not trigger changes to current usage practices, no additional schools would need to be constructed as a result of implementing PAR 1420. Any construction activities would be temporary. No additional emission control devices are expected to be installed from the implementation of PAR 1420, and trained personnel are currently maintaining the emission control devices at existing facilities, thus no increased labor force is expected. Therefore, since no increase in local population would be anticipated as a result of implementing PAR 1420, there would be no corresponding impacts to local schools 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 or other public facilities.

Conclusion

Based upon these considerations, significant adverse public services impacts are not expected from implementing PAR 1420. 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XV. a) & b) No Impact. As previously explained in Section XIII – Population and Housing, PAR 1420 is not expected to affect population growth or distribution within the SCAQMD's jurisdiction because workers needed to conduct construction activities to comply with PAR 1420 can be supplied by the existing labor pool in the local Southern California area and no additional employees are expected long-term to comply with operational requirements. Further, all facilities

subject to PAR 1420 have existing emission control devices with personnel trained to maintain the equipment. As such, PAR 1420 is not anticipated to generate any significant adverse effects, either indirectly or directly on population growth within the SCAQMD's jurisdiction or population distribution, thus no additional demand for recreational facilities would be expected. Further, no provisions in PAR 1420 could increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or expansion of existing recreational facilities that might have an adverse physical effect on the environment because it would not directly or indirectly increase or redistribute population.

Conclusion

Based upon these considerations, significant adverse recreation impacts are not expected from implementing PAR 1420. 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XVI. a & b) Less Than Significant Impact. PAR 1420 may cause some minor construction activities to occur at eight facilities, and these activities may result in the generation of some solid construction waste that may need to be disposed of in a landfill. As discussed in Section III – Air Quality and Greenhouse Gas Emissions b) and f), facility operators will be expected to collect more lead for disposal and increase the frequency for replacing the spent filters. Facility operators would continue sending the collected lead and the spent filters, which are considered hazardous waste, to a certified landfill or recycling facility for proper disposal or recycling. However, PAR 1420 does not contain any requirements that would cause existing practices for disposing of solid and hazardous waste to change. For this reason, facilities that currently comply with all applicable local, state, or federal waste disposal regulations would not be expected to change their current practices if PAR 1420 is implemented. Thus, implementation of PAR 1420 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 impact.

Conclusion
Based upon these considerations, significant adverse solid and hazardous waste impacts are not expected from implementing PAR 1420. 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 AND TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☑	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☑	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	☑
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☑

Significance Criteria

Impacts on transportation and traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

Discussion

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XVII. a) & b) Less than Significant Impact. As previously discussed in Section III – Air Quality and Greenhouse Gas Emissions, compliance with PAR 1420 would require construction activities related to making building improvements to create eight total enclosures. On a peak day, four facilities were assumed to undergo overlapping construction activities and if all the affected facilities complete their requirements on the same day: 122 medium duty trucks, 15 aerial lifts, and 30 light duty trucks would be used on a peak day. This is below the significant threshold of 350 round trips. Traffic and transportation impacts during construction and operation are not expected to cause a significant adverse impact.

XVII. c) No Impact. As explained previously in Section XIII – Hazards and Hazardous Materials, there are no facilities located within two miles of an airport. Since PAR 1420 would not require additional emission control devices to be installed and the new walls to be built would be added to existing structures, implementation of PAR 1420 would not be expected to interfere with an airport, cause a change in existing air traffic patterns, increase air traffic levels, or cause a change in location that would result in substantial safety risks. Therefore, implementation of PAR 1420 is not expected to adversely affect traffic patterns.

XVII. d) & e) No Impact. PAR 1420 does not involve or require the construction of new roadways, because the focus of PAR 1420 is to control lead emissions from lead processing or metal melting facilities. Thus, there will be no change to current public roadway designs that could increase traffic hazards. Further, PAR 1420 is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the facilities. Construction-related activities for the building improvements for eight total enclosures are expected to be temporary and is expected to involve short-term construction activities such as delivery truck trips which would cease after construction is completed. The proposed project is not expected to alter the existing long–term circulation patterns within the areas of each affected facility during construction. Similarly, during operation, the projected increase of additional vehicle trips that may be needed at each affected facility would be at less than significant levels individually and cumulatively such that the implementation of the proposed project is not expected to require a modification to circulation. Thus, no long-term impacts on the traffic circulation system are expected to occur during construction or operation. Further, impacts to existing emergency access at the affected facilities would also not be affected because PAR 1420 does not contain any requirements specific to emergency access points and each facility would be expected to continue to maintain their existing emergency access. As a result, PAR 1420 is not expected to adversely impact emergency access.

XVII. f) No Impact. Since implementation of PAR 1420 is not expected to require permanent additional workers as discussed in Section XIII – Population and Housing a), no operational traffic impacts are expected to occur and consequently. Parking may be necessary at the 15 facilities that require periodic source testing or rooftop cleaning when workers are visiting the facilities to complete testing and cleaning. However, it would be expected only one to two workers would visit during a source test or when rooftop cleaning is conducted. Therefore, PAR 1420 is not expected to adversely impact on- or off-site parking capacity. PAR 1420 has no provisions that would conflict with alternative transportation, such as bus turnouts, bicycle racks, etcetera. Further, affected facilities would still be expected to comply with, and not interfere with adopted policies, plans, or programs supporting alternative transportation (e.g., bicycles or buses) that exist in their respective cities. In addition, implementing PAR 1420 would be expected to occur at existing facilities and thus, would not have an impact on each facility's ability to comply with any applicable alternative transportation plans or policies.

Conclusion

Based upon these considerations, significant adverse transportation and traffic impacts are not expected from implementing PAR 1420. 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. 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

PAR 1420 will reduce lead emissions generated from metal melting or lead processing facilities by lowering the lead ambient air concentration limit and establishing requirements for point source controls. PAR 1420 affects existing metal melting or lead processing facilities that process greater than 0.05 percent by weight per year. Of the 107 facilities in SCAQMD's jurisdiction that are subject to PAR 1420, only 15 facilities would be required to make all of the following physical changes: constructing total enclosures, conducting initial source tests and smoke tests, and implementing housekeeping and maintenance requirements. Of these 15, only eight would need to make building improvements (by constructing one wall at each facility) to achieve the required total enclosure and ten would need to enclose grinding activities. The 92 remaining facilities are assumed to already comply with most of PAR 1420, but would have to comply with the new housekeeping requirements, such as wet cleaning or vacuuming, and recordkeeping. All 107 facilities will have emission control devices that need to undergo periodic source testing to demonstrate that the emission control devices meet the minimum control efficiency or outlet mass

emission rate limit, along with ensuring ongoing compliance. Finally, only facilities that exceed the ambient air concentrations of lead will be required to conduct ambient air monitoring.

XVIII. a) No Impact. As explained in Section IV - Biological Resources, PAR 1420 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because any construction and operational activities associated with the facilities are expected to occur entirely within the boundaries of existing developed facilities in areas that have been greatly disturbed and that currently do not support any species of concern or the habitat on which they rely. For these reasons, PAR 1420 is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XVIII. b) Less Than Significant Impact. Based on the foregoing analyses, PAR 1420 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts from implementing PAR 1420 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 cumulative considerable. SCAQMD 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 PAR 1420 for any environmental topic.

XVIII. c) Less Than Significant Impact. Based on the foregoing analyses, PAR 1420 is not expected to cause adverse effects on human beings for any environmental topic, either directly or indirectly because: 1) aesthetic impacts were determined to be less than significant as analyzed in Section I - Aesthetics; 2) the air quality and GHG impacts were determined to be less than the significance thresholds as analyzed in Section III – Air Quality and Greenhouse Gases; 3) energy impacts were determined to be less than significant as analyzed in Section VI – Energy; 4) geological and soil impacts were determined to be less than significant as analyzed in VII – Geology and Soils; 5) the hazards and hazardous materials impacts were determined to be less than significant as analyzed in Section VIII – Hazards and Hazardous Materials; 6) the increased water usage and wastewater was determined to be less than significant as analyzed in Section IX – Hydrology and Water Quality; 7) the noise impacts were determined to be less than significant as analyzed in Section XII – Noise; 8) public services such as fire protection and police protection were determined to be less than the significance thresholds as analyzed in Section XIV – Public Services; 9) solid and hazardous waste impacts were determined to be less than significant as analyzed in Section XVI – Solid and Hazardous Waste; and 10) transportation and traffic impacts were determined to be less than the significant as analyzed in Section XVII – Transportation and Traffic. In addition, the analysis concluded that there would be no significant environmental impacts for the remaining environmental impact topic areas: agriculture and forestry resources, biological resources, cultural resources, land use and planning, mineral resources, population and housing, recreation, and solid and hazardous waste.

Conclusion

As previously discussed in environmental topics I through XVIII, the proposed project has no potential to cause significant adverse environmental effects. Since no mitigation measures are necessary or required.

APPENDICES

Appendix A: Proposed Rule 1420 – Emissions Standard for Lead

Appendix B: Assumptions and Calculations

B-1: CalEEMod Files and Assumptions – Construction Emissions

Building Improvement for Total Enclosure (Annual)

Building Improvement for Total Enclosure (Summer)

Building Improvement for Total Enclosure (Winter)

B-2: Operational Emissions and Calculations

Appendix C: List of Affected Facilities

Appendix D: Comment Letters Received on the Draft EA and Responses to Comments

APPENDIX A

PROPOSED AMENDED RULE 1420 – EMISSIONS STANDARD FOR LEAD

In order to save space and avoid repetition, please refer to the latest version of Propose Amended Rule 1420 located elsewhere in the Governing Board Package. The version of Proposed Amended Rule 1420 that was circulated with the Draft EA and released on September 19, 2017 for a 30-day public review and comment period ending on October19, 2017 was identified as "Preliminary Draft Rule Language – August 18, 2017".

Original hard copies of the Draft EA, which include the draft version of the proposed amended rule listed above, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by contacting Fabian Wesson, Public Advisor at the SCAQMD's Public Information Center by phone at (909) 396-2039 or by email at PICrequests@aqmd.gov.

APPENDIX B

ASSUMPTIONS AND CALCULATIONS

APPENDIX B-1

CalEEMod Files and Assumptions – Construction Emissions

CalEEMod Files and Assumptions

Building Improvement For Total Enclosure (Annual)

R1420_Total Enclosure Improvement_20170914

South Coast AQMD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - assume 2017/11/1 to start the construction and 2018 is the operational year

Land Use - assumption: 3000 sq ft building with only 1 wall = 20% = 600 sqft

Construction Phase - assumptions: 5 days construction

Off-road Equipment - default hp, and LF. Equipment type and hr/day are from the previous EA for R1155 assumptions. Double the unit amount since two baghouses will be installed at the same time (worst case)

Off-road Equipment - assumptions: 4hrs per day

Trips and VMT - assumptions 10 hauling trips

Demolition -

Grading -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	5.00
tblOffRoadEquipment	OffRoadEquipmentType	Cranes	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	2.6900e-003	0.0194	0.0155	3.0000e-005	9.0000e-005	1.3300e-003	1.4200e-003	2.0000e-005	1.3000e-003	1.3200e-003	0.0000	2.3172	2.3172	3.5000e-004	0.0000	2.3260
Maximum	**2.6900e-003**	**0.0194**	**0.0155**	**3.0000e-005**	**9.0000e-005**	**1.3300e-003**	**1.4200e-003**	**2.0000e-005**	**1.3000e-003**	**1.3200e-003**	**0.0000**	**2.3172**	**2.3172**	**3.5000e-004**	**0.0000**	**2.3260**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2017	2.6900e-003	0.0194	0.0155	3.0000e-005	9.0000e-005	1.3300e-003	1.4200e-003	2.0000e-005	1.3000e-003	1.3200e-003	0.0000	2.3172	2.3172	3.5000e-004	0.0000	2.3260
Maximum	**2.6900e-003**	**0.0194**	**0.0155**	**3.0000e-005**	**9.0000e-005**	**1.3300e-003**	**1.4200e-003**	**2.0000e-005**	**1.3000e-003**	**1.3200e-003**	**0.0000**	**2.3172**	**2.3172**	**3.5000e-004**	**0.0000**	**2.3260**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	3.0000e-005	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.7734	0.7734	3.0000e-005	1.0000e-005	0.7763
Mobile	4.7000e-004	2.6300e-003	6.9600e-003	2.0000e-005	1.6400e-003	3.0000e-005	1.6700e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.9726	1.9726	1.1000e-004	0.0000	1.9752
Waste						0.0000	0.0000		0.0000	0.0000	0.1137	0.0000	0.1137	6.7200e-003	0.0000	0.2816
Water						0.0000	0.0000		0.0000	0.0000	0.0440	0.5756	0.6197	4.5400e-003	1.1000e-004	0.7666
Total	**2.9200e-003**	**2.6600e-003**	**6.9900e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6700e-003**	**4.4000e-004**	**2.0000e-005**	**4.6000e-004**	**0.1577**	**3.3216**	**3.4793**	**0.0114**	**1.2000e-004**	**3.7997**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.4500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	2.0000e-005
Energy	0.0000	3.0000e-005	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.7734	0.7734	3.0000e-005	1.0000e-005	0.7763
Mobile	4.7000e-004	2.6300e-003	6.9600e-003	2.0000e-005	1.6400e-003	3.0000e-005	1.6700e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.9726	1.9726	1.1000e-004	0.0000	1.9752
Waste						0.0000	0.0000		0.0000	0.0000	0.1137	0.0000	0.1137	6.7200e-003	0.0000	0.2816
Water						0.0000	0.0000		0.0000	0.0000	0.0440	0.5756	0.6197	4.5400e-003	1.1000e-004	0.7666
Total	**2.9200e-003**	**2.6600e-003**	**6.9900e-003**	**2.0000e-005**	**1.6400e-003**	**3.0000e-005**	**1.6700e-003**	**4.4000e-004**	**2.0000e-005**	**4.6000e-004**	**0.1577**	**3.3216**	**3.4793**	**0.0114**	**1.2000e-004**	**3.7997**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction/improvement	Building Construction	11/1/2017	11/7/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction/improvement	Air Compressors	1	4.00	78	0.48
Building Construction/improvement	Forklifts	1	4.00	89	0.20
Building Construction/improvement	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction/improvement	Welders	1	4.00	46	0.45
Building Construction/improvement	Cement and Mortar Mixers	1	4.00	9	0.56
Building Construction/improvement	Concrete/Industrial Saws	1	4.00	81	0.73
Building Construction/improvement	Cranes	0	4.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction/improve	6	0.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction/improvement - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6400e-003	0.0177	0.0151	2.0000e-005		1.3200e-003	1.3200e-003		1.2900e-003	1.2900e-003	0.0000	1.9283	1.9283	3.3000e-004	0.0000	1.9364
Total	**2.6400e-003**	**0.0177**	**0.0151**	**2.0000e-005**		**1.3200e-003**	**1.3200e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**1.9283**	**1.9283**	**3.3000e-004**	**0.0000**	**1.9364**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7200e-003	3.2000e-004	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3889	0.3889	3.0000e-005	0.0000	0.3896
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0000e-005**	**1.7200e-003**	**3.2000e-004**	**0.0000**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**2.0000e-005**	**1.0000e-005**	**3.0000e-005**	**0.0000**	**0.3889**	**0.3889**	**3.0000e-005**	**0.0000**	**0.3896**

3.2 Building Construction/improvement - 2017

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	2.6400e-003	0.0177	0.0151	2.0000e-005		1.3200e-003	1.3200e-003		1.2900e-003	1.2900e-003	0.0000	1.9283	1.9283	3.3000e-004	0.0000	1.9364
Total	**2.6400e-003**	**0.0177**	**0.0151**	**2.0000e-005**		**1.3200e-003**	**1.3200e-003**		**1.2900e-003**	**1.2900e-003**	**0.0000**	**1.9283**	**1.9283**	**3.3000e-004**	**0.0000**	**1.9364**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	5.0000e-005	1.7200e-003	3.2000e-004	0.0000	9.0000e-005	1.0000e-005	1.0000e-004	2.0000e-005	1.0000e-005	3.0000e-005	0.0000	0.3889	0.3889	3.0000e-005	0.0000	0.3896
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.0000e-005**	**1.7200e-003**	**3.2000e-004**	**0.0000**	**9.0000e-005**	**1.0000e-005**	**1.0000e-004**	**2.0000e-005**	**1.0000e-005**	**3.0000e-005**	**0.0000**	**0.3889**	**0.3889**	**3.0000e-005**	**0.0000**	**0.3896**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	4.7000e-004	2.6300e-003	6.9600e-003	2.0000e-005	1.6400e-003	3.0000e-005	1.6700e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.9726	1.9726	1.1000e-004	0.0000	1.9752
Unmitigated	4.7000e-004	2.6300e-003	6.9600e-003	2.0000e-005	1.6400e-003	3.0000e-005	1.6700e-003	4.4000e-004	2.0000e-005	4.6000e-004	0.0000	1.9726	1.9726	1.1000e-004	0.0000	1.9752

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	1.01	1.01	1.01	4,320	4,320
Total	1.01	1.01	1.01	4,320	4,320

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No Rail	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.7456	0.7456	3.0000e-005	1.0000e-005	0.7482
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.7456	0.7456	3.0000e-005	1.0000e-005	0.7482
NaturalGas Mitigated	0.0000	3.0000e-005	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0279	0.0279	0.0000	0.0000	0.0280
NaturalGas Unmitigated	0.0000	3.0000e-005	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0279	0.0279	0.0000	0.0000	0.0280

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	522	0.0000	3.0000e-005	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0279	0.0279	0.0000	0.0000	0.0280
Total		**0.0000**	**3.0000e-005**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0279**	**0.0279**	**0.0000**	**0.0000**	**0.0280**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	522	0.0000	3.0000e-005	2.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0279	0.0279	0.0000	0.0000	0.0280
Total		**0.0000**	**3.0000e-005**	**2.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0279**	**0.0279**	**0.0000**	**0.0000**	**0.0280**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	2340	0.7456	3.0000e-005	1.0000e-005	0.7482
Total		**0.7456**	**3.0000e-005**	**1.0000e-005**	**0.7482**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	2340	0.7456	3.0000e-005	1.0000e-005	0.7482
Total		**0.7456**	**3.0000e-005**	**1.0000e-005**	**0.7482**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.4500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	2.0000e-005
Unmitigated	2.4500e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	2.0000e-005

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	2.0000e-005
Total	**2.4500e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.8000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.1700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	2.0000e-005
Total	**2.4500e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**2.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.6197	4.5400e-003	1.1000e-004	0.7666
Unmitigated	0.6197	4.5400e-003	1.1000e-004	0.7666

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	0.13875 / 0	0.6197	4.5400e-003	1.1000e-004	0.7666
Total		**0.6197**	**4.5400e-003**	**1.1000e-004**	**0.7666**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	0.13875 / 0	0.6197	4.5400e-003	1.1000e-004	0.7666
Total		**0.6197**	**4.5400e-003**	**1.1000e-004**	**0.7666**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.1137	6.7200e-003	0.0000	0.2816
Unmitigated	0.1137	6.7200e-003	0.0000	0.2816

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	0.56	0.1137	6.7200e-003	0.0000	0.2816
Total		**0.1137**	**6.7200e-003**	**0.0000**	**0.2816**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	0.56	0.1137	6.7200e-003	0.0000	0.2816
Total		**0.1137**	**6.7200e-003**	**0.0000**	**0.2816**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Files and Assumptions

Building Improvement For Total Enclosure (Summer)

R1420_Total Enclosure Improvement_20170914

South Coast AQMD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - assume 2017/11/1 to start the construction and 2018 is the operational year

Land Use - assumption: 3000 sq ft building with only 1 wall = 20% = 600 sqft

Construction Phase - assumptions: 5 days construction

Off-road Equipment - default hp, and LF. Equipment type and hr/day are from the previous EA for R1155 assumptions. Double the unit amount since two baghouses will be installed at the same time (worst case)

Off-road Equipment - assumptions: 4hrs per day

Trips and VMT - assumptions 10 hauling trips

Demolition -

Grading -

R1420_Total Enclosure Improvement_20170914 - South Coast AQMD Air District, Summer

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	5.00
tblOffRoadEquipment	OffRoadEquipmentType	Cranes	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.0756	7.7429	6.1743	0.0107	0.0350	0.5335	0.5684	0.0000	0.5181	0.5277	0.0000	1,022.9494	1,022.9494	0.1557	0.0000	1,026.8417
Maximum	**1.0756**	**7.7429**	**6.1743**	**0.0107**	**0.0350**	**0.5335**	**0.5684**	**0.0000**	**0.5181**	**0.5277**	**0.0000**	**1,022.9494**	**1,022.9494**	**0.1557**	**0.0000**	**1,026.8417**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.0756	7.7429	6.1743	0.0107	0.0350	0.5335	0.5684	0.0000	0.5181	0.5277	0.0000	1,022.9494	1,022.9494	0.1557	0.0000	1,026.8417
Maximum	**1.0756**	**7.7429**	**6.1743**	**0.0107**	**0.0350**	**0.5335**	**0.5684**	**0.0000**	**0.5181**	**0.5277**	**0.0000**	**1,022.9494**	**1,022.9494**	**0.1557**	**0.0000**	**1,026.8417**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Energy	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Mobile	2.7200e-003	0.0137	0.0404	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		12.4439	12.4439	6.6000e-004		12.4604
Total	**0.0162**	**0.0139**	**0.0405**	**1.2000e-004**	**9.1900e-003**	**1.5000e-004**	**9.3400e-003**	**2.4600e-003**	**1.4000e-004**	**2.6000e-003**		**12.6122**	**12.6122**	**6.6000e-004**	**0.0000**	**12.6298**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Energy	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Mobile	2.7200e-003	0.0137	0.0404	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		12.4439	12.4439	6.6000e-004		12.4604
Total	**0.0162**	**0.0139**	**0.0405**	**1.2000e-004**	**9.1900e-003**	**1.5000e-004**	**9.3400e-003**	**2.4600e-003**	**1.4000e-004**	**2.6000e-003**		**12.6122**	**12.6122**	**6.6000e-004**	**0.0000**	**12.6298**

R1420_Total Enclosure Improvement_20170914 - South Coast AQMD Air District, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction/improvement	Building Construction	11/1/2017	11/7/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction/improvement	Air Compressors	1	4.00	78	0.48
Building Construction/improvement	Forklifts	1	4.00	89	0.20
Building Construction/improvement	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction/improvement	Welders	1	4.00	46	0.45
Building Construction/improvement	Cement and Mortar Mixers	1	4.00	9	0.56
Building Construction/improvement	Concrete/Industrial Saws	1	4.00	81	0.73
Building Construction/improvement	Cranes	0	4.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction/improve	6	0.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction/improvement - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0557	7.0770	6.0519	9.0600e-003		0.5299	0.5299		0.5147	0.5147		850.2212	850.2212	0.1437		853.8126
Total	**1.0557**	**7.0770**	**6.0519**	**9.0600e-003**		**0.5299**	**0.5299**		**0.5147**	**0.5147**		**850.2212**	**850.2212**	**0.1437**		**853.8126**

3.2 Building Construction/improvement - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0199	0.6659	0.1224	1.6000e-003	0.0350	3.5900e-003	0.0385	9.5800e-003	3.4400e-003	0.0130		172.7282	172.7282	0.0120		173.0292
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0199**	**0.6659**	**0.1224**	**1.6000e-003**	**0.0350**	**3.5900e-003**	**0.0385**	**9.5800e-003**	**3.4400e-003**	**0.0130**		**172.7282**	**172.7282**	**0.0120**		**173.0292**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0557	7.0770	6.0519	9.0600e-003		0.5299	0.5299		0.5147	0.5147	0.0000	850.2212	850.2212	0.1437		853.8126
Total	**1.0557**	**7.0770**	**6.0519**	**9.0600e-003**		**0.5299**	**0.5299**		**0.5147**	**0.5147**	**0.0000**	**850.2212**	**850.2212**	**0.1437**		**853.8126**

3.2 Building Construction/improvement - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0199	0.6659	0.1224	1.6000e-003	0.0350	3.5900e-003	0.0385	9.5800e-003	3.4400e-003	0.0130		172.7282	172.7282	0.0120		173.0292
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0199**	**0.6659**	**0.1224**	**1.6000e-003**	**0.0350**	**3.5900e-003**	**0.0385**	**9.5800e-003**	**3.4400e-003**	**0.0130**		**172.7282**	**172.7282**	**0.0120**		**173.0292**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.7200e-003	0.0137	0.0404	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		12.4439	12.4439	6.6000e-004		12.4604
Unmitigated	2.7200e-003	0.0137	0.0404	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		12.4439	12.4439	6.6000e-004		12.4604

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	1.01	1.01	1.01	4,320	4,320
Total	1.01	1.01	1.01	4,320	4,320

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

R1420_Total Enclosure Improvement_20170914 - South Coast AQMD Air District, Summer

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
NaturalGas Unmitigated	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	1.43014	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Total		**2.0000e-005**	**1.4000e-004**	**1.2000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**0.1683**	**0.1683**	**0.0000**	**0.0000**	**0.1693**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0.00143014	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Total		**2.0000e-005**	**1.4000e-004**	**1.2000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**0.1683**	**0.1683**	**0.0000**	**0.0000**	**0.1693**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Unmitigated	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Total	**0.0134**	**0.0000**	**6.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.3000e-004**	**1.3000e-004**	**0.0000**		**1.4000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Total	**0.0134**	**0.0000**	**6.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.3000e-004**	**1.3000e-004**	**0.0000**		**1.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Files and Assumptions

Building Improvement For Total Enclosure (Winter)

R1420_Total Enclosure Improvement_20170914

South Coast AQMD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	0.60	1000sqft	0.01	600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	9			**Operational Year**	2018
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - assume 2017/11/1 to start the construction and 2018 is the operational year

Land Use - assumption: 3000 sq ft building with only 1 wall = 20% = 600 sqft

Construction Phase - assumptions: 5 days construction

Off-road Equipment - default hp, and LF. Equipment type and hr/day are from the previous EA for R1155 assumptions. Double the unit amount since two baghouses will be installed at the same time (worst case)

Off-road Equipment - assumptions: 4hrs per day

Trips and VMT - assumptions 10 hauling trips

Demolition -

Grading -

R1420_Total Enclosure Improvement_20170914 - South Coast AQMD Air District, Winter

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	5.00
tblOffRoadEquipment	OffRoadEquipmentType	Cranes	Air Compressors
tblOffRoadEquipment	OffRoadEquipmentType		Cement and Mortar Mixers
tblOffRoadEquipment	OffRoadEquipmentType		Concrete/Industrial Saws
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	UsageHours	6.00	4.00
tblOffRoadEquipment	UsageHours	8.00	4.00
tblTripsAndVMT	HaulingTripNumber	0.00	10.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.0762	7.7531	6.1846	0.0106	0.0350	0.5335	0.5685	0.0000	0.5182	0.5278	0.0000	1,019.9490	1,019.9490	0.1563	0.0000	1,023.8554
Maximum	**1.0762**	**7.7531**	**6.1846**	**0.0106**	**0.0350**	**0.5335**	**0.5685**	**0.0000**	**0.5182**	**0.5278**	**0.0000**	**1,019.9490**	**1,019.9490**	**0.1563**	**0.0000**	**1,023.8554**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2017	1.0762	7.7531	6.1846	0.0106	0.0350	0.5335	0.5685	0.0000	0.5182	0.5278	0.0000	1,019.9490	1,019.9490	0.1563	0.0000	1,023.8554
Maximum	**1.0762**	**7.7531**	**6.1846**	**0.0106**	**0.0350**	**0.5335**	**0.5685**	**0.0000**	**0.5182**	**0.5278**	**0.0000**	**1,019.9490**	**1,019.9490**	**0.1563**	**0.0000**	**1,023.8554**

	ROG	**NOx**	**CO**	**SO2**	**Fugitive PM10**	**Exhaust PM10**	**PM10 Total**	**Fugitive PM2.5**	**Exhaust PM2.5**	**PM2.5 Total**	**Bio- CO2**	**NBio-CO2**	**Total CO2**	**CH4**	**N20**	**CO2e**
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Energy	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Mobile	2.6100e-003	0.0142	0.0375	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		11.7812	11.7812	6.5000e-004		11.7976
Total	**0.0160**	**0.0143**	**0.0377**	**1.2000e-004**	**9.1900e-003**	**1.5000e-004**	**9.3400e-003**	**2.4600e-003**	**1.4000e-004**	**2.6000e-003**		**11.9496**	**11.9496**	**6.5000e-004**	**0.0000**	**11.9669**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Energy	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Mobile	2.6100e-003	0.0142	0.0375	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		11.7812	11.7812	6.5000e-004		11.7976
Total	**0.0160**	**0.0143**	**0.0377**	**1.2000e-004**	**9.1900e-003**	**1.5000e-004**	**9.3400e-003**	**2.4600e-003**	**1.4000e-004**	**2.6000e-003**		**11.9496**	**11.9496**	**6.5000e-004**	**0.0000**	**11.9669**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Building Construction/improvement	Building Construction	11/1/2017	11/7/2017	5	5	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Building Construction/improvement	Air Compressors	1	4.00	78	0.48
Building Construction/improvement	Forklifts	1	4.00	89	0.20
Building Construction/improvement	Tractors/Loaders/Backhoes	1	4.00	97	0.37
Building Construction/improvement	Welders	1	4.00	46	0.45
Building Construction/improvement	Cement and Mortar Mixers	1	4.00	9	0.56
Building Construction/improvement	Concrete/Industrial Saws	1	4.00	81	0.73
Building Construction/improvement	Cranes	0	4.00	231	0.29

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Building Construction/improve	6	0.00	0.00	10.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Building Construction/improvement - 2017

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0557	7.0770	6.0519	9.0600e-003		0.5299	0.5299		0.5147	0.5147		850.2212	850.2212	0.1437		853.8126
Total	**1.0557**	**7.0770**	**6.0519**	**9.0600e-003**		**0.5299**	**0.5299**		**0.5147**	**0.5147**		**850.2212**	**850.2212**	**0.1437**		**853.8126**

3.2 Building Construction/improvement - 2017

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0205	0.6761	0.1327	1.5800e-003	0.0350	3.6500e-003	0.0386	9.5800e-003	3.4900e-003	0.0131		169.7278	169.7278	0.0126		170.0428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0205**	**0.6761**	**0.1327**	**1.5800e-003**	**0.0350**	**3.6500e-003**	**0.0386**	**9.5800e-003**	**3.4900e-003**	**0.0131**		**169.7278**	**169.7278**	**0.0126**		**170.0428**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0557	7.0770	6.0519	9.0600e-003		0.5299	0.5299		0.5147	0.5147	0.0000	850.2212	850.2212	0.1437		853.8126
Total	**1.0557**	**7.0770**	**6.0519**	**9.0600e-003**		**0.5299**	**0.5299**		**0.5147**	**0.5147**	**0.0000**	**850.2212**	**850.2212**	**0.1437**		**853.8126**

3.2 Building Construction/improvement - 2017

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0205	0.6761	0.1327	1.5800e-003	0.0350	3.6500e-003	0.0386	9.5800e-003	3.4900e-003	0.0131		169.7278	169.7278	0.0126		170.0428
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Total	**0.0205**	**0.6761**	**0.1327**	**1.5800e-003**	**0.0350**	**3.6500e-003**	**0.0386**	**9.5800e-003**	**3.4900e-003**	**0.0131**		**169.7278**	**169.7278**	**0.0126**		**170.0428**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.6100e-003	0.0142	0.0375	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		11.7812	11.7812	6.5000e-004		11.7976
Unmitigated	2.6100e-003	0.0142	0.0375	1.2000e-004	9.1900e-003	1.4000e-004	9.3300e-003	2.4600e-003	1.3000e-004	2.5900e-003		11.7812	11.7812	6.5000e-004		11.7976

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	1.01	1.01	1.01	4,320	4,320
Total	1.01	1.01	1.01	4,320	4,320

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.544547	0.044708	0.198656	0.126890	0.018261	0.005879	0.019662	0.030939	0.001958	0.002113	0.004656	0.000702	0.001029

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
NaturalGas Unmitigated	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	1.43014	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Total		**2.0000e-005**	**1.4000e-004**	**1.2000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**0.1683**	**0.1683**	**0.0000**	**0.0000**	**0.1693**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	0.00143014	2.0000e-005	1.4000e-004	1.2000e-004	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		0.1683	0.1683	0.0000	0.0000	0.1693
Total		**2.0000e-005**	**1.4000e-004**	**1.2000e-004**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**		**0.1683**	**0.1683**	**0.0000**	**0.0000**	**0.1693**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Unmitigated	0.0134	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Total	**0.0134**	**0.0000**	**6.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.3000e-004**	**1.3000e-004**	**0.0000**		**1.4000e-004**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.5200e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0119					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	6.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.3000e-004	1.3000e-004	0.0000		1.4000e-004
Total	**0.0134**	**0.0000**	**6.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.3000e-004**	**1.3000e-004**	**0.0000**		**1.4000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

APPENDIX B-2

Operational Emissions and Calculations

PAR 1420 Operation Emissions
(09/08/17 rev.)

Summary

Key Requirements: Operation Phase	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOX, lb/day
Total Enclosure	-	-	-	-	-	-
Point Source Emission Controls	3.02	1.96	2.43	0.84	0.39	0.03
Housekeeping	14.02	22.01	3.45	1.93	4.14	0.05
Source Testing	1.56	1.55	0.47	0.27	0.27	0.01
Total	**18.60**	**25.52**	**6.35**	**3.04**	**4.80**	**0.09**

By Vehicle Class	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOX, lb/day	CO2, MT/yr	CH4, MT/yr	N2O, MT/yr	CO2e, MT/yr	All facilities	
											Max. # used/day	Max. # used/yr
Total Enclosure	-	-	-	-	-	-	-	-	-	-		
Mobile Source - Diesel Trucks (MDT)	2.92	0.82	3.93	1.13	0.23	0.05	4.96	-	-	4.96	122	244
Roof top cleaning (aerial lift)	12.56	21.60	1.49	1.37	4.02	0.02	0.94	0.00	0.00	0.96	15	15
Source Testing (LDT)	3.12	3.09	0.94	0.54	0.55	0.01	0.98	-	-	0.98	30	60
Total	**18.60**	**25.52**	**6.35**	**3.04**	**4.80**	**0.09**	**6.88**	**0.00**	**0.00**	**6.90**		

Notes and Assumptions:

1. No additional air pollution control devices would need to be installed from the implementation of PAR 1420. However, 15 facilities have existing emission control devices that would be subject to source testing. To meet the control efficiency requirements, these emission control devices would also need to maintain the filters; therefore, requiring filter changeout and inspection.
2. It was assumed all of the facilities (107 facilities) would utilize 1 waste/wastewater disposal truck (MDT) to meet housekeeping requirements. 15 facilities are subject to rooftop cleaning, 15 are subject to source testing, and maintenance requirements and would use: 1 filter replacement truck (MDT), 1 source testing truck (LDT), 1 filter inspection truck (LDT), and 1 aerial lift.
3. It was assumed as a worst case scenario, every year 2 MDT round trips, 2 LDT round trips, and 1 aerial lift trip use would occur in every facility.
4. Although unlikely, it was assumed on a peak day all the affected facilities would conduct their requirements including: waste disposal, source testing, filter maintenance/inspection, and rooftop cleaning.
5. It was assumed every on-road vehicle used during operation would travel a distance of 40 miles round trip and aerial life would be used 4 hours per day.

Medium-Duty Truck (MDT) - each

	CO	NOx	PM10	PM2.5	VOC	SOX	CO2	CH4	N2O	CO2e
g/mile (RUNEX, PMBW, PMTW, Fugitive)	0.26	0.08	0.37	0.10	0.02	0.00	505.00			505.00
g/vehicle (IDLEX)	0.33	0.05	0.01	0.01	0.02	0.00	139.57			139.57
lb/day, MT/day for GHG	0.02	0.01	0.03	0.01	0.00	0.00	0.02	-	-	0.02

VMT, mile/day
40.0

EF: from EMFAC2014, EPA AP-42

Aerial Lift

	CO	NOx	PM10	PM2.5	VOC	SOX	CO2	CH4	N2O	CO2e
lb/hr	0.21	0.36	0.02	0.02	0.07	0.00	34.72	0.01	0.01	36.57
lb/day, MT/day for GHG	0.84	1.44	0.10	0.09	0.27	0.00	0.06	0.00	0.00	0.06

Usage, hr/day
4

EF: from OFFROAD2012

Light-Duty Truck (LDT) - each

	CO	NOx	PM10	PM2.5	VOC	SOX	CO2	CH4	N2O	CO2e
g/mile (RUNEX, PMBW, PMTW, Fugitive)	1.14	1.15	0.35	0.20	0.20	0.00	406.56			406.56
g/vehicle/day (IDLEX)	1.42	0.75	0.16	0.16	0.19	0.00	112.36			112.36
lb/day, MT/day for GHG	0.10	0.10	0.03	0.02	0.02	0.00	0.02	-	-	0.02

VMT, mile/day
40.0

EF: from EMFAC2014, EPA AP-42

APPENDIX C

List of Affected Facilities

Facility Name	NAICS	Facility ID	On Lists Per Government Code §65962.5 Per EnviroStor?	Address	City	Zip	Located Within Two Miles of Airport?	Nearest Sensitive Receptor	Approx. Distance to Nearest Sensitive Receptor (ft)	Nearest School	Approx. Distance to Nearest School (ft)
Atlas Pacific Corporation	331410	77271	No	2803 Industrial Dr	Bloomington	92316	No	Residential	2,000	Crestmore Elementary School	7,200
Metal Briquetting Company	331314	61681/ 91868/ 104332/ 144706/ 144903/ 800430	Yes	366 E 58th St	Los Angeles	90011	No	Residential	180	Estrella Elementary School	540
Fox Hills Ind Inc	331511	19341	No	5831 Research Dr	Huntington Beach	92649	No	Residential	960	Marina High School	5,300
Alhambra Foundry Co LTD	331511	20492	No	1147 Meridian Ave	Alhambra	91803	No	Residential	650	Freemont Elementary School	3,300
Alcast Foundy Inc	331524	43020	No	2821 190th St	Redondo Beach	90278	No	Residential	120	Coast Christian Schools	2,700
Arrowhead Brass and Plumbing	331524	164864	No	5142 Alhambra Ave	Los Angeles	90032	No	Residential	72	Little Sunshine Preschool Cal State L.A.	9,000 6,900
Came Alloys	331524	48010	No	12319 Branford St	Sun Valley	91352	No	Residential	1,300	Montague Charter Academy	5,800
Los Angeles Pump and Valve Products	331529	20167	No	2529 E 55th St	Huntington Park	90255	No	Residential	230	Merci School	530
Charter Foundry Co Inc	331529	21972	No	5208 Malabar St	Huntington Park	90255	No	Residential	360	Pacific Blvd School	7,400
Techni-Cast Corp	331529	7796	Yes	11220 S Garfield Ave	South Gate	90280	No	Residential	1,000	Will Rogers Child Development Center	7,900
Gasser Olds	331529	23941	No	2618 Fruitland Ave	Vernon	90058	No	Residential	1,040	City of Angels School	4,800
Montclair Broze Inc	331529	35194/ 60815	No	5621 State St	Montclair	91763	No	Residential	160	Mission Elementary	4,200
Koko's Foundry	423500/ 331524	142410	No	3525 E 15th St	Los Angeles	90023	No	Residential	1,100	Foundation of Early Childhood	2,800
KinsBursky Brothers, Inc	423930	35006	Yes	1314 N Anaheim Blvd	Anaheim	92801	No	Residential	630	SEA Charter School	2,700

Notes:

1. Metal Briquetting Company has a unique address for each facility id.

APPENDIX D

Comment Letters Received on the Draft EA and Responses to Comments

Comment Letter #1: Ray Teran/Viejas Tribal Government

Comment Letter #2: Bryan Etsitty/Colorado River Indian Tribes

Comment Letter #1

VIEJAS
TRIBAL GOVERNMENT

PO Box 908
Alpine, CA 91903
#1 Viejas Grade Road
Alpine, CA 91901

Phone: 6194453810
Fax: 6194455337
viejas.com

September 21, 2017

Diana Thai
South Coast AQMD
21865 Copley Drive
Diamond Bar, CA 91765

RE: Emissions Standard for Lead Project

Dear Ms. Thai,

In reviewing the above referenced project the Viejas Band of Kumeyaay Indians ("Viejas") would like to comment at this time.

The project area may contain many sacred sites to the Kumeyaay people. We request that these sacred sites be avoided with adequate buffer zones.

Additionally, Viejas is requesting, as appropriate, the following:

- All NEPA/CEQA/NAGPRA laws be followed
- Immediately contact Viejas on any changes or inadvertent discoveries.

Thank you for your collaboration and support in preserving our Tribal cultural resources. I look forward to hearing from you. Please call me at 619-659-2312 or Ernest Pingleton at 619-659-2314, or email, rteran@viejas-nsn.gov or epingleton@viejas-nsn.gov, for scheduling. Thank you.

Sincerely,

Ray Teran, Resource Management
VIEJAS BAND OF KUMEYAAY INDIANS

Response to Comment #1 – Viejas Band of Kumeyaay Indians

From: Ray Teran
Sent: Wednesday, September 27, 2017 8:44 AM
To: 'Diana Thai'
Cc: Ernest Pingleton; Charity Erwin
Subject: RE: PAR 1420 Affected Facilities - Appendix C.pdf

Diana, we have reviewed the list of projects and at this time we have determined that the project list has little cultural significance or ties to Viejas. Ray

From: Diana Thai [mailto:dthai@aqmd.gov]
Sent: Wednesday, September 27, 2017 8:09 AM
To: Ray Teran
Subject: PAR 1420 Affected Facilities - Appendix C.pdf

Good Morning Ray,

Thank you for returning my phone call. I have attached the list of affected facilities for Proposed Amended Rule (PAR) 1420 – Emissions Standard for Lead. Please identify the project area that may be on sacred sites to the Kumeyaay people. If you have any additional questions or concerns, please feel free to contact me.

Sincerely,

Diana Thai
Air Quality Specialist
Planning, Rule Development, and Area Sources
South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765
Direct: (909) 396-3443 | Fax: (909)396-3879
Email: dthai@aqmd.gov

Comment Letter #1 initially indicated that PAR 1420 may affect facilities that contain sites sacred to the Viejas Band of Kumeyaay Indians, but the letter did not identify specific facilities. As such, SCAQMD staff initially followed up on this comment letter with a telephone call to Mr. Ray Teran seeking clarification to identify which affected facilities may contain sites sacred to the Viejas Band of Kumeyaay Indians. SCAQMD staff also provided a list of affected facilities (the same list that was presented in the Draft EA in Appendix C) via email to Mr. Teran. Please refer to the above email thread dated Wednesday, September 27, 2017. After examining the list of affected facilities, Mr. Teran indicated that the PAR 1420 would have little cultural significant or ties to the Viejas Band of Kumeyaay Indians. In light of this updated information, PAR 1420 is not expected to have any significant adverse cultural impacts to sacred these Native American sites.

Comment Letter #2

COLORADO RIVER INDIAN TRIBES

Tribal Historic Preservation Office

26600 Mohave Road
Parker, Arizona 85344
Telephone: (928)-669-5822 Fax: (928) 669-5843

October 04, 2017

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

RE: Proposed Amended Rule 1420

Dear Ms. Radlein:

The Colorado River Indian Tribes' Tribal Historic Preservation Office ("CRIT THPO") has received your letter dated September 19, 2017, regarding the *proposed Amended Rule 1420 – Emissions Standard for Lead and the draft Environmental Assessment to analyze environmental impacts from the project identified as Emissions Standard for Lead, pursuant to its certified regulatory program.*

As a preliminary matter, the Colorado River Indian Tribes are a federally recognized Indian tribe comprised of over 4,200 members belonging to the Mohave, Chemehuevi, Hopi and Navajo Tribes. The almost 300,000-acre Colorado River Indian Reservation sits astride the Colorado River between Blythe, California and Parker, Arizona. The ancestral homelands of the Tribe's members, however, extend far beyond the Reservation boundaries. Significant portions of public and private lands in California, Arizona and Nevada were occupied by the ancestors of the Colorado River Indian Tribes' Mohave and Chemehuevi members since time immemorial. These landscapes remain imbued with substantial cultural, spiritual and religious significance for the Tribes' current members and future generations. For this reason, we have a strong interest in ensuring that potential cultural resource impacts are adequately considered and mitigated.

In particular, the Colorado River Indian Tribes are concerned about the removal of artifacts from this area and corresponding destruction of the Tribes' footprint on this landscape. As such, the Tribes request that all prehistoric cultural resources, including both known and yet-to-be-discovered sites, be avoided if feasible. If avoidance of the site is infeasible, then the Tribes request that the resources be left in-situ or reburied in a nearby area, after consultation. This language should be incorporated into enforceable mitigation measures.

In addition, we respond as follows:

_____Given the potential impact of the project on important cultural resources, the Colorado River Indian Tribes request in-person government-to-government consultation. Please contact the CRIT THPO to discuss our concerns and schedule a meeting with Tribal Council.

Comment Letter #2 (cont.)

CRIT THPO
Project Name: Amended Rule 1420 Project
Date: October 04, 2017
Page 2

_____In the event any human remains or objects subject to provision of the Native American Graves Protection and Repatriation Act, or cultural resources such as sites, trails, artifacts are identified during ground disturbance, please contact the CRIT THPO within 48 hours.

_____The Colorado River Indian Tribes request tribal monitoring of any ground disturbing activity as a condition of project approval. The Tribes request notification of any opportunities to provide tribal monitoring for the project.

___√___The Colorado River Indian Tribes do not have any specific comment on the proposed project and instead defer to the comments of other affiliated tribes.

Thank you for your consideration. Please contact the undersigned if you have any questions or concerns.

Please be advised that David Harper is no longer associated with this Department. Mr. Bryan Etsitty has been appointed the Acting-Director.

Sincerely,

COLORADO RIVER INDIAN TRIBES
TRIBAL HISTORIC PRESERVATION OFFICE

/s/ Bryan Etsitty, Acting-Director
26600 Mohave Road
Parker, AZ 85344
Phone: (928) 669-5822
E-mail: bryan.etsitty@crit-nsn.gov

Response to Comment Letter #2 – Colorado River Indian Tribes

Thank you for your comment. No further response is required under CEQA.

ATTACHMENT I

Proposed Amended Rule 1420

Emissions Standard for Lead

South Coast AQMD

Governing Board Meeting
December 1, 2017

Background

- In 2008 U.S. EPA lowered the lead National Ambient Air Quality Standard from 1.5 µg/m^3 to 0.15 µg/m^3
  - Thousands of studies on health impacts on lead
  - Children most vulnerable – affects brain development
- 2012 Lead State Implementation Plan committed to amend Rule 1420
- Proposed Amended Rule 1420 will further reduce lead point and fugitive emissions

Rule 1420 Regulatory Structure

Adopted in 1992

Broad Rule that Applied to all Stationary Sources of Lead

Key Requirements

Point Source Air Pollution Control Requirements

Meet either:

- 99% control efficiency or:
- 0.0003 lb/hour

Ambient Lead Concentration Limit*

- 0.150 µg/m^3 date of adoption
- 0.100 µg/m^3 beginning January 1, 2021

Enhanced Housekeeping

- Wet wash or vacuum lead processing and grinding areas
- Periodic cleaning of control devices

Building Enclosure

- Conduct lead processing within building enclosure (Negative air not required)

* Averaged over any 30 consecutive days

Conditional Ambient Lead Monitoring Requirements

- Rules 1420.1 and 1420.2 have mandatory lead monitoring requirements
- Ambient lead monitoring is not a mandatory under PAR 1420
- Ambient lead monitoring may be required if:
  - SCAQMD monitors show ambient lead concentration* exceeds 0.150 µg/m^3
  - Two source tests exceed lead point source over 36 months

* Averaged over any 30 consecutive days

Key Requirements for Affected Facilities

Key Requirements	Processing > 2 Tons/Year	Processing ≤ 2 Tons/Year
Ambient Lead Limit	Yes	
Point Source Pollution Controls	Yes	No
Building Enclosure	Yes	No
Housekeeping	Yes	
Recordkeeping and Reporting	Yes	
Conditional Ambient Lead Monitoring	Yes	
Number of Affected Facilities	**15**	**92**

Staff Recommendation

Adopt the Attached Resolution:

- Certifying the Final Environmental Assessment
- Amending Rule 1420 – Emissions Standard for Lead

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 33

PROPOSAL: Certify Final Subsequent Environmental Assessment and Amend Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

SYNOPSIS: Rule 1466 was adopted July 7, 2017 and is designed to minimize fugitive dust emissions of certain toxic air contaminants from earth-moving activities from sites that U.S. EPA, Department of Toxic Substances Control, Regional Water Quality Control Board, State Water Resources Control Board, or the SCAQMD have determined that the soil contains certain toxic air contaminants. During the adoption of Rule 1466, the adoption Resolution directed staff to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. Proposed Amended Rule 1466 (PAR 1466) proposes to expand the list of applicable toxic air contaminants consistent with the adoption Resolution and expands the applicability to other government designated sites. Other amendments to PAR 1466 are provided for alternative compliance and to clarify provisions.

COMMITTEE: Stationary Source, October 20, 2017, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached Resolution:

1. Certifying the Final Subsequent Environmental Assessment for Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants; and
2. Amending Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants.

Wayne Nastri
Executive Officer

PF:SN:MM:UV

Background
Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (Rule 1466) was adopted July 7, 2017 and is designed to minimize fugitive dust emissions during earth-moving activities at sites with soils containing arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls. Under Rule 1466, applicable sites are determined to contain one or more of the applicable toxic air contaminants and designated as cleanup sites by the U.S. Environmental Protection Agency (U.S. EPA), California Department of Toxic Substances Control (DTSC), State Water Resources Control Board (State Water Board), or Regional Water Quality Control Board (Regional Water Board) or designated, based on a set of criteria, by the Executive Officer. The rule requires PM10 ambient monitoring, implementation of dust control measures, notification, recordkeeping, and signage. At the July 2017 public hearing to adopt Rule 1466, the adoption Resolution directed staff to return to the Board no later than February 2018, with an amendment for the Board's consideration to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds.

Proposal
PAR 1466 expands the list of applicable toxic air contaminants consistent with the adoption Resolution and expands the rule's applicability to other government designated sites. The list of applicable toxic air contaminants for sites designated by other agencies has been expanded to include dioxins, pesticides, and polycyclic aromatic hydrocarbons. The list of applicable toxic air contaminants for sites designated by the Executive Officer includes all toxic air contaminants identified in Rule 1401, Table I, and California Code of Regulations Section 93001, excluding volatile organic compounds as they are regulated under Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil. In addition to expanding the list of applicable toxic air contaminants, PAR 1466 expands the applicability of the rule to include the owner or operator of Hazardous Material Release Sites, as defined in Health and Safety Code Section 25260, that have been designated and notified by county, local, or state regulatory agencies. Expanding the applicability of PAR 1466 ensures that an entity cannot refer a site to a county, local, or state regulatory agency to avoid implementation of PAR 1466.

Additional amendments to PAR 1466 include clarifications for monitoring, fugitive dust measures, recordkeeping, and Executive Officer designated sites. Requirements for notification updates were also added to account for shifting start dates for earth-moving activities and/or changes in exemption status. Additionally, an exemption from certain rule requirements was added for linear trenching for natural gas, power and water projects where soil is directly loaded into a truck or bin. An alternative provision option was added for direct loading into trucks or bins for transport when an owner or operator is excavating less than 500 cubic yards of soil or for linear trenching of natural gas,

power, sewer, and water projects. Finally, for signage requirements, PAR 1466 adds a provision for the owner or operator or designating agency to use a smaller font height if the sign would otherwise exceed 48 inches by 96 inches when using four-inch lettering.

Public Process
Proposed Amended Rule 1466 was developed through a public process. Through the rulemaking process, staff held two stakeholder Working Group Meetings to discuss provisions of the proposed amended rule on August 3, 2017 and September 12, 2017. In addition, a Public Workshop was held on September 19, 2017.

Key Issues
Staff has worked with stakeholders to address comments and resolve issues. Staff is not aware of any outstanding key issues.

California Environmental Quality Act
The proposed amendments to Rule 1466 are considered to be modifications to a previously approved project (the adoption of Rule 1466 on July 7, 2017) and are considered to be a "project" as defined by the California Environmental Quality Act (CEQA). Pursuant to CEQA Guidelines Sections 15251, 15252, 15070, and 15162 and SCAQMD Rule 110, the SCAQMD, as the designated lead agency for the proposed project, has prepared a Subsequent Environmental Assessment (SEA) for PAR 1466. Based on SCAQMD staff's review of PAR 1466, the proposed project would not generate any significant adverse environmental impacts and therefore, no alternatives or mitigation measures are required. The Draft SEA was released for a 32-day public review and comment period from October 13, 2017 to November 14, 2017. One comment letter was received and a response has been prepared. The comment letter and response are included in an appendix to the Final SEA (see Appendix E).

Since the release of the Draft SEA, minor modifications were made to PAR 1466. SCAQMD staff has reviewed the modifications to PAR 1466 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the Draft SEA. As a result, these revisions do not require recirculation of the CEQA document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, the Draft SEA is now a Final SEA and is included as an attachment to the Board package (see Attachment H of this Board package). Prior to making a decision on the adoption of PAR 1466, the Board must review and certify the Final SEA as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1466.

The previous CEQA document (the Final EA for the adoption of Rule 1466 on July 7, 2017) is publicly available upon request and can be reviewed by calling the SCAQMD Public Information Center at (909) 396-2001 or by visiting SCAQMD's website at

www.aqmd.gov. The direct links to these documents are also referenced in the Final SEA for PAR 1466.

Socioeconomic Analysis

PAR 1466 would expand the rule's applicability to other government designated sites and expand the list of applicable toxic air contaminants. These amendments would result in an increased number of potentially affected sites and industries than previously estimated for the current rule. Based on data collected for sites with soil containing one or more of the additional applicable toxic air contaminant(s), approximately two additional sites per year would be potentially impacted. The current owners or responsible parties of these additional impacted sites, which may differ from the previous industrial operations that resulted in contamination at these sites, may belong to: Lessors of Residential Buildings and Dwellings (NAICS 531100), Line-Haul Railroads (NAICS 482111), Solid Waste Landfill (NAICS 562212), Administration of Air and Water Resource and Solid Waste Management Programs (NAICS 924110), Administration of Conservation Programs (NAICS 924120), and National Security (NAICS 928110). The incremental cost related to compliance with the proposed monitoring and fugitive dust control requirements was estimated at about $182,000 per year, which would bring the total estimated cost of compliance to $913,000, if the proposed amendments are adopted. The estimated total compliance costs would result in a minimal impact on jobs in the regional economy.

AQMP and Legal Mandates

Pursuant to Health & Safety Code Section 40460 (a), the SCAQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all federal regulations and standards. The SCAQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. Proposed Amended Rule 1466 is a control measure (TXM-04) in the 2016 AQMP and will reduce fugitive dust emissions containing toxic air contaminants from earth-moving activities at cleanup sites.

Implementation and Resource Impact

Existing SCAQMD resources will be used to implement Proposed Amended Rule 1466.

Attachments

A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Amended Rule 1466
G. Final Staff Report
H. Final Subsequent Environmental Assessment
I. Board Meeting Presentation

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

<u>Applicability</u>
• Expands applicability to include sites that have been designated and notified as Hazardous Material Release Sites, as defined in Health and Safety Code Section 25260, by a county, local, or state regulatory agency, effective January 1, 2018
 	
<u>Soil with Applicable Toxic Air Contaminant(s)</u>
• For sites designated as clean-up sites by U.S. EPA, DTSC, State Water Board, Regional Water Board, or other county, local, or state regulatory agencies
  o Arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel and polychlorinated biphenyls
  o Proposal includes dioxins, pesticides, and polycyclic aromatic hydrocarbons
• For sites designated by the Executive Officer
  o Toxic air contaminants that are identified above
  o Proposal includes:
  ▪ All compounds listed in Rule 1401, Table I
  ▪ All compounds listed in CARB Toxic Air Contaminant List
  o Excludes volatile organic compounds regulated under Rule 1166
 	
<u>Notification Requirements</u>
• Notification updates required for changes in start date or exemption status
 	
<u>Signage Requirements</u>
• Adds a provision that allows the use of a smaller font height if the sign would otherwise exceed 48 inches by 96 inches when using four-inch lettering
 	
<u>Exemptions</u>
• Expand linear trenching exemption to include natural gas, power, and water projects on roadways and excavation activities of soils with applicable toxic air contaminants of less than 500 cubic yards
• Include alternative provision for direct loading into a truck or bin for transport when an owner or operator is excavating less than 500 cubic yards of soil or for linear trenching of natural gas, power, sewer, and water projects

ATTACHMENT B

KEY ISSUES AND RESPONSES

Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants
Staff is not aware of any outstanding key issues

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

Initiated Rule Development: July 2017

↓

Working Group Meetings (2)
August 3, 2017
September 12, 2017

↓

75-Day Public Notice: September 7, 2017

↓

Public Workshop: September 19, 2017

↓

Stationary Source Committee Briefing: October 20, 2017

↓

Set Hearing: November 3, 2017

↓

Public Hearing: December 1, 2017

5 months spent in rule development.
1 Public Workshop.
2 Working Group Meetings.

ATTACHMENT D

KEY CONTACTS LIST

Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

Action Now

AECOM

Andeavor

The Boeing Company

California Communities Against Toxics

California Department of Toxic Substances Control

CalPortland Company

California Safe Schools

Citadel Environmental Services

Coalition for a Safe Environment

Del Amo Action Committee

Innovative Construction Solutions

Long Beach Unified School District

Los Angeles Department of Water and Power

Los Angeles Unified School District

Metropolitan Water District of Southern California

National Demolition Contractors

Panacea, Inc.

Plains All American

Sanitation Districts of Los Angeles County

Society for Positive Action

The Source Group, Inc.

Southern California Edison

Southern California Gas Company

ATTACHMENT E

RESOLUTION NO. 17-_____

A Resolution of the Governing Board of the South Coast Air Quality Management District (SCAQMD) certifying the Final Subsequent Environmental Assessment (SEA) for Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants.

A Resolution of the SCAQMD Governing Board amending Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants.

WHEREAS, the SCAQMD Governing Board finds and determines with certainty that Proposed Amended Rule 1466 is considered a modification to a previously approved project (the adoption of Rule 1466 on July 7, 2017) and is considered to be a "project" as defined by the California Environmental Quality Act (CEQA); and

WHEREAS, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code Section 21080.5 and CEQA Guidelines Section 15251(l), and has conducted a CEQA review and analysis of Proposed Amended Rule 1466 pursuant to such program (SCAQMD Rule 110); and

WHEREAS, the SCAQMD Governing Board has determined that the requirements for a Subsequent Negative Declaration have been triggered pursuant to CEQA Guidelines Section 15162, and that a Subsequent Environmental Assessment (SEA), a substitute document allowed pursuant to CEQA Guidelines Section 15252 and SCAQMD's certified regulatory program, is appropriate; and

WHEREAS, the SCAQMD staff has prepared a Draft SEA pursuant to its certified regulatory program and CEQA Guidelines Sections 15251, 15252, 15162, and 15070, setting forth the potential environmental consequences of Proposed Amended Rule 1466 and determined that the proposed project would not have the potential to generate significant adverse environmental impacts; and

WHEREAS, the Draft SEA was circulated for 32-day public review and comment period, from October 13, 2017 to November 14, 2017, and one comment letter was received; and

WHEREAS, the Draft SEA has been revised to include a comment received on the Draft SEA and the response, so that it is now a Final SEA; and

WHEREAS, it is necessary that the SCAQMD Governing Board review the Final SEA 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 PAR 1466, including the response to a comment received relative to the Draft SEA; 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 and 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 a Statement of Overriding Considerations pursuant to CEQA Guidelines Section 15093 were not prepared because the analysis shows that Proposed Amended Rule 1466 would not have a significant adverse effect on the environment, and thus, are not required; and

WHEREAS, the SCAQMD Governing Board voting to adopt Proposed Amended Rule 1466 has reviewed and considered the information contained in the Final SEA and other supporting documentation, prior to its certification, and has determined that the Final SEA document, including the response to the comment received, has been completed in compliance with CEQA; and

WHEREAS, Proposed Amended Rule 1466 and supporting documentation, including but not limited to, the Final SEA and the Final Staff Report were presented to the SCAQMD Governing Board and the SCAQMD Governing Board has reviewed and considered the entirety of this information, and has taken and considered staff testimony and public comment prior to approving the project; and

WHEREAS, the Board package includes the Final SEA and other supporting documentation, and this information was presented to the SCAQMD Governing Board and that the Board has reviewed and considered the entirety of this information before approving the staff recommendations; and

WHEREAS, the Final SEA reflects the independent judgment of the SCAQMD; and

WHEREAS, the SCAQMD Governing Board finds and determines that all changes made in the Final SEA after the public notice of availability of the Draft SEA, were not substantial revisions and do not constitute significant new information within the meaning of CEQA Guidelines Section 15073.5 or 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 SEA, and recirculation is therefore not required; and

WHEREAS, the SCAQMD Governing Board finds and determines, taking into consideration the factors in Section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D)(i) of the Administrative Code), that the modifications to Proposed Amended Rule 1466 since the notice of public hearing was published add clarity or provide compliance flexibility that meets the same air quality objective and are not so substantial as to significantly affect the meaning of the proposed amended rule within the meaning of Health and Safety Code Section 40726 because: (a) the changes do not impact emission reductions, (b) the changes do not affect the number or type of sources regulated by the rule, (c) the changes are consistent with the information contained in the notice of public hearing, and (d) the consideration of the range of CEQA alternatives is not applicable because the effects of PAR 1466 do not cause significant impacts and therefore alternatives are not required; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1466 is needed to further protect public health to minimize fugitive dust emissions from earth-moving activities at sites that contain certain toxic air contaminants by expanding the rule's applicability to also include sites designated by local, county, and state regulatory agencies and also expanding the list of applicable toxic air contaminants consistent with the Governing Board's direction in the adoption Resolution for Rule 1466 in July 2017; and

WHEREAS, Proposed Amended Rule 1466 is a control measure (CM TXM-04) in the 2016 Air Quality Management Plan (AQMP) and was not ranked by cost-effectiveness relative to other AQMP control measures in the 2016 AQMP, and furthermore, pursuant to California Health and Safety Code Section 40910, cost-effectiveness in terms of dollars per ton of pollutant reduced is only applicable to rules regulating ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide and does not apply to toxic air contaminants; and

WHEREAS, Proposed Amended Rule 1466 and supporting documentation, including but not limited to, the Final SEA, the Socioeconomic Impact Assessment, the Final Staff Report, and this December 1, 2017 Board letter were presented to the SCAQMD Governing Board and the SCAQMD Governing Board has reviewed and considered the entirety of this information, as well as has taken and considered staff testimony and public comment prior to approving the project; and

WHEREAS, California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the Final Staff Report; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1466, as proposed to be adopted, is written and displayed so that its meaning can be easily understood by persons directly affected by it; and

WHEREAS, Proposed Amended Rule 1466 will not be submitted for inclusion into the State Implementation Plan; and

WHEREAS, the SCAQMD Governing Board has determined that Rule 1466, as proposed to be amended, is in harmony with, and not in conflict with, or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the SCAQMD Governing Board, in adopting this regulation, references the following statutes which the SCAQMD hereby implements, interprets or makes specific: the provisions of California Health and Safety Code Section 41700 (nuisance) and Federal Clean Air Act (CAA) Section 112 (Hazardous Air Pollutants) and Federal CAA Section 116 (Retention of State Authority); and

WHEREAS, the SCAQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from Sections 39002, 39650 et seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41511, 41700, and 41706 of the California Health and Safety Code; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1466, as proposed to be adopted, does not impose the same requirements as any existing state or federal regulations, and the proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD; and

WHEREAS, California Health and Safety Code Section 40727.2 requires the SCAQMD 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 that the SCAQMD's comparative analysis of Proposed Amended Rule 1466 is included in the Final Staff Report; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment, as contained in the Final Staff Report, of Proposed Amended Rule 1466 is consistent with the March 17, 1989 Governing Board Socioeconomic Resolution for rule adoption; and

WHEREAS, the SCAQMD Governing Board has determined that Proposed Amended Rule 1466 will result in increased costs to sites containing applicable toxic air contaminants, yet are considered to be reasonable, with a total annualized cost as specified in the Socioeconomic Impact Assessment, as contained in the Final Staff Report; and

WHEREAS, the SCAQMD Board has actively considered the Socioeconomic Impact Assessment, as contained in the Final Staff Report, and has made a good faith effort to minimize such impacts; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Impact Assessment, as contained in the Final Staff Report, is consistent with the provisions of California Health and Safety Code Sections 40440.8, 40728.5, and 40920.6; and

WHEREAS, the SCAQMD staff conducted a public workshop regarding Proposed Amended Rule 1466 on September 19, 2017; and

WHEREAS, a public hearing has been properly noticed in accordance with all provisions of California Health and Safety Code Section 40725; and

WHEREAS, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

WHEREAS, the SCAQMD Governing Board specifies the Manager overseeing the rule development for Proposed Amended Rule 1466 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

NOW, THEREFORE BE IT RESOLVED, that the SCAQMD Governing Board does hereby certify the Final SEA for Proposed Amended Rule 1466, including a response to the comment received, was completed in compliance with CEQA and SCAQMD Rule 110 provisions and finds that the Final SEA was presented to the SCAQMD Governing Board, whose members reviewed, considered, and approved the information therein prior to acting on Proposed Amended Rule 1466; and

BE IT FURTHER RESOLVED, that because no significant adverse environmental impacts were identified as a result of implementing Proposed Amended Rule 1466, Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring and Reporting Plan are not required; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, Proposed Amended Rule 1466 as set forth in the attached, and incorporated herein by reference.

DATE: _____ _____

CLERK OF THE BOARDS

ATTACHMENT F

(Adopted July 7, 2017)
(Proposed Amended Rule December 1, 2017)
11-15-17

PROPOSED AMENDED RULE 1466. CONTROL OF PARTICULATE EMISSIONS FROM SOILS WITH TOXIC AIR CONTAMINANTS

(a) Purpose

The purpose of this rule is to minimize the amount of off-site fugitive dust emissions containing toxic air contaminants by reducing particulate emissions in the ambient air as a result of earth-moving activities, including, excavating, grading, handling, treating, stockpiling, transferring, and removing soil that contains applicable toxic air contaminants from sites that meet the applicability requirements of subdivision (b).

(b) Applicability

(1) ~~Effective 30 days from adoption date, t~~This rule shall apply to any owner or operator conducting earth-moving activities of soil with applicable toxic air contaminant(s) as defined in paragraph (c)(~~3~~15) that have been identified as contaminant(s) of concern at a site that has been designated and notified by ~~the~~:

(A) The U.S. Environmental Protection Agency (U.S. EPA) as a Superfund National Priorities List site;

(B) The California Department of Toxic Substances Control (DTSC) as a Brownfield or Cleanup Program site;

(C) The State Water Resources Control Board (State Water Board) or Regional Water Quality Control Board (Regional Water Board) as a Site Cleanup Program site; ~~or~~

(D) A county, local, or state regulatory agency as a Hazardous Material Release site, as defined in California ~~pursuant to~~ Health and Safety Code~~,~~ Section 25260, effective January 1, 2018; or

(~~D~~E) The Executive Officer pursuant to subdivision (i).

(2) This rule shall not apply to:

(A) Earth-moving activities of soil with applicable toxic air contaminant(s) of less than 50 cubic yards; or

(B) Removal of soil for sampling purposes.

(c) Definitions

(1) ADEQUATELY WET is the condition of being sufficiently mixed or penetrated with water to prevent the release of particulates or visible emissions. The process

by which an adequately wet condition is achieved is by using a dispenser or water hose with a nozzle that permits the use of a fine, low-pressure spray or mist.

(2) ADJACENT ATHLETIC AREA is any outdoor athletic field or park where youth organized sports occur that is in physical contact or separated solely by a public roadway or other public right-of-way to a school or early education center.

~~(3) APPLICABLE TOXIC AIR CONTAMINANTS, for the purpose of this rule, include arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls.~~

(~~4~~3) CHEMICAL STABILIZERS are any non-toxic chemical dust suppressant. The chemical stabilizers shall meet any specifications, criteria, or tests required by any federal, state, or local agency or any applicable law, rule, or regulation. Unless otherwise indicated, the use of a non-toxic chemical stabilizer shall be of sufficient concentration and application frequency to maintain a stabilized surface and no less than what is specified by the manufacturer.

(~~5~~4) DISTURBED SURFACE AREA is a portion of the earth's surface which has been physically moved, uncovered, destabilized, or otherwise modified from its undisturbed natural soil condition, thereby increasing the potential for fugitive dust. This definition excludes those areas which have:

(A) Been restored to a natural state, such that the vegetative ground cover and soil characteristics are similar to adjacent or nearby natural conditions;

(B) Been paved or otherwise covered by a permanent structure; or

(C) Sustained a vegetative ground cover of at least 70 percent of the native cover for a particular area for at least 30 days.

(~~6~~5) DUST SUPPRESSANTS are water, hygroscopic materials, or chemical stabilizers used as a treatment material to reduce fugitive dust emissions.

(~~7~~6) EARLY EDUCATION CENTER is any public or private property, used for purposes of education as defined as an Early Learning and Developmental Program by the U.S. Department of Education, but does not include any property in which education is primarily conducted in private homes. Early education center includes any building or structure, playground, athletic field, or other areas of early education center property.

(~~8~~7) EARTH-MOVING ACTIVITIES are, for the purpose of this rule, any activity on a site that meets the applicability requirements of subdivision (b) where soil with applicable toxic air contaminant(s) are being moved or uncovered, and shall include, but not be limited to the following: excavating, grading, earth cutting and filling operations, loading or unloading, and adding to or removing from stockpiles.

(~~9~~8) FUGITIVE DUST is, for the purpose of this rule, any solid particulate matter that is in contact with ambient air and has the potential to become airborne, other than solid particulate matter that is emitted from an exhaust stack.

(~~10~~9) JOINT USE AGREEMENT PROPERTY is a shared public facility in which a formal agreement exists between a school or early education center and another government entity setting forth the terms and conditions for shared use.

(~~11~~10) OWNER OR OPERATOR is any firm, business establishment, association, partnership, corporation or individual, whether acting as principal, agent, employee, contractor, or other capacity.

(~~12~~11) PAVED ROAD is a public or private improved street, highway, alley, public way, or easement that is covered by typical roadway materials, but excluding access roadways that connect a facility with a public paved roadway and are not open to through traffic. Public paved roads are those open to public access and that are owned by any federal, state, county, municipal, or any other governmental or quasi-governmental agencies. Private paved roads are any paved roads not defined as public.

(~~13~~12) PROPERTY LINE is the boundary of an area where a person has the legal use or possession of the property. Where such property is divided into one or more sub-tenancies, the property line(s) shall refer to the boundaries dividing the areas of all sub-tenancies.

(~~14~~13) SCHOOL is any public or private education center, including juvenile detention facilities and education centers serving as the students' place of residence (e.g., boarding schools), used for purposes of the education of more than 12 children in kindergarten or any grades 1 to 12, inclusive, but does not include any school in which education is primarily conducted in private homes. School includes any building or structure, playground, athletic field, or other areas of school property.

(~~15~~14) SOIL is dirt, sand, gravel, clay, and aggregate material less than two inches in length or diameter, and other organic or inorganic particulate matter.

(~~16~~15) SOIL WITH APPLICABLE TOXIC AIR CONTAMINANT(S) means, for the purpose of this rule, soil that has been identified by the U.S. EPA, the DTSC, the State Water Board, the Regional Water Board, or a county, local, or state regulatory agency ~~or the Executive Officer~~ to contain one or more of the applicable toxic air contaminants as ~~defined in paragraph (c)(3)~~listed in Table I that exceed action levels as specified by the designating agency or, effective January 1, 2018, soil that has been identified by the Executive Officer to contain one or more of the toxic air contaminants listed in Rule 1401 – New Source Review of Toxic Air Contaminants

Table I or Hazardous Air Pollutants Identified as Toxic Air Contaminants as listed in California Code of Regulations Section 93001, excluding volatile organic compounds regulated under Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil.

(~~17~~16) STABILIZED SURFACE is any previously disturbed surface area or stockpile, which through the application of dust suppressants, shows visual or other evidence of surface crusting and is resistant to wind driven fugitive dust, and is demonstrated to be stabilized. Stabilization can be demonstrated by one or more of the applicable test methods contained in the SCAQMD *Rule 403 Fugitive Dust Implementation Handbook* or in Volumes I and II of SCAQMD's *Dust Control in the Coachella Valley*.

(~~18~~17) STOCKPILE is any accumulation of soil, which is not fully enclosed, covered, or chemically stabilized, and which attains a height of three feet or more and a total surface area of 150 square feet or more.

(~~19~~18) TRACK-OUT is any soil that adheres to and agglomerates on the exterior surface of motor vehicles, haul trucks, and equipment (including tires) that has been released onto a paved road.

(~~20~~19) WIND-DRIVEN FUGITIVE DUST is visible emissions from any disturbed surface area, which is generated by wind action alone.

(~~21~~20) WIND GUST is the maximum instantaneous wind speed as measured by an anemometer.

(d) Monitoring Requirements

(1) When earth-moving activities or vehicular movement occurs, the owner or operator shall conduct continuous direct-reading near real-time ambient monitoring of PM_{10} concentrations pursuant to paragraph (d)(3).

(2) If the PM_{10} concentration averaged over two hours exceeds 25 micrograms per cubic meter, as measured pursuant to paragraph (d)(3) and as determined pursuant to paragraph (d)(4), the owner or operator shall cease earth-moving activities, apply dust suppressant to fugitive dust sources, or implement other dust control measures as necessary until the PM_{10} concentration is equal to or less than 25 micrograms per cubic meter averaged over 30 minutes.

(A) The owner or operator or designating agency may request an alternative PM_{10} limit from the Executive Officer provided the exposure to toxic air contaminants from fugitive dust from earth-moving activities at the proposed PM_{10} concentration level is health protective to the public. The

owner or operator or designating agency shall provide ~~to~~ the Executive Officer the information specified in subparagraphs (i)(1)(A) through (~~G~~H) and substantiate its position that an alternative PM_{10} limit is health protective. Use of an alternative PM_{10} limit must be submitted and approved by the Executive Officer as specified in subdivision (j).

(3) The owner or operator conducting earth-moving activities shall install and conduct ambient PM_{10} monitoring as follows:

(A) In accordance with a U.S. EPA-approved equivalent method for PM_{10} monitoring or an alternative method approved by the Executive Officer. The owner or operator or designating agency shall select an alternative PM_{10} method as specified in Appendix 1. Use of an alternative PM_{10} method must be submitted and approved by the Executive Officer as specified in subdivision (j);

(B) Using a minimum of one upwind monitor where the location of the upwind monitor(s) are indicative of background PM_{10} levels and not generally influenced by fugitive dust sources from the site;

(C) Using a minimum of one downwind monitor placed in the seasonal prevailing wind direction downwind of each area of earth-moving activity and as close to the property line as feasible;

(D) Using PM_{10} monitors that are identical in make and model; settings; calibration; configuration; and calibration, correction, and correlation factors.

(~~D~~E) Operate, maintain, and calibrate ambient PM_{10} monitors in accordance with appropriate U.S. EPA-published documents for U.S. EPA-approved equivalent method(s) for PM_{10} or the alternative method approved by the Executive Officer, and manufacturer's instructions; and

(~~E~~F) Collect ambient PM_{10} data with a data acquisition system that is capable of logging direct-reading near real-time data providing the date, time, and PM_{10} concentration in micrograms per cubic meter every 10 minutes or less.

(4) The owner or operator shall calculate the PM_{10} concentration based on the PM_{10} concentration averaged over two hours, starting at the top of each hour, where:

(A) The PM_{10} concentration is the absolute difference between the upwind and downwind monitors;

(B) If there is more than one upwind monitor, the upwind result is the two hour average of all upwind monitors;

(C) If there is more than one downwind monitor, the downwind average is the maximum two hour average concentration of any of the downwind monitors; and

(D) The owner or operator or designating agency may use an alternative calculation methodology if the owner or operator or designating agency provides information to substantiate that all or some the PM_{10} concentration is the result of another source and not attributed to the earth-moving activities of the site. Use of an alternative calculation methodology must be submitted and approved by the Executive Officer as specified in subdivision (j).

(5) When earth-moving activities occur, the owner or operator shall monitor wind direction and speed as specified in U.S. EPA *Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements*.

(e) Requirements to Minimize Fugitive Dust Emissions

(1) The owner or operator shall not conduct earth-moving activities unless the area is surrounded with fencing that is a minimum of 6 feet tall and at least as tall as the height of the tallest stockpile, with a windscreen with a porosity of 50 ± 5%.

(2) An owner or operator conducting earth-moving activities shall:

(A) Adequately wet to the depth of earth-moving activity and allow time for penetration; and

(B) Adequately wet at frequencies to prevent the generation of visible dust plumes.

(3) An owner or operator that is moving vehicles on, within, or off a site where earth-moving activities are occurring shall:

(A) Post signs at all entrances of the site to designate the speed limit as 15 miles per hour;

(B) Stabilize the surface of all vehicular traffic and parking areas by applying gravel, paving, or dust suppressant;

(C) Not allow track-out to extend beyond 25 feet of the property line. Remove any track-out each day using a vacuum equipped with a filter(s) rated by the manufacturer to achieve a 99.97% capture efficiency for 0.3 micron particles;

(D) Clean the soil from the exterior of trucks, trailers, and tires prior to the truck leaving the site; and

(E) The owner or operator shall utilize at least one of the measures listed in clause (e)(3)(E)(i) through (e)(3)(E)(iv) at each vehicle egress from the site to a paved public road:

(i) Install a pad consisting of washed gravel (minimum-size: one inch), maintained in a clean condition, to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long;

(ii) Pave the surface extending at least 100 feet from the property line and at least 20 feet wide;

(iii) Utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipes, or grates) at least 24 feet long and 10 feet wide; or

(iv) Install and utilize a wheel washing system to remove soil from tires and vehicle undercarriages.

(4) An owner or operator conducting earth-moving activities that result in the development of stockpiles of any soil with applicable toxic air contaminant(s) shall:

(A) Segregate non-contaminated stockpiles from stockpiles with applicable toxic air contaminant(s) and label with "SCAQMD Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminant(s) Applicable Soil";

(B) Maintain stockpiles to avoid steep sides or faces that exceed the angle of repose;

(C) Not create a stockpile that is more than 400 cubic yards of soil and greater in height than the perimeter fencing and windscreen;

(D) Apply dust suppressant to stockpiles;

(E) At the end of each working day, either chemically stabilize and/or completely cover with 10 millimeter thick plastic sheeting that overlaps a minimum of 24 inches. The plastic sheeting shall be anchored and secured so that no portion of the soil is exposed to the atmosphere; and

(F) Daily, inspect stabilized or covered stockpiles. For a stabilized stockpile, such inspections shall include a demonstration of stabilization by one or more of the applicable test methods contained in SCAQMD *Rule 403 Fugitive Dust Implementation Handbook* or Volumes I and II of SCAQMD's *Dust Control in the Coachella Valley*. For a covered stockpile, such inspections shall include a visual inspection of all seams and plastic cover surfaces. Immediately re-stabilize or repair any holes, tears, or any other potential sources of fugitive toxic air contaminant emissions.

(5) An owner or operator conducting truck loading activities of soil containing applicable toxic air contaminant(s) shall:

(A) Apply dust suppressant to material prior to loading;

(B) Empty the loader bucket slowly so that no dust plumes are generated;

(C) Minimize the drop height from the loader bucket;

(D) Maintain at least six inches ~~of freeboard~~ of space between the soil and the top of the truck bed while transporting within a site; and

(E) Completely tarp the truck and trailer prior to leaving the site.

(6) An owner or operator conducting truck unloading activities of soil containing applicable toxic air contaminant(s) shall:

(A) Apply dust suppressant to material prior to unloading; and

(B) Empty the trailer slowly so that no dust plumes are generated.

(7) The owner or operator shall immediately remove any spilled soil containing applicable toxic air contaminant(s).

(8) The owner or operator shall cease earth-moving activities if the wind speed is greater than 15 miles per hour (mph) averaged over a 15-minute period or instantaneous wind speeds exceed 25 mph.

(9) During earth-moving activities, the owner or operator shall have an on-site dust control supervisor that:

(A) Is employed by or contracted with the owner or operator;

(B) Is located on the site during working hours;

(C) Is in a position to expeditiously employ sufficient dust control measures to ensure compliance with all Rule requirements;

(D) Has completed the SCAQMD Fugitive Dust Control Class and has been issued a valid Certificate of Completion for the class; and

(E) Has the following credentials, if asbestos is an applicable toxic air contaminant:

(i) Successfully completed the Asbestos Abatement Contractor/Supervisor course pursuant to the Asbestos Hazard Emergency Response Act (AHERA), and obtained and maintained accreditation as an AHERA Asbestos Abatement Contractor/Supervisor; and

(ii) Trained on the provisions of 40 CFR Part 61.145, 61.146, 61.147 and 61.152 (Asbestos NESHAP provisions) and Part 763, and have the means by which to comply with these provisions.

(10) If earth-moving activities will not occur for three (3) or more consecutive days, apply a chemical stabilizer to potential sources of fugitive dust diluted to the concentration required to maintain a stabilized surface for the period of inactivity; re-stabilize as necessary.

(11) An owner or operator that is conducting earth-moving activities of soil with applicable toxic air contaminant(s) at a school, early education center, joint use agreement property, or adjacent athletic area shall:

(A) Only conduct earth-moving activities at a school or early education center outside of the hours between 7:30 a.m. and 4:30 p.m. on days when the school or early education center is in session;

(B) Not conduct earth-moving activities at a school, early education center, joint use agreement property, or adjacent athletic area if there is a school or early education center sponsored activity or youth organized sports at that site;

(C) Handle excavated soils with applicable toxic air contaminant(s) by:

(i) Immediately placing soil in a leak-tight container whereby any contained solids or liquids are prevented from escaping or spilling out;

(ii) Directly loading soil in trucks, applying dust suppressant, and covering prior to transporting; or

(iii) Stockpiling pursuant to paragraph (e)(4), in a fenced area that is not accessible to the general public, and locked when not in use; and

(D) Within five (5) days of its excavation, remove all soil with applicable toxic air contaminant(s) from the site.

(12) With the exception of paragraphs (e)(7) and (e)(11), the owner or operator or designating agency may use alternative dust control measures that meet the objective and effectiveness of the dust control measure it is replacing, where the objective and effectiveness of each category of dust control measures is stated in Appendix 2. Use of alternative dust control measures must be submitted and approved by the Executive Officer as specified under subdivision (j).

(f) Notification Requirements

(1) At least 72 hours and no more than 30 days prior to conducting any earth-moving activities on any site meeting the applicability requirements of subdivision (b), the owner or operator shall electronically notify the Executive Officer, using a format approved by the Executive Officer, of the intent to conduct any earth-moving activities. Notifications shall include the following requirements:

(A) Name, address, telephone number, and e-mail address of the owner or operator;

(B) Name, telephone number, and e-mail address of the on-site dust control supervisor;

(C) Project name and, if applicable, the project identification number from the designating agency;

(D) Project location (address and/or coordinates);

(E) Identify whether the site is a school, early education center, joint use agreement property, or adjacent athletic area;

(F) A map indicating the specific location(s) of each earth-moving activity and the concentrations of the applicable toxic air contaminant(s) and location of PM_{10} monitors;

(G) A description of the earth-moving activities, estimated volume of soil with applicable toxic air contaminant(s), and a schedule that includes the anticipated start and completion dates of earth-moving activities;

(H) Current and/or previous type of operation(s) and use(s) at the site;

(I) Applicable exemption(s); and

(~~I~~J) Whether the notice is a revised notification.

(2) Notification Updates

Notifications pursuant to paragraph (f)(1) shall be updated when any of the following conditions arise:

(A) Earlier Start Date

A change in the start date of any earth-moving activity to an earlier date shall be reported to the SCAQMD no later than 72 hours before any earth-moving activities begin.

(B) Later Start Date

A delay in the start date of any earth-moving activity shall be reported to the SCAQMD as soon as the information becomes available, but no later than the original start date.

(C) Change in Exemption Status

Any change(s) in exemption status pursuant to subdivision (k) shall be reported to the SCAQMD as soon as the information becomes available, but no later than 48 hours after the information becomes available.

(~~2~~3) Within 72 hours of an exceedance of the PM_{10} emission limit specified in subdivision (d), the owner or operator of a site meeting the applicability requirements of subdivision (b) shall electronically notify the Executive Officer,

using a format approved by the Executive Officer, of the exceedance and shall include the following information:

(A) Name, address, telephone number, and e-mail address of the owner/operator;

(B) Name, telephone number, and e-mail address of the on-site dust control supervisor;

(C) Project name and, if applicable, the project identification number from the designating agency;

(D) Project Location (address and/or coordinates);

(E) PM_{10} monitoring results, including result, date and time of exceedance(s), 12 hours before first exceedance, and 12 hours after last exceedance;

(F) Earth-moving activities occurring at the date and time of exceedance(s); and

(G) Dust control measure(s) taken to mitigate fugitive dust.

(g) Signage Requirements

When conducting earth-moving activities, the owner or operator shall install and maintain project signage.

(1) Unless otherwise approved in writing by the Executive Officer, signage shall:

(A) Be installed at all entrances and at intervals of 1,000 feet or less along the property line or perimeter of the site, with a minimum of one along each side;

(B) Be located between 6 and 8 feet above grade from the bottom of the sign;

(C) Display lettering at least four inches tall with text contrasting with the sign background; and

(D) Display the following information:

(i) Local or toll-free phone number for the site contact or pre-recorded notification center that is accessible 24 hours a day; and

(ii) Warning statement:

"THIS SITE CONTAINS SOILS THAT CONTAIN THE FOLLOWING CHEMICALS: [LIST APPLICABLE TOXIC AIR CONTAMINANT(S)]
TO REPORT ANY DUST LEAVING THE SITE PLEASE CALL [FACILITY CONTACT] OR THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT 1-800-CUT-SMOG"

(E) If signage pursuant to paragraph (g)(1) exceeds 48 inches by 96 inches, the owner or operator or designating agency must still include the warning

statement referenced in (g)(1)(D)(ii), displaying lettering at least four inches tall with text contrasting with the sign background, but may use 2.5 inch tall lettering to list applicable toxic air contaminants. All other signage requirements set forth in paragraph (g)(1) shall remain the same. If signage continues to exceed 48 inches by 96 inches with these parameters, the owner or operator or designating agency may use alternative signage as set forth in paragraph (g)(2).

(2) The owner or operator or designating agency may use alternative signage approved by the Executive Officer pursuant to subdivision (j). Notwithstanding subdivision (j), the request shall include a visual representation of the alternative sign, including proposed lettering height, and ~~*proposed*~~ locations and, at a minimum, the alternative signage shall:

(A) Display ~~*lettering at least four inches tall with*~~ text contrasting with the sign background; and

(B) Display the following warning statement:

"THIS SITE CONTAINS SOILS THAT CONTAIN THE FOLLOWING CHEMICALS: [LIST APPLICABLE TOXIC AIR CONTAMINANT(S)] TO REPORT ANY DUST LEAVING THE SITE PLEASE CALL THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT AT 1-800-CUT-SMOG"

(h) Recordkeeping Requirements

The owner or operator shall maintain records for a period of not less than three years and shall make such records available to the Executive Officer upon request. At a minimum, records shall be maintained daily and shall include:

(1) Inspection of all covered stockpiles containing soils with applicable toxic air contaminant(s);

(2) Results of wind and PM_{10} monitoring, including: instrument make and model; settings; calibration; configuration; and calibration, correction, and correlation factors, maintenance, operator training, and daily instrument performance check records for all monitoring instruments;

(3) Earth-moving activities conducted and the corresponding volume of soil with applicable toxic air contaminant;

(4) Names and business addresses of the transporting and receiving facilities, and a copy of the shipping manifest; and

(5) Complaints called in, including the name of complainant and contact information, date and time, earth-moving activities occurring at the date and time, complaint, and action taken to mitigate the source of the complaint.

(i) Executive Officer Designated Sites

(1) The Executive Officer may designate a site if the Executive Officer has evidence that the site contains soil with applicable toxic air contaminant(s) as defined in paragraph (c)(15), after consultation with U.S. EPA, DTSC, the State or Regional Water Boards, and/or local, county, or state health and regulatory agencies, and consideration of the following:

(A) Site history, including current and/or previous type(s) of operation(s) and use(s) at the site and regulatory history;

(B) Concentration(s) of applicable toxic air contaminant(s) in the soil;

(~~B~~C) Background concentration(s) of applicable toxic air contaminant(s);

(~~C~~D) Volume of soil with applicable toxic air contaminant(s);

(~~D~~E) Distance to a residence, park, or school;

(~~E~~F) Meteorological data;

(~~F~~G) Health risk information or other data provided by the owner or operator, if available; and

(~~G~~H) Ambient monitoring data and other applicable data, if available.

(2) Prior to making a determination, the Executive Officer will notify the owner or operator in writing that the site may be subject to this rule.

(A) In the event the owner or operator exercises this opportunity to demonstrate that this rule does not apply, the owner or operator shall submit information to the Executive Officer within 14 days of the notification substantiating why the site should be excluded from this rule.

(B) Upon final determination, the Executive Officer will notify the owner or operator in writing if the site is subject to this rule.

(3) During the determination period, the owner or operator shall comply with the provisions of this rule or cease all earth-moving activities until a determination is made.

(j) Alternative Provisions

(1) If requesting an alternative provision pursuant to subparagraphs (d)(2)(A), (d)(3)(A), or (d)(4)(D) or paragraphs (e)(12), ~~or~~ (g)(2), k(3), or (k)(4) the owner or

operator or designating agency shall submit all information to the Executive Officer to substantiate its positon.

(A) The owner or operator or designating agency that elects to request alternative provisions for the PM_{10} limit, PM_{10} monitoring method, ~~or~~ signage, or direct loading exemption shall submit the request in writing at least 30 days prior to conducting any earth-moving activities.

(B) The owner or operator or designating agency that elects to request alternative provisions for the PM_{10} calculation or dust control measures shall submit the request, in writing, prior to an exceedance of the PM_{10} concentration requirements set forth in paragraph (d)(2).

(2) The Executive Officer may request additional information from the owner or operator or designating agency.

(3) The owner or operator or designating agency shall submit all requested information within 14 days of the request for additional information.

(4) The Executive Officer will review the request for an alternative provision and will approve or reject the data and notify the owner or operator or designating agency in writing. Approved alternative provisions may not be used retroactively.

(k) Exemptions

(1) The owner or operator may be exempt from one or more provisions of this rule provided there is written confirmation that the designating agency under subparagraphs (b)(1)(A) through (~~C~~D) has consulted with the Executive Officer and has determined that the provision(s) are not needed based on information specified in subparagraphs (i)(1)(A) through (~~G~~H).

(2) Earth-moving activities performed within an enclosed system vented to SCAQMD permitted air pollution control equipment shall be exempt from all requirements except: subparagraphs (e)(3)(C) through (e)(3)(E), subparagraphs (e)(5)(D) and (e)(5)(E), and subdivisions (f), (g), and (h).

(3) Linear trenching for natural gas, power, sewer, and water projects on roadways with soil with applicable toxic air contaminant(s), directly loaded into a truck or bin for transport, shall be exempt from all requirements except: paragraphs (e)(2) through (e)(8), paragraph (e)(11), and subdivisions (f), (h), and (i). The owner or operator or designating agency may use an alternative to directly load into a truck or bin for transport that meets the objective and effectiveness of directly loading soil, where the objective and effectiveness is stated in Appendix 2. Use of an alternative

measure must be submitted and approved by the Executive Officer as specified under subdivision (j).

(4) Earth-moving activities consisting only of excavation activities of soil with applicable toxic air contaminant(s) of less than 500 cubic yards, directly loaded into a truck or bin for transport, shall be exempt from all requirements except: paragraphs (e)(2) through (e)(8), paragraph (e)(11), and subdivisions (f), (h), and (i). The owner or operator or designating agency may use an alternative to directly load into a truck or bin for transport that meets the objective and effectiveness of directly loading soil, where the objective and effectiveness is stated in Appendix 2. Use of alternative measure must be submitted and approved by the Executive Officer as specified under subdivision (j).

(5) Active operations conducted during emergency life-threatening situations, or in conjunction with any officially declared disaster or state of emergency as declared by an authorized health officer, agricultural commissioner, fire protection officer, or other authorized agency officer shall be exempt from all requirements. The Executive Officer shall be notified electronically no later than 48 hours following such earth-moving activities. Written notification shall include written emergency declaration from the authorized officer.

(6) Active operations conducted by essential service utilities to provide electricity, natural gas, telephone, water, or sewer during periods of service outages and emergency disruptions shall be exempt from all requirements. The Executive Officer shall be notified electronically no later than 48 hours following such earth-moving activities.

Table I – Applicable Toxic Air Contaminants

CAS Number	Substance
7440-38-2	**arsenic and arsenic compounds (inorganic)**
	including, but not limited to:
	arsenic compounds (inorganic)
7784-42-1	arsine
1332-21-4	asbestos
7440-43-9	cadmium and cadmium compounds

CAS Number	Substance
57-74-9	Chlorodane*
	dibenzo-p-dioxins (chlorinated)*
1746-01-6	tetrachlorodibenzo-p-dioxin, 2,3,7,8-
40321-76-4	pentachlorodibenzo-p-dioxin, 1,2,3,7,8-
39227-28-6	hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-
57653-85-7	hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-
19408-74-3	hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-
35822-46-9	heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-
3268-87-9	octachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8,9-
41903-57-5	total tetrachlorodibenzo-p-dioxin
36088-22-9	total pentachlorodibenzo-p-dioxin
34465-46-8	total hexachlorodibenzo-p-dioxin
37871-00-4	total heptachlorodibenzo-p-dioxin
72-54-8	dichlorodiphenyldichloroethane*
72-55-9	dichlorodiphenyldichloroethylene*
50-29-3	dichlorodiphenyltrichloroethane*
18540-29-9	**chromium (hexavalent) and chromium compounds**
	including, but not limited to:
10294-40-3	barium chromate
13765-19-0	calcium chromate
7758-97-6	lead chromate
10588-01-9	sodium dichromate
7789-06-2	strontium chromate
13530-65-9	zinc chromate
7439-92-1	**lead and lead compounds (inorganic, including elemental lead)**
	including, but not limited to:
	lead compounds (inorganic)

CAS Number	Substance
301-04-2	lead acetate
7758-97-6	lead chromate
7446-27-7	lead phosphate
1335-32-6	lead subacetate
7439-97-6	**mercury and mercury compounds (inorganic)**
	including, but not limited to:
7487-94-7	mercuric chloride
593-74-8	methyl mercury
7440-02-0	**nickel and nickel compound**
	including, but not limited to:
373-02-4	nickel acetate
3333-67-3	nickel carbonate
13463-39-3	nickel carbonyl
12054-48-7	nickel hydroxide
1313-99-1	nickel oxide
12035-72-2	nickel subsulfide
1271-28-9	nickelocene
	refinery dust from the pyrometallurgical process
1336-36-3	**polychlorinated biphenyls (PCBs)**
32598-13-3	3,3’,4,4’-tetrachlorobiphenyl
70362-50-4	3,4,4’,5-tetrachlorobiphenyl
32598-14-4	2,3,3’,4,4’-pentachlorobiphenyl
74472-37-0	2,3,4,4’,5-pentachlorobiphenyl
31508-00-6	2,3’,4,4’,5-pentachlorobiphenyl
65510-44-3	~~2’,3,4,4’,5 pentachlorobiphenyl~~2,3',4,4',5'-pentachlorobiphenyl
57465-28-8	3,3’,4,4’,5-pentachlorobiphenyl
38380-08-4	2,3,3’,4,4’,5-hexachlorobiphenyl
69782-90-7	2,3,3’,4,4’,5’-hexachlorobiphenyl
52663-72-6	2,3’,4,4’,5,5’-hexachlorobiphenyl
32774-16-6	3,3’,4,4’,5,5’-hexachlorobiphenyl

CAS Number	**Substance**
39635-31-9	2,3,3'4,4',5,5'-heptachlorobiphenyl
	polycyclic aromatic hydrocarbons (PAHs)*
56-55-3	benzo[a]anthracene
50-32-8	benzo[a]pyrene
205-99-2	benzo[b]fluoranthene
207-08-9	benzo[k]fluoranthene
218-01-9	chrysene
53-70-3	dibenz[a,h]anthracene
193-39-5	indeno[1,2,3-c,d]pyrene

* Effective January 1, 2018

Appendix 1 – Executive Officer Approved PM_{10} Monitors

The Executive Officer may approve PM_{10} monitors that meeting the following requirements.

1. PM_{10} monitors must be continuous direct-reading near-real time monitors and shall monitor particulate matter less than 10 microns.
2. PM_{10} monitors must be equipped with:
   a. Omni-directional heated sampler inlet~~ with water trap~~;
   b. Sample pump;
   c. Volumetric flow controller;
   d. Enclosure; and
   e. Data logger capable of logging each data point with average concentration, time/date, and data point number.
3. PM_{10} monitors must have the following minimum performance standards:
   a. Range: 0 - 10,000 µg/m^3
   b. Accuracy: ±5% of reading ± precision
   c. Resolution: ~~0.1~~1.0 µg/m^3
   d. Measurement Cycle: User selectable (30 minute and 2 hour)
4. In order to ensure the validity of the PM_{10} measurements performed, there must be appropriate Quality Assurance/Quality Control (QA/QC). It is the responsibility of the owner or operator to adequately supplement QA/QC Plans to include the following critical features: instrument calibration, instrument maintenance, operator training, and daily instrument performance (span) checks.

Appendix 2 – Objectives and Effectiveness of Dust Control Measures Set-Forth in Subdivision (e)

Dust Control Measure	Objective	Effectiveness
(e)(1) Fencing and Windscreen Requirement	To minimize off-site fugitive dust emissions containing toxic air contaminants, provide a wind break, act as containment, provide security, and limit access to unauthorized persons.	Any dust control measure that is equally or more effective in minimizing off-site fugitive dust emissions containing toxic air contaminants that may result in exposure to the general public and will limit public access to the site.
(e)(2) Water Application	To minimize fugitive dust emissions containing toxic air contaminants from earth-moving activities.	Any dust control measure that is equally or more effective at preventing the generation of visible dust plumes from earth-moving activities.
(e)(3) Vehicle Movement	To minimize fugitive dust emissions containing toxic air contaminants from on-site vehicles and as vehicles are moving off-site.	Any dust control measure that is equally or more effective at preventing the generation of dust plumes from on-site vehicle movement and any fugitive dust that can be tracked out of the site that can result in exposure to the general public.
(e)(4) Stockpiles	To minimize fugitive dust emissions containing toxic air contaminants from stockpiles.	Any dust control measure that is equally or more effective at minimizing fugitive dust emissions containing toxic air contaminants from stockpiles and that will prevent the generation of dust plumes from stockpiles that can result

Dust Control Measure	Objective	Effectiveness
		in exposure to the general public.
(e)(5) Truck Loading	To minimize fugitive dust emissions containing toxic air contaminants from truck loading and truck movement.	Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust occurring during the loading of soils containing toxic air contaminants into trailers and physical containment or other mechanisms to minimize fugitive dust from escaping the trailer during transport.
(e)(6) Truck Unloading	To minimize fugitive dust emissions containing toxic air contaminants from truck unloading and truck movement.	Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust occurring during the unloading of soils containing toxic air contaminants.
(e)(8) Earth-Moving Activities at Certain Wind Speeds	To minimize fugitive dust emissions containing toxic air contaminants from high wind events.	Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust occurring during high wind events.
(e)(9) On-site Dust Control Supervisor	To require the on-site presence of a person that has specific training to ensure compliance with all Rule requirements.	Any measure that ensures the on-site presence of a person with training covering the same material as that covered by an SCAQMD Fugitive Dust Control Class and appropriate credentials to handle applicable toxic air contaminants and that can

Dust Control Measure	Objective	Effectiveness
		ensure compliance with all Rule requirements.
(e)(10) Application of Chemical Stabilizer During Periods of Inactivity	To minimize a dust plume or fugitive dust emissions containing toxic air contaminants from occurring on-site during periods of inactivity.	Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust emissions containing toxic air contaminants from occurring on-site during periods of inactivity.
(k)(3)/(k)(4) Direct Load into a Truck or Bin for Transport	To minimize a dust plume or fugitive dust emissions containing toxic air contaminants from truck loading and unloading.	Any dust control measure that is equally or more effective at preventing a dust plume or fugitive dust emissions containing toxic air contaminants from truck loading and unloading.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report
Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

December 2017

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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BACKGROUND

The South Coast Air Quality Management District (SCAQMD) is the lead air pollution agency in the South Coast Air Basin (Basin) and has jurisdiction over all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. The SCAQMD performs inspections of more than 27,000 facilities in the Basin and Coachella Valley, in addition to responding to thousands of public complaints regarding air quality.

Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants (Rule 1466) minimizes fugitive dust emissions containing arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls from sites that meet the rule's applicability requirements by establishing dust control measures that can be implemented during earth-moving activities. Applicable sites are those conducting earth-moving activities where the soil contains applicable toxic air contaminant(s) as determined and designated by the U.S. Environmental Protection Agency (U.S. EPA), California Department of Toxics Substances Control (DTSC), State Water Resources Control Board (State Water Board), or Regional Water Quality Control Board (Regional Water Board). Additionally, Rule 1466 has a provision for the Executive Officer to identify sites, based on a set of criteria, to be subject to the requirements of the rule. The rule establishes a PM_{10} ambient dust concentration limit and dust control measures. Notification to the Executive Officer is required prior to beginning earth-moving activities as well as when ambient PM_{10} dust concentration limits are exceeded. Additional requirements include, recordkeeping and signage. Rule 1466 allows alternative dust control measures, ambient dust concentration limits, signage, and other alternative provisions upon Executive Officer approval.

At the July 2017 Board Hearing, the SCAQMD Governing Board adopted Rule 1466. The adoption Resolution directed staff to return to the Governing Board as early as practicable considering impacts and staff resources, but no later than February 2018 with an amendment for the Board's consideration to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. Proposed Amended Rule 1466 (PAR 1466) expands the list of applicable toxic air contaminants consistent with the adoption Resolution and expands the rule's applicability to other government designated sites. Other amendments to PAR 1466 are provided to clarify existing provisions.

REGULATORY BACKGROUND

SCAQMD's regulatory structure for fugitive dust and particulate matter includes rules that address fugitive dust (Rule 403 – Fugitive Dust); volatile organic compounds (VOCs) contaminated soil (Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil); soil containing toxic air contaminant(s) (Rule 1466); and particulate matter and hexavalent chromium emissions from cement manufacturing facilities (Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities).

Rule 1166

Rule 1166 was adopted on August 5, 1988 and established requirements to control VOC emissions from excavating, grading, handling and treating VOC-contaminated soil as a result of leakages from storage or transfer operations, accidental spillage or other deposition. Although Rule 1166 targets VOC emission reductions, implementation of the rule also results in concurrent reductions

in toxic-VOCs such as benzene, toluene, xylene, and ethylbenzene, which are generally associated with petroleum products. The rule includes provisions for mitigation plans to limit VOC emissions, notification to the SCAQMD, and monitoring requirements; as well as measures to reduce VOC emissions during stockpiling and truck loading. Rule 1166 does not apply to sites with soils containing non-VOC toxics, such as metal toxic particulates and the toxic air contaminants covered under Rule 1466.

Rule 403

Rule 403 was adopted on May 7, 1976 and amended six times. The purpose of Rule 403 is to reduce particulate matter entrained in ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 limits particulate matter concentrations, when monitored, and contains control measures to limit fugitive dust. Rule 403 provides a menu of dust control guidance and options for the operator to select. Additional provisions, including more specific dust control measures, are included for large operations (> 50 acres) and for operations where fugitive dust concentrations exceed performance standards. Many sites with toxic air contaminant(s) in the soil are less than 50 acres, and therefore are not required to implement these additional and more specific dust control measures. Also, ambient dust monitoring is not always required under Rule 403. Even when monitoring is required, the 50 $\mu g/m^3$ PM_{10} ambient dust concentration limit may not be sufficiently health protective for toxic air contaminants.

Rule 1156

Rule 1156 was adopted on November 4, 2005 and established requirements to reduce particulate matter emissions and minimize hexavalent chromium emissions from cement manufacturing operations and properties. The rule includes provisions for visible emissions; material loading, unloading and transferring; cement manufacturing operations; material storage; air pollution control devices; internal roadways and areas; and track-out. Rule 1156 also has provisions for a Compliance Monitoring Plan; hexavalent chromium, PM_{10}, and wind monitoring; and source testing. Additional provisions include Operation and Maintenance procedures; reporting and recordkeeping; and requirements after facility closure. Rule 1156 is only applicable to cement manufacturing facilities, only addresses hexavalent chromium, and does not apply to all earth-moving activities.

PUBLIC PROCESS

PAR 1466 was developed through a public process. SCAQMD has held two working group meetings at the SCAQMD Headquarters in Diamond Bar on August 3, 2017 and September 12, 2017. The Working Group is composed of representatives from businesses, environmental groups, public agencies, and consultants. The purpose of the working group meetings is to discuss proposed concepts and work through the details of staff's proposal. Additionally, a Public Workshop was held on September 19, 2017.

PROPOSED AMENDED RULE 1466

PAR 1466 includes provisions to expand the applicability to other government designated sites, expand the list of applicable toxic air contaminants, and clarify existing provisions.

Applicability (Subdivision (b))

Effective January 1, 2018, PAR 1466 expands the applicability of the rule to include the owner or operator of Hazardous Material Release Sites, as defined in Health and Safety Code Section 25260, that have been designated and notified by county, local, or state regulatory agencies ~~pursuant to Health and Safety Code Section 25260~~. According to Health and Safety Code Section 25260, "'hazardous materials release site' or 'site' means any area, location, or facility where a hazardous material has been released or threatens to be released into the environment. 'Hazardous materials release site' does not include a site subject to a response and cleanup operation under Chapter 7.4 (commencing with Section 8670.1) of Division 1 of Title 2 of the Government Code or a corrective action under Part 6 (commencing with Section 46000) of Division 30 of the Public Resources Code." Health and Safety Code Sections 25261-25263 and 25265 defines "Site Designation Committee" and authorizes the committee, at the request of the responsible party for a hazardous materials release site, to designate an administering agency to oversee the site's investigation and remedial action. County, local, and state regulatory agencies include agencies such as environmental health departments, planning departments, fire departments, and public health offices and have the jurisdiction to supervise, oversee, or approve a site investigation and remedial action at a hazardous materials release site. Concern by stakeholders was raised that sites may avoid Rule 1466 by selecting a county, local, or regulatory agency to oversee a cleanup rather than selecting the U.S. EPA, DTSC, State Water Board, or Regional Water Board. Therefore, expanding the rule's applicability will ensure that earth-moving activities at these sites requiring cleanup of soil with applicable toxic air contaminants will also be applicable to Rule 1466.

Definitions (Subdivision (c))

The definition for Applicable Toxic Air Contaminants is proposed to be deleted and instead incorporated into the definition of Soil with Applicable Toxic Air Contaminant(s). Additionally, in order to be consistent with subdivision (b), the definition for Soil with Applicable Toxic Air Contaminant(s) includes soil that has been identified by a county, local, or state regulatory agency. The list of applicable toxic air contaminants for sites designated by the U.S. EPA, the DTSC, the State Water Board, the Regional Water Board or a county, local or state regulatory agency has been expanded and is listed in Table I of the proposed rule. Effective January 1, 2018, the list of applicable toxic air contaminants for sites designated by the Executive Officer has been expanded to include any toxic air contaminant listed in SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants, Table I or the California Code of Regulations, Section 93001. The applicable toxic air contaminants for sites designated by other regulatory agencies, include those that are commonly found at contaminated sites above background levels and have negative health effects. The list of applicable toxic air contaminants for sites designated by the Executive Officer is much broader and includes all toxic air contaminants identified in SCAQMD Rule 1401 and California Code of Regulations Section 93001 (see Appendix 1 of the staff report, Applicable Toxic Air Contaminants for Executive Officer Designated Sites), excluding volatile organic compounds which are subject to Rule 1166. Both references for toxic air contaminants are included because each list on its own does not include all the categories required by the adoption Resolution. Rule 1401 includes 11 dioxins, whereas Section 93001 of the California Code of Regulations only has one. With respect to metals, Section 93001 includes cobalt compounds and Rule 1401 does not. Section 93001 includes polycyclic organic matter with more than one benzene ring and a boiling point of equal to or greater than 100 degrees Celsius, while Rule 1401 specifies certain polycyclic aromatic hydrocarbons (PAHs). Rule 1401 does not include any pesticides, whereas Section

93001 includes several. Referencing both Rule 1401 and Section 93001 allows the Executive Officer to identify unique sites that contain hazardous materials that are not the common substances listed in PAR 1466 Table I. PAR 1466 exempts volatile organic compounds subject to Rule 1166 because volatile organic compounds are regulated under Rule 1166. Volatile organic compounds and particulates are handled differently in terms of procedures for clean-up and/or remediation and need to be handled separately. Therefore, if a site contains both volatile organic compounds and toxic particulates, the site will be subject to both rules.

Table I, Applicable Toxic Air Contaminants

To be consistent with SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants, Table I, Toxic Air Contaminants, the following changes were made to the current list of applicable toxic air contaminants:

- Arsenic is now listed as arsenic and arsenic compounds (inorganic), including, but not limited to: arsenic compounds (inorganic) and arsine.
- Cadmium is listed as cadmium and cadmium compounds.
- Hexavalent chromium is listed as chromium (hexavalent) and chromium compounds, including, but not limited to: barium chromate, calcium chromate, lead chromate, sodium dichromate, strontium chromate, and zinc chromate.
- Lead is listed as lead and lead compounds (inorganic, including elemental lead), including, but not limited to: lead compounds (inorganic), lead acetate, lead chromate, lead phosphate, and lead subacetate.
- Mercury is listed as mercury and mercury compounds (inorganic), including, but not limited to: mercuric chloride and methyl mercury.
- Nickel is listed as nickel and nickel compound, including, but not limited to: nickel acetate, nickel carbonate, nickel carbonyl, nickel hydroxide, nickel oxide, nickel subsulfide, nickelocene, and refinery dust from the pyrometallurgical process.
- Polychlorinated biphenyls is now listed as polychlorinated biphenyls (PCBs); 3,3’,4,4’ tetrachlorobiphenyl; 3,4,4’,5 tetrachlorobiphenyl; 2,3,3’,4,4’ pentachlorobiphenyl; 2,3,4,4’,5 pentachlorobiphenyl; 2,3’,4,4’,5 pentachlorobiphenyl; ~~2’,3,4,4’,5 pentachlorobiphenyl~~2,3',4,4',5'-pentachlorobiphenyl; 3,3’,4,4’,5 pentachlorobiphenyl; 2,3,3’,4,4’,5 hexachlorobiphenyl; 2,3,3’,4,4’,5’ hexachlorobiphenyl; 2,3’,4,4’,5,5’ hexachlorobiphenyl; 3,3’,4,4’,5,5’ hexachlorobiphenyl; and 2,3,3’4,4’,5,5’ heptachlorobiphenyl.

The adoption Resolution directed staff to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. Staff reviewed these categories and selected the compounds from each category that were commonly found at contaminated sites above background levels. The pesticides and herbicides that staff selected are chlordane and the dichlorodiphenyltrichloroethane (DDT) family of compounds. Staff did not include other metals because the original list of applicable toxic air contaminants covered the commonly found metals. Staff reviewed two years of data regarding cleanup projects and only found one site that would not be applicable to Rule 1466 because the site’s contaminant of concern was zinc. Dioxins were included to cover the category of bioaccumulative toxics. Staff did not include any semi-volatile organic compounds because those would fall under Rule 1166.

The following substances are proposed to be added and will be applicable effective January 1, 2018:

- Dioxins. These are classified as persistent organic pollutants because they are extremely resistant to environmental degradation. Dioxins are highly toxic and have been linked to cancer, developmental problems in children, reproductive and infertility problems in adults, miscarriages, damage to the immune system, and interference with hormones. For consistency, PAR 1466 lists the same dioxins as in Rule 1401, referring to them as dibenzo-p-dioxins (chlorinated), including: 2,3,7,8-tetrachlorodibenzo-p-dioxin; 1,2,3,7,8-pentachlorodibenzo-p-dioxin; 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin; 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin; 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin; 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin; 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin; total tetrachlorodibenzo-p-dioxin; total pentachlorodibenzo-p-dioxin; total hexachlorodibenzo-p-dioxin; and total heptachlorodibenzo-p-dioxin.
- Pesticides. Depending on the pesticide, exposure can cause a variety of adverse health effects ranging from irritation of the skin and eyes to more severe effects such as causing cancer, reproductive and developmental problems, and endocrine disruption. PAR 1466 Table I includes the pesticides that are commonly found at contaminated sites above background levels that have negative health effects. The pesticides are: chlordane, dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethylene (DDE), and dichlorodiphenyldichloroethane (DDD). In general, when a less commonly found pesticide is identified it occurs with one of these four pesticides.
- Polycyclic Aromatic Hydrocarbons (PAHs). Exposure to PAHs is linked to cancer, cardiovascular disease, and poor fetal development. The PAHs included in PAR 1466 are the ones with the highest risk factor and include: benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-c,d]pyrene.

The definition for Stabilized Surface has been modified to add that stabilization can be demonstrated by an applicable test method contained in Volumes I and II of SCAQMD's *Dust Control in Coachella Valley*. These stabilization test methods are the same as those found in SCAQMD's *Rule 403 Fugitive Dust Implementation Handbook*.

Monitoring Requirements (Subdivision (d))

Paragraph (d)(3) specifies the requirements for PM_{10} monitoring. PAR 1466 adds a provision, subparagraph (d)(3)(D), that requires all the PM_{10} monitors used at a site to be identical in: make and model; settings; calibration; configuration; and calibration, correction, and correlation factors. The term "settings" refers to the run parameters entered into the instrument such as: flow rate, humidity control, conditioning of sample air stream, logging mode and averaging period, run times, zeroing, and correction factor. "Calibrations" includes PM_{10}, flow, temperature, and pressure and also refers to calibration procedures and standards. "Configuration" refers to any of the accessories on the PM_{10} monitor such as the: inlet (omni directional, heated, cyclone, etc.), water trap, zero module, pump, and filter. The phrase "calibration, correction, and correlation factors" refers to any value that scales the concentration output. This provision was added to

ensure that the PM_{10} results from all of the instruments at one site are operated in the same manner, producing results that are as accurate as possible.

Rule 1466 Appendix 1 provides alternative Executive Officer approved PM_{10} monitor requirements. Currently, the requirement for the inlet is that it is omni-directional, heated, and has a water trap. PAR 1466 proposes to remove the water inlet requirement because the water trap is not necessary to correct for humidity as long as the inlet is heated. Currently, the performance standard for resolution is 0.1 $\mu g/m^3$. PAR 1466 proposes to change the resolution to 1.0 $\mu g/m^3$. Increasing the resolution from 0.1 to 1.0 $\mu g/m^3$ will increase the number of monitors that may be approved but will not affect the quality of the data.

Requirements to Minimize Fugitive Dust Emissions (Subdivision (e))

For clarification, subparagraph (e)(5)(D), replaces the term "freeboard" with the phrase "between the soil and the top of the truck bed" in the requirement to maintain at least six inches of space between the soil and the top of the truck while transporting within a site.

For consistency with paragraph (c)(16), subparagraph (e)(4)(F) includes stabilization test methods contained in Volumes I and II of SCAQMD's *Dust Control in Coachella Valley*.

Notification Requirements (Subdivision (f))

For the notification of intent to conduct earth-moving activities, subparagraph (f)(1)(G) requires the notification to include a description of the earth-moving activities and a schedule that includes the anticipated start and completion dates of earth-moving activities. PAR 1466 adds a requirement to include the estimated volume of soil with applicable toxic air contaminant(s). Knowing the volume of soil with applicable toxic air contaminant(s) will allow staff to know the extent of the earth-moving activities. Additionally, PAR 1466 adds subparagraph (f)(1)(I) which requires the notification to state any applicable exemption(s).

In order to clarify the notification provisions and be consistent with Rule 403, PAR 1466 added paragraph (f)(2) Notification Updates, which includes provisions to specify when a notification needs to be updated. Additionally, notifying SCAQMD of the changes allows compliance personnel to be present, if necessary, and ensures that the requirements of the rule are being followed. PAR 1466 proposes that notifications must be updated when there is a change in the start date of any earth-moving activity. If the starting date is changed to an earlier date, subparagraph (f)(2)(A) requires that the change must be reported to the SCAQMD at least 72 hours before any earth-moving activities begin. If the starting date is changed to a later date, subparagraph (f)(2)(B) requires that the change must be reported to the SCAQMD as the information becomes available, but no later than the original start date. Subparagraph (f)(2)(C) requires notifications to be updated when there is a change in a site's exemption status pursuant to subdivision (k). If a site's exemption status changes, the change must be reported to the SCAQMD as soon as the information becomes available, but no later than 48 hours after the information becomes available.

Currently, Rule 301 – Permitting and Associated Fees does not have a fee for Rule 1466 Notifications. Staff plans to include a fee for Rule 1466 Notifications when Rule 301 gets updated or amended. The fee will be similar to Rule 1149 and Rule 1166 Notification Fees (Rule 301,

subdivision (x)) for all notifications in subdivision (f), with the exception of those required under paragraph (f)(2) Notification Updates, which will not be subject to notification fees.

Signage Requirements (Subdivision (g))

PAR 1466 adds subparagraph (g)(1)(E) which allows the owner or operator or designating agency to list applicable toxic air contaminants on signage using 2.5 inch tall lettering if four inch tall lettering would cause the sign to exceed 48 inches by 96 inches. All other signage requirements set forth in paragraph (g)(1) must remain the same. This will allow the owner or operator or designating agency, in these limited circumstances, to use an alternative sign without having to request an alternative provision. If the owner or operator or designating agency wants to make additional changes, or if the sign still exceeds 48 inches by 96 inches using 2.5 inch tall lettering for the applicable toxic air contaminants, then they will need to request an alternative provision pursuant to paragraph (g)(2).

Additionally, in paragraph (g)(2), staff removed the four inch tall lettering requirement and included the requirement that the owner or operator or designating agency must include a proposed lettering height in the request for alternative signage. This change is consistent with subparagraph (g)(1)(E) and allows more flexibility for the owner or operator or designating agency.

Recordkeeping Requirements (Subdivision (h))

In order to enforce subparagraph (d)(3)(D), paragraph (h)(2) will also require records for: instrument make and model; settings; configuration; and calibration, correction, and correlation factors.

Executive Officer Designated Sites (Subdivision (i))

Currently, in order to determine whether or not a site is applicable to Rule 1466, the Executive Officer, with evidence that a site contains soil with applicable toxic air contaminant(s), will consult with U.S. EPA, DTSC, the State or Regional Water Boards, and/or local or state health agencies, and based on criteria specified in the rule. In order to be consistent with the new applicability, PAR 1466 adds that the Executive Officer will also consult with local, county, or state regulatory agencies. Additionally, subparagraph (i)(1)(A) has been added which allows the Executive Officer to consider a site's history, which includes current and previous operation(s) and use(s) and regulatory history, when making a determination. Site history will also be required to substantiate the request for an alternative PM_{10} limit pursuant to subparagraph (d)(2)(A) and a specific provision exemption pursuant to paragraph (k)(1).

Exemptions (Subdivision (k))

The exemption in paragraph (k)(1) allows the designating agency, in consultation with the Executive Officer, to exempt a site from one or more provisions in the rule. To be consistent with subdivision (b), PAR 1466 includes county, local, and state regulatory agencies as a designating agency with this authority.

Paragraph (k)(2) exempts earth-moving activities performed within enclosures vented to approved air pollution control equipment from certain provisions of Rule 1466. One of those exemptions is from subdivision (f), notification requirements; PAR 1466 proposes to remove this. These sites

are still applicable to Rule 1466 and notification allows compliance personnel to be present, if necessary, to ensure the requirements are being followed.

Paragraph (k)(3) exempts linear trenching for sewer projects that directly load soil with applicable toxic air contaminant(s) into a truck or bin for transport from certain provisions of Rule 1466. PAR 1466 proposes to include linear trenching for natural gas, power, and water projects, which are very similar to linear trenching for sewer projects. Fugitive dust emissions will not be significant since activities in one area will have a short timeframe and the soil will be directly loaded into a truck or bin for transport. Linear trenching for water projects on roadways that directly load soil with applicable toxic air contaminant(s) into trucks or bin for transport, shall be exempt from all requirements except:

- Paragraph (e)(2), adequately wet soil
- Paragraph (e)(3), vehicles
- Paragraph (e)(4), stockpiles
- Paragraphs (e)(5) and (e)(6), truck loading and unloading
- Paragraph (e)(7), spilled soil
- Paragraph (e)(8), wind speed
- Paragraph (e)(11), schools, early education centers, and joint use agreement properties
- Subdivision (f), notification requirements
- Subdivision (h), recordkeeping requirements
- Subdivision (i), Executive Officer designated sites

PAR 1466 adds the option for exemptions (k)(3) and (k)(4) for the owner or operator or designating agency to utilize an alternative to directly loading into a truck or bin for transport, provided it is approved by the Executive Officer pursuant to subdivision (j) and meets the same objective and effectiveness as direct loading, as listed in Appendix 2 of the rule.

POTENTIALLY IMPACTED SITES

A review of notifications of hazardous site cleanup actions by responsible regulatory agencies between 2015 and 2016 indicate approximately 20 sites would have been subject to PAR 1466 had it been in place during that two-year time period. For Rule 1466, based on the original list of eight applicable toxic air contaminants, staff estimated that approximately 8 sites per year would be impacted. ~~Therefore, PAR 1466's~~ The additional applicable toxic air contaminants in PAR 1466 will increase the number of affected sites by approximately 2 per year.

SOCIOECONOMIC ASSESSMENT

Affected Industries

The proposed amendments to PAR 1466 would expand the rule's applicability to other government designated sites and expand the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bioaccumlative toxics. These amendments would lead to an increased number of potentially affected sites and industries ~~than~~ as compared to those described in the Final Staff Report for Proposed Rule 1466.

A list of potentially impacted sites was developed based on a review of notifications of hazardous site cleanup actions within the SCAQMD's jurisdiction by responsible regulatory agencies

between 2015 and 2016.[1] Over the two-year period, a total of 20 sites would have been subject to PAR 1466 had it been in place during that time period. ~~Seven~~ Eight (~~3.5~~4 per year) of the 20 sites would have been potentially impacted by the proposed amendments (Table 1 of the Final Staff Report), and ~~13~~ 12 (~~6.5~~6 per year) would have been impacted by the current Rule 1466 that was adopted in July 2017. Therefore, this analysis assumed an average total of ten potentially impacted sites per year.

Table 1 of the Final Staff Report summarizes the industries associated with past sites where the soil contained one or more of the additional applicable toxic air contaminant(s) under PAR 1466. Notice that the industries of the current owner or responsible party of the sites are listed, and they may differ from the previous industrial operations that resulted in contamination at these sites. The real estate industry, specifically Lessors of Residential Buildings and Dwellings (coded 531110 under the North American Industry Classification System), would have had the greatest number of potentially impacted sites with the largest total acreage from 2015 through 2016. Other potentially impacted industries include rail transportation and waste management. The public administration sector would be also affected.

Table 1: Additional Potentially Affected Industries (Based on 2015 & 2016 Data)

Industry Classification	**6-digit Industry NAICS**	**# of Sites**	**Total Acreage**
Line-Haul Railroads	482111	1	3
Lessors of Residential Buildings and Dwellings	531110	3	85
Solid Waste Landfill	562212	1	38
Administration of Air and Water Resource and Solid Waste Management Programs	924110	1	17
Administration of Conservation Programs	924120	1	81
National Security	928110	1	n/a
Total		**~~7~~8**	**≥ 224**

Among the additional potentially impacted sites that are not operated by public agencies, no information was available from the 2016 Dun and Bradstreet data that could be used to classify their small business status.[2] However, based on the County Business Patterns data from U.S Census Bureau, about 99 percent of establishments in the Lessors of Residential Buildings and

[1] Appendix C to Draft Subsequent Environmental Assessment of PAR 1466 (released on October 13, 2017).

[2] The SCAQMD defines a "small business" in Rule 102 as, among other things, one which employs 10 or fewer persons and which earns $500,000 or less in gross annual receipts. For the purpose of qualifying for access to services from the SCAQMD's Small Business Assistance Office (SBAO), Rule 102 further defines a small business as a business with total gross annual receipts of $5 million or less, or with 100 or fewer employees. The federal Clean Air Act Amendments (CAAA) of 1990 and the federal Small Business Administration (SBA) also provide definitions of a small business. The CAAA classifies a business as a "small business stationary source" if it: (1) employs 100 or fewer employees, (2) does not emit more than 10 tons per year of either VOC or NOx, and (3) is a small business as defined by SBA. The federal SBA definitions of small businesses vary by six-digit NAICS codes. In general terms, it defines a small business as having no more than 500 employees for most manufacturing and mining industries, and no more than $7 million in average annual receipts for most nonmanufacturing industries.

Dwellings industry and 96 percent of establishments in the Solid Waste Landfill industry would be classified as small businesses using the federal Small Business Administration's definition.[3]

Compliance Cost

Due to the recent adoption of Rule 1466 in July 2017, staff elected to analyze the compliance cost of both the incremental cost of the proposed amendments and the total cost for the rule including the proposed amendments to provide further information to stakeholders.[4] In contrast to the incremental cost, which represents the amount of cost resulting only from the amendments, the total cost of the rule includes the estimated cost of the current Rule 1466 plus the proposed amendments. Compliance cost was estimated based on the same assumptions used in the Final Staff Report for Proposed Rule 1466. As such, it was assumed that a potentially impacted site would have an average land area of about eight acres and an average period of three months for earth-moving activities at the site.

As discussed above, staff used data from past sites to develop a reasonable scenario for potentially impacted sites. The cost impact of current Rule 1466 was analyzed based on an assumption of eight sites per year affected by this rule, and the proposed amendments would potentially affect two additional sites per year. This scenario also takes into account the fact that many sites may have already employed some of the control methods and activities required in PAR 1466 in accordance with existing rules and requirements from other agencies. For example, many sites have already put fencing and windscreens in place or PM_{10} monitors in accordance with DTSC requirements or vehicle egress measures and an onsite compliance supervisor in accordance with SCAQMD Rule 403. Staff calculated the percentage of sites which already use particular dust control measures, monitoring equipment, or undertake required activities in order to estimate the portion of PAR 1466 requirements which are incremental to this baseline.

The annual compliance cost for the current Rule 1466 was previously estimated at $731,000 and the estimated *incremental* annual compliance cost for the proposed amendments is about $182,000, bringing the total estimated compliance cost of PAR 1466 to nearly $913,000 (Table 2).[5] A range of estimated compliance cost for an average-sized site (i.e., about eight acres) was also calculated to provide further information about the potential cost that could be incurred by a single site. The lower bound of the range, with a total cost of approximately $31,000 per site per year, assumed that a potentially affected site has already employed an onsite dust control supervisor and installed equipment such as PM_{10} monitors and fencing with windscreens. The upper bound assumed that

[3] Geographic Area Series: County Business Patterns, 2015. US Census Bureau. For the four-county region. https://factfinder.census.gov/

[4] The cost assumptions made herein are based on the same data and information used for the Draft Subsequent Environmental Assessment (Draft SEA for PAR 1466; released on October 13, 2017). While the Draft SEA examines the maximum environmental impacts of compliance-related activities that could occur concurrently, the socioeconomic assessment typically analyzes, on an annual basis, the socioeconomic impacts of compliance-related activities, regardless of whether they could occur concurrently during the same period within any given year.

[5] In the Final Staff Report for Proposed Rule 1466, a total of eight potentially impacted sites per year was assumed based on a dataset over a longer time frame. Table 2 reports the total compliance cost for PAR 1466 based on the assumption of ten potentially impacted sites per year using the 2015-2016 data for past sites, as discussed above, and the difference between this total cost and the compliance cost estimated in the Final Staff Report for Proposed Rule 1466 was considered to be the incremental cost for the proposed amendments.

none of the required measures have been implemented, and the cost would amount to about $162,000 per site per year.

Notification fees for initial notifications and PM_{10} exceedances, will be proposed as part of an upcoming amendment to Rule 301. As previously discussed, updated notification will not be subject to fees. The proposed fees initial notifications and PM_{10} exceedances are expected to be similar to Rule 1149 and Rule 1166 Notification Fees (Rule 301, subdivision (x)), but the exact fee amounts will be determined during the rulemaking process for Rule 301. The proposed fees for initial notifications and PM_{10} exceedances are expected to be approximately $61.00 and have not been included in this estimate.

Table 2: Estimated Annual Compliance Cost

Activity or Equipment	Annual Compliance Cost					Range of Annual Compliance Cost Per Site	
	Annual Cost for Current Rule 1466[6]		Incremental Cost for Proposed Amendments		Total Cost for PAR 1466	Lower Bound	Upper Bound
PM_{10} monitors	$292,499	+	$73,125	=	$365,624	$0	$91,406
Sweeper with HEPA filter	$118,200	+	$29,550	=	$147,750	$14,775	$14,775
Water Truck	$107,520	+	$26,880	=	$134,400	$13,440	$13,440
Dust Control Supervisor	$97,952	+	$24,500	=	$122,452	$0	$15,561
Fencing (temporary)	$86,400	+	$21,600	=	$108,000	$0	$21,600
Water	$17,741	+	$4,435	=	$22,176	$2,218	$2,218
Fencing in of stockpiles (at schools)	$3,240	+	$0	=	$3,240	$0	$1,620
Notification signs	$2,880	+	$720	=	$3,600	$360	$360
Vehicle Egress (washed gravel)	$2,642	+	$660	=	$3,302	$0	$389
Speed limit signs	$616	+	$154	=	$770	$77	$77
Fence gate (temporary)	$500	+	$125	=	$625	$0	$125
Plastic Sheeting	$480	+	$120	=	$600	$0	$200
Total	**$730,670**	+	**$181,869**	=	**$912,540**	**$30,870**	**$161,770**

The items with relatively larger costs are PM_{10} monitors, a sweeper with HEPA filters, water trucks, temporary fencing and windscreen, and employing a dust control supervisor. Following is a description of the estimation and associated cost assumptions:

- **PM_{10} Monitors** cost was estimated based on an assumption of the purchase of two T640 model monitors with the 640X option (one upwind and one downwind) per site at $45,703 per monitor, based on a price quote from a local supplier. This would result in a cost of about $91,406 for each site that does not already use PM_{10} monitors. Based on prior site data, it was

[6] From Table 3 of the Draft Staff Report for Proposed Rule 1466, June 2017.

assumed that approximately 60% of sites already have PM_{10} monitors.[7] Note that this analysis does not consider any resale value the PM_{10} monitors may have after project completion, therefore representing an upper bound on the cost for this equipment. This also assumes that contractors that work on multiple projects will use the monitors at other Rule 1466 sites.

- **Sweeper with HEPA Filter** cost was estimated based on a price quote from a national supplier of $14,775 per unit for purchase. This analysis does not consider any resale value the sweeper may have after project completion, therefore representing an upper bound on the cost for this equipment.
- **Water Trucks** cost was estimated based on the assumption of one 4,000-5,000 gallon capacity water truck necessary to service an average size cleanup site at a rental rate of $4,480 per month, based on a price quote from a local supplier.
- **On-site Dust Control Supervisor** cost was estimated based on an annual salary of $46,800 from a job listing for construction supervisor in Los Angeles county and adjusted to account for the non-wage benefits[8], such as health benefits, considering a three month project period, and the fact that 30% of sites already employ supervisors that would satisfy this requirement.[9] This results in an incremental cost of about $15,561 for each site that does not already employ a dust control supervisor.
- **Fencing, windscreen, and gate (temporary)** costs were estimated based on an average eight acre site, that would have an approximately 600' x 600' perimeter, using a quote of a three month rental rate from a local supplier of $4,500 per 500 linear feet of temporary six foot fencing with windscreens, and adjusting for the desired number of linear feet. An additional $125 per site is included for fence gates. Based on about half of sites already having fencing with windscreens in place, this results in a cost of about $21,725 for a site without these structures already in place. This is a conservative estimate as the rule does allow fencing around the area where the earth moving activities will occur on site, which may represent a smaller portion of the entire site.
- **Water** costs were estimated based on the incremental water use required by the Rule 1466. Based on prior site data,[10] incremental water use was estimated to be about 1,700 cubic feet per site, per work day on average. As the majority of sites were located in Los Angeles county, the Tier 1 commercial water rate from Los Angeles Department of Water and Power of $1.999 per hundred cubic feet (hcf) was used to calculate the cost of water.[11] This results in a cost estimate of about $2,218 per average site.
- **Fencing in of Stockpiles** cost was estimated based on the assumption that about 180 linear feet of fencing would be necessary to surround a 400 cubic yard stockpile. This requirement is specific to schools, early education centers, and joint use agreement properties.
- **Notification signs** cost was estimated based on a price of $90/sign, assuming four signs for each site.

[7] See Table 1, Final Staff Report for Proposed Rule 1466, June 2017.

[8] Based on the ratio of Total Benefits to Wages and Salary on average for 2016 from Employer Cost of Employee Compensation, Bureau of Labor Statistics. https://www.bls.gov/web/ecec/ecsuphst.pdf

[9] The number of sites which already employ PM_{10} monitors or onsite dust control supervisor differs due to sites being subject to different requirements from different lead agencies.

[10] See Table 1, Final Staff Report for Proposed Rule 1466, June 2017.

[11] A site will pay different water rates depending on where it is located. Water rates from major water districts in each of the four counties in the air basin are examined, and the rate used to calculate cost is considered to be a good proxy for other Tier 1 rates in the region. A rate of about $2.04/hcf is found for City of Anaheim, $1.978/hcf for Western Municipal Water District in Riverside, and about $1.52/hcf for the San Bernardino Municipal Water District.

- **Vehicle Egress** cost was estimated based on the assumed use of washed gravel, which is the lowest cost option to fulfill this proposed requirement. The estimation assumed 21 tons of gravel at a price of $18.50 per ton and taking into account that 14% of sites have already employed vehicle egress measures.
- **Speed limit signs** cost was estimated based on a price of $19.25/sign from a national supplier, assuming four signs for each site.
- **Plastic Sheeting** cost was estimated based on a price of $200 for a 20' x 100' sheet of 10 millimeter plastic sheeting from a local supplier.

Job Impacts

It has been a standard practice for SCAQMD's socioeconomic impact assessments that, when the annual compliance cost is less than one million current U.S. dollars, the Regional Economic Impact Model 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 diminutive relative to the baseline regional economy. Since the annual incremental cost of compliance with Proposed Amended Rule 1466 are $182,000 and the total estimated cost of compliance with Rule 1466 is $913,000, a REMI analysis was not conducted.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented, if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of a negative declaration or environmental impact report once the secretary of the resources agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the secretary of resources agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), the SCAQMD typically prepares an Environmental Assessment (EA) to evaluate the environmental impacts for rule projects proposed for adoption or amendment.

PAR 1466 is considered a "project" as defined by CEQA. Analysis of PAR 1466 indicates that more toxic air contaminants are proposed to be added to the list of applicable toxic air contaminants without substantially revising the existing requirements that were included in Rule 1466 as adopted in July 2017. As such, SCAQMD staff has determined that PAR 1466 contains new information of substantial importance which was not known and could not have been known at the time the Final EA was certified for the adoption of Rule 1466 in July 2017 (referred to herein as the July 2017 Final EA). However, PAR 1466 is not expected to create new significant effects that were not discussed in the previous July 2017 Final EA. Thus, analysis of the proposed project indicates that the type of CEQA document appropriate for the proposed project is a Subsequent Environmental Assessment (SEA), in lieu of an EA. The SEA is a substitute CEQA document,

prepared in lieu of a Subsequent Negative Declaration with no significant impacts (CEQA Guidelines Section 15162(b)), pursuant to the SCAQMD's Certified Regulatory Program (CEQA Guidelines Section 15251(l); codified in SCAQMD Rule 110). The SEA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, prepared a Draft SEA pursuant to its Certified Regulatory Program. Because PAR 1466 was not expected to have statewide, regional, or areawide significance, a CEQA scoping meeting was not required and thus, was not held for the proposed project pursuant to Public Resources Code Section 21083.9(a)(2). Further, since no significant adverse impacts were identified, an alternatives analysis and mitigation measures were not required (CEQA Guidelines Section 15252(a)(2)(B)). The Draft SEA was released for a 32-day public review and comment period from October 13, 2017 to November 14, 2017. During the public comment period, the SCAQMD received one comment letter relative to the Draft SEA. All comments received during the public comment period on the analysis presented in the Draft SEA have ~~will~~ been responded to and included in an appendix to the Final SEA (Appendix E).

Since the release of the Draft SEA, minor modifications were made to PAR 1466. Staff has reviewed the modifications to PAR 1466 and concluded that none of the modifications constitute significant new information or a substantial increase in the severity of an environmental impact, nor provide new information of substantial importance relative to the draft document. In addition, revisions to PAR 1466 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these minor revisions do not require recirculation of the Draft SEA pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Thus, the Draft SEA has been revised to reflect the aforementioned modifications such that it is now a Final SEA.

The previously certified July 2017 Final EA, supporting documentation, and record of approval of the July 2017 adoption of Rule 1466 are available upon request by visiting the Public Information Center at SCAQMD Headquarters located at 21865 Copley Drive, Diamond Bar, CA 91765, by contacting Fabian Wesson, Public Advisor by phone at (909) 396-2039 or by email at PICrequests@aqmd.gov, or by visiting SCAQMD's website at www.aqmd.gov. The direct link to the July 2017 Final EA for Rule 1466 can be found at: http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2017/fea_1466.pdf.

Prior to making a decision on the adoption of PAR 1466, the SCAQMD Governing Board must review and certify the Final SEA, including responses to comments, as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1466.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity,

authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing, and in the staff report.

Necessity
Proposed Amended Rule 1466 is needed to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds and clarify existing provisions.

Authority
The SCAQMD Governing Board has authority to adopt amendments to Rule 1466 pursuant to the California Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41511, 41700, and 41706.

Clarity
Proposed Amended Rule 1466 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency
Proposed Amended Rule 1466 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions, or state or federal regulations.

Non-Duplication
Proposed Amended Rule 1466 will not impose the same requirements as any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD. SCAQMD Rule 403 has some similar provisions but there is minimal overlap between the two rules for applicable sites. Where there is overlap, the provisions in Proposed Amended Rule 1466 supersede those in Rule 403.

Reference
By adopting Proposed Amended Rule 1466, the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Section 41700 (nuisance), and Federal Clean Air Act Section 112 (Hazardous Air Pollutants), and Section 116 (Retention of State authority).

Rule Adoption Relative to Cost-Effectiveness
On October 14, 1994, the Governing Board adopted a resolution that requires staff to address whether rules being proposed for amendment are considered in the order of cost-effectiveness. The 2016 Air Quality Management Plan (AQMP) ranked, in the order of cost-effectiveness, all of the control measures for which costs were quantified. It is generally recommended that the most cost-effective actions be taken first. Although TXM-04 is a control measure that was included in the 2016 AQMP, Proposed Amended Rule 1466 was included in the 2016 AQMP as a toxic control measure and was not ranked relative to other criteria pollutant control measures in the 2016 AQMP.

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, sulphur oxides, oxides of nitrogen, and their precursors. Since Proposed Amended Rule 1466 is a toxic rule that is designed to reduce toxic air contaminants, the incremental cost effectiveness analysis requirement does not apply.

COMPARATIVE ANALYSIS

Health and Safety Code Section 40727.2 requires a comparative analysis of the proposed amended rule with any Federal or District rules and regulations applicable to the same source.

	Proposed Amended Rule 1466	Rule 403	Rule 1166	Rule 1157	Rule 1403	Rule 1156
Purpose	Control fugitive toxic air contaminant emissions during earth-moving activities	Reduce anthropogenic fugitive dust	Control of VOC emissions (including toxic VOCs) from earth-moving activities	Control PM_{10} emissions from aggregate activities	Limit asbestos emissions	Reduce particulate matter and hexavalent chromium emissions
Applicability	Designated cleanup sites with specified toxic air contaminants; Executive Officer designated cleanup sites based on a set of criteria	Any activity or anthropogenic condition capable of generating dust	VOC contaminated soils	Sand, gravel, quarried rock operations	Building demolition and renovation activities	Cement manufacturing operations and the property
Monitoring	Two-hour 25 $\mu g/m^3$ differential limit for PM_{10} emission; Meteorological monitoring	If monitored, five-hour 50 $\mu g/m^3$ differential limit for PM_{10} emission	Fifteen minute monitoring of VOC emissions	None	None	Hexavalent chromium monitoring, wind monitoring, and PM_{10} monitoring if owner/operator accrues three or more notices of violation for Rule 403 exceedance within 36-month period
General Controls	Perimeter fencing and windscreen	Perimeter fencing and windscreen	None	None	Removal procedures	None
	Application of dust suppressants during earth-moving activities	Adequately wet during earth-moving activities	None	None	Handling procedures	Application of dust suppressants
	Cease earth-moving operations during high wind conditions	During high wind conditions some requirements do not apply	None	None	None	Cease open handling of clinker material during high wind conditions

	Proposed Amended Rule 1466	Rule 403	Rule 1166	Rule 1157	Rule 1403	Rule 1156
	Onsite compliance supervisor	Onsite compliance supervisor (large sites only)	None	None	Onsite compliance supervisor	None
	Earth-moving not allowed during hours of operation or facility-sponsored activities when conducted on school, early education center, or joint use agreement properties	None	None	None	None	None
Vehicle Controls	Vehicle speed limit	Vehicle speed limit (large sites only)	None	Vehicle speed limit	Vehicle marking	Vehicle speed limit
	Stabilize road and parking surfaces	Stabilize road and parking surfaces	None	Stabilize road and parking surfaces	None	Stabilize or apply gravel pad to roads
	Clean departing vehicles	None	None	None	None	Truck cleaning on site
	Limited track out	Limited track out	None	Limited track out	None	No track out
	Vehicle egress	Vehicle egress	None	Vehicle egress	None	Vehicle egress
	No internal paved road sweeping provision	None	None	None	None	Sweep internal paved roads
Stockpile Controls	Limited size	None	None	Limited size	Leak-tight containers	None
	Adequately wet or chemically stabilized	Adequately wet or chemically stabilized	Adequately wet or chemically stabilized	Adequately wet or chemically stabilized	None	Apply chemical dust suppressant
	Covered during inactivity	None	Covered during inactivity	Apply chemical stabilizer during inactivity	None	Covered
	Daily inspection	None	Daily inspection	None	None	Records of status of inactive clinker stockpiles
	Segregate	None	Segregate	None	None	None
	Limited at schools, early education centers and joint use agreement properties	None	None	None	None	None

	Proposed Amended Rule 1466	Rule 403	Rule 1166	Rule 1157	Rule 1403	Rule 1156
	No freeboard requirement	None	None	None	None	Freeboard requirements
	No wind fence	None	None	None	None	Wind fence
Loading, Unloading and Transferring Controls	Adequately wet	Adequately wet	None	None	None	Apply dust suppressants as necessary
	Loading techniques	Loading techniques	None	None	None	Minimize height of drop
	Cover loads	Cover loads (contingency only)	Cover loads	None	None	Close cement truck hatches
	No requirement for enclosed system	None	None	None	None	Conducted in enclosed system that is vented to SCAQMD permitted air pollution control device
	No requirement for enclosed conveying systems and transfer points	None	None	None	None	Cover or enclose all conveying systems and enclose all transfer points
	No requirement for belt conveying system	None	None	None	None	Dust curtains, shrouds, belt scrapers, and gaskets along belt conveying system
Notification	Prior to commencing earth-moving activities	Prior to commencing earth-moving activities (large sites only)	Prior to commencing earth-moving activities	None	Prior to commencing asbestos handling	None
	Exceedances of hourly PM_{10} limit	None	None	None	Changes in quantity or schedule	Exceedance of hexavalent chromium, failing source testing compliance limits
	No advisory flyer requirement	None	None	None	None	Fugitive Dust Advisory flyer
Signage	Entrances and along perimeter	Entrances and along perimeter (large sites only)	None	None	Entrances and along perimeter	None

	Proposed Amended Rule 1466	Rule 403	Rule 1166	Rule 1157	Rule 1403	Rule 1156
Recordkeeping	Monitoring results, dust control actions taken, stockpile inspections, volume of soil removed, transport information, complaints	Dust control actions taken (large sites only)	VOC concentration readings; stockpile inspections, transport information	Dust control actions, transport information	Control actions, survey data, notifications, training information, transport information	Dust control and cleaning activities, operation and production records, test reports, equipment records, material handling, monitoring data, maintenance activities, clinker pile reclamation, vehicle traffic

REFERENCES

Air Monitoring Methods - Criteria Pollutants, https://www3.epa.gov/ttn/amtic/criteria.html, U.S. EPA, accessed May 31, 2017

"Air Toxics Hot Spots Program, Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments", Office of Environmental Health Hazard Assessment, February 2015

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"Quality Assurance Handbook for Air Pollution Measurement Systems, Volume IV: Meteorological Measurements", U.S. EPA, March 2008

"Rule 403 Fugitive Dust Implementation Handbook", South Coast Air Quality Management District, June 2007

Site Cleanup Programs, http://www.waterboards.ca.gov/water_issues/programs/scp/, California Environmental Protection Agency, accessed May 31, 2017

Superfund: National Priorities List (NPL), https://www.epa.gov/superfund/superfund-national-priorities-list-npl, U.S. EPA, accessed May 31, 2017

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
75-07-0	Acetaldehyde	acetaldehyde
60-35-5	Acetamide	acetamide
75-05-8	Acetonitrile	
98-86-2	Acetophenone	
53-96-3	2-Acetylaminofluorene	
107-02-8	Acrolein	acrolein
79-06-1	Acrylamide	acrylamide (or propenamide)
79-10-7	Acrylic acid	acrylic acid
107-13-1	Acrylonitrile	acrylonitrile (or vinyl cyanide)
107-05-1	Allyl chloride	allyl chloride
117-79-3		aminoanthraquinone, 2-
7664-41-7		ammonia
92-67-1	4-Aminobiphenyl	
62-53-3	Aniline	aniline
90-04-0	o-Anisidine	
1332-21-4	Asbestos	asbestos
71-43-2	Benzene (including benzene from gasoline)	benzene (including benzene from gasoline)
92-87-5	Benzidine	benzidine (and its salts)
98-07-7	Benzotrichloride	
100-44-7	Benzyl chloride	benzyl chloride
92-52-4	Biphenyl	
117-81-7	Bis (2-ethylhexyl) phthalate (DEHP)	bis(2-ethylhexyl)phthalate (DEHP)
542-88-1	Bis (chloromethyl) ether	bis(chloromethyl)ether
7789-30-2		bromine pentafluoride
75-25-2	Bromoform	
106-99-0	1,3-Butadiene	butadiene, 1,3-
156-62-7	Calcium cyanamide	
105-60-2	Caprolactam	caprolactum
133-06-2	Captan	
63-25-2	Carbaryl	
75-15-0	Carbon disulfide	carbon disulfide
56-23-5	Carbon tetrachloride	carbon tetrachloride (or tetrachloromethane)
463-58-1	Carbonyl sulfide	carbonyl sulfide
120-80-9	Catechol	
133-90-4	Chloramben	
12789-03-6	Chlordane	
7782-50-5	Chlorine	chlorine
10049-04-4		chlorine dioxide

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
79-11-8	Chloroacetic acid	
532-27-4	2-Chloroacetophenone	
108-90-7	Chlorobenzene	chlorobenzene
510-15-6	Chlorobenzilate	
		chlorofluorocarbons
75-43-4		dichlorodifluoromethane (CFC-12)
75-69-4		trichlorofluoromethane (CFC-11)
76-13-1		trichlorotrifluoroethane (CFC-113)
67-66-3	Chloroform	chloroform (trichloromethane)
95-83-0		chloro-o-phenylenediamine, 4-
95-69-2		chloro-o-toluidine, p-
107-30-2	Chloromethyl methyl ether	
		Chlorophenols
95-57-8		chlorophenol, 2-
87-86-5		pentachlorophenol
76-06-2		chloropicrin
126-99-8	Chloroprene	chloroprene
120-71-8		cresidine, p-
1319-77-3	Cresols/Cresylic acid (isomers and mixture)	**cresols/cresylic acid (all isomers and mixture)**
95-48-7	o-Cresol	cresol, o-
108-39-4	m-Cresol	cresol, m-
106-44-5	p-Cresol	cresol, p-
98-82-8	Cumene	
135-20-6		cupferron
94-75-7	2,4-D, salts and esters	
72-55-9	DDE	
		dialkylnitrosamines
924-16-3		nitrosodi-n-butylamine, n-
621-64-7		nitrosodi-n-propylamine, n-
55-18-5		nitrosodiethylamine, n-
10595-95-6		nitrosomethylethylamine, n-
615-05-4		diaminoanisole, 2,4- (sulfate)
334-88-3	Diazomethane	
132-64-9	Dibenzofurans	**dibenzofurans (chlorinated)**
5120-73-19		tetrachlorodibenzofuran, 2,3,7,8-
57117-41-6		pentachlorodibenzofuran, 1,2,3,7,8-
57117-31-4		pentachlorodibenzofuran, 2,3,4,7,8-

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
70648-26-9		hexachlorodibenzofuran, 1,2,3,4,7,8-
57117-44-9		hexachlorodibenzofuran, 1,2,3,6,7,8-
72918-21-9		hexachlorodibenzofuran, 1,2,3,7,8,9-
60851-34-5		hexachlorodibenzofuran, 2,3,4,6,7,8-
67562-39-4		heptachlorodibenzofuran, 1,2,3,4,6,7,8-
55673-89-7		heptachlorodibenzofuran, 1,2,3,4,7,8,9-
39001-02-0		octachlorodibenzofuran, 1,2,3,4,5,6,7,8
55722-27-5		total tetrachlorodibenzofuran
30402-15-4		total pentachlorodibenzofuran
55684-94-1		total hexachlorodibenzofuran
38998-75-3		total heptachlorodibenzofuran
		dibenzo-p-dioxins (chlorinated)
1746-01-6		tetrachlorodibenzo-p-dioxin, 2,3,7,8-
40321-76-4		pentachlorodibenzo-p-dioxin, 1,2,3,7,8-
39227-28-6		hexachlorodibenzo-p-dioxin, 1,2,3,4,7,8-
57653-85-7		hexachlorodibenzo-p-dioxin, 1,2,3,6,7,8-
19408-74-3		hexachlorodibenzo-p-dioxin, 1,2,3,7,8,9-
35822-46-9		heptachlorodibenzo-p-dioxin, 1,2,3,4,6,7,8-
3268-87-9		octachlorodibenzo-p-dioxin, 1,2,3,4, 6,7,8,9-
41903-57-5		total tetrachlorodibenzo-p-dioxin
36088-22-9		total pentachlorodibenzo-p-dioxin
34465-46-8		total hexachlorodibenzo-p-dioxin
37871-00-4		total heptachlorodibenzo-p-dioxin
		total dioxins, with individual isomers reported
		total dioxins, without individual isomers reported
96-12-8	1,2-Dibromo-3-chloropropane	dibromo-3-chloropropane, 1,2- (DBCP)
84-74-2	Dibutylphthalate	
106-46-7	1,4-Dichlorobenzene (p)	dichlorobenzene, 1,4- (or p-dichlorobenzene)
91-94-1	3,3-Dichlorobenzidene	dichlorobenzidine, 3,3
111-44-4	Dichloroethyl ether (Bis (2-chloroethyl) ether)	bis(2-chloroethyl)ether (DCEE)
542-75-6	1,3-Dichloropropene	
62-73-7	Dichlorvos	
9901 (emittant ID)		diesel PM – diesel particulate matter from diesel-fueled internal combustion engine exhaust
111-42-2	Diethanolamine	
91-66-7	N.N-Diethyl aniline (N.N-Dimethylaniline)	
64-67-5	Diethyl sulfate	
119-90-4	3,3-Dimethoxybenzidine	

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
60-11-7	Dimethyl aminoazobenzene	dimethylaminoazobenzene, p-
119-93-7	3,3-Dimethyl benzidine	
79-44-7	Dimethyl carbamoyl chloride	
68-12-2	Dimethyl formamide	dimethylformamide (N,N-)
57-14-7	1,1-Dimethyl hydrazine	
131-11-3	Dimethyl phthalate	
77-78-1	Dimethyl sulfate	
534-52-1	4,6-Dinitro-o-cresol, and salts	
51-28-5	2,4-Dinitrophenol	
121-14-2	2,4-Dinitrotoluene	dinitrotoluene, 2,4-
123-91-1	1,4-Dioxane (1,4-Diethyleneoxide)	dioxane, 1,4- (or 1,4-diethylene dioxide)
122-66-7	1,2-Diphenylhydrazine	hydrazobenzene (or 1,2-diphenylhydrazine)
106-89-8	Epichlorohydrin (1-Chloro-2,3-epoxypropane)	epichlorohydrin (or 1-chloro-2,3-epoxypropane)
106-88-7	1,2-Epoxybutane	epoxybutane,1,2-
140-88-5	Ethyl acrylate	ethyl acrylate
100-41-4	Ethyl benzene	ethyl benzene
51-79-6	Ethyl carbamate (Urethane)	urethane (or ethyl carbamate)
75-00-3	Ethyl chloride (Chloroethane)	ethyl chloride (or chloroethane)
106-93-4	Ethylene dibromide (Dibromoethane)	ethylene dibromide (or 1,2-dibromoethane)
107-06-2	Ethylene dichloride (1,2-Dichloroethane)	ethylene dichloride (or 1,2-dichloroethane)
107-21-1	Ethylene glycol	
151-56-4	Ethylene imine (Aziridine)	
75-21-8	Ethylene oxide	ethylene oxide (or 1,2-epoxyethane)
96-45-7	Ethylene thiourea	ethylene thiourea
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)	dichloroethane, 1,1-
1101		Fluorides (except hydrogen fluoride, listed separately)
50-00-0	Formaldehyde	formaldehyde
		gasoline vapors
111-30-8		glutaraldehyde
76-44-8	Heptachlor	
118-74-1	Hexachlorobenzene	hexachlorobenzene
87-68-3	Hexachlorobutadiene	
608-73-1 319-85-6 319-85-7		**hexachlorocyclohexanes (mixed or technical grade)** hexachlorocyclohexane, alpha hexachlorocyclohexane, beta
77-47-4	Hexachlorocyclopentadiene	hexachlorocyclopentadiene
67-72-1	Hexachloroethane	

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
822-06-0	Hexamethylene-1,6-diisocyanate	
680-31-9	Hexamethylphosphoramide	
110-54-3	Hexane	hexane
302-01-2	Hydrazine	hydrazine
10035-10-6		hydrogen bromide (HBR)
74-90-8		hydrogen cyanide
7783-07-5		hydrogen selenide
7783-06-4		hydrogen sulfide
7647-01-0	Hydrochloric acid	hydrochloric acid (or hydrogen chloride)
7664-39-3	Hydrogen fluoride (Hydrofluoric acid)	hydrofluoric acid (or hydrogen fluoride)
123-31-9	Hydroquinone	
78-59-1	Isophorone	isophrone
67-63-0		isopropyl alcohol
58-89-9	Lindane (all isomers)	hexachlorocyclohexane, gamma- (lindane)
108-31-6	Maleic anhydride	maleic anhydride
67-56-1	Methanol	methanol (methyl alcohol)
72-43-5	Methoxychlor	
74-83-9	Methyl bromide (Bromomethane)	methyl bromide (or bromomethane)
74-87-3	Methyl chloride (Chloromethane)	
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)	methyl chloroform (or 1,1,1-trichloroethane)
78-93-3	Methyl ethyl ketone (2-Butanone)	methyl ethyl ketone
60-34-4	Methyl hydrazine	
74-88-4	Methyl iodide (Iodomethane)	
108-10-1	Methyl isobutyl ketone (Hexone)	
624-83-9	Methyl isocyanate	methyl isocyanate
80-62-6	Methyl methacrylate	methyl methacrylate
1634-04-4	Methyl tert butyl ether	methyl tert-butyl ether
101-14-4	4,4-Methylene bis(2-chloroaniline)	methylene bis(2-chloroaniline), 4,4- (MOCA)
75-09-2	Methylene chloride (Dichloromethane)	methylene chloride (or dichloromethane)
101-68-8	Methylene diphenyl diisocyanate (MDI)	methylene diphenyl diisocyanate
101-77-9	4,4-Methylenedianiline	methylene dianiline, 4,4’- (and its dichloride)
90-94-8		michler's ketone
1135		mineral fibers (other than man-made)
91-20-3	Naphthalene	
7697-37-2		nitric acid
98-95-3	Nitrobenzene	nitrobenzene
92-93-3	4-Nitrobiphenyl	
100-02-7	4-Nitrophenol	

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
79-46-9	2-Nitropropane	nitrosodimethylamine, n-
759-73-9		nitroso-n-ethylurea, n-
684-93-5	N-Nitroso-N-methylurea	nitroso-n-methylurea, n-
62-75-9	N-Nitrosodimethylamine	
86-30-6		nitrosodiphenylamine, n-
156-10-5		nitrosodiphenylamine, p-
59-89-2	N-Nitrosomorpholine	nitrosomorpholine, n-
56-38-2	Parathion	
100-75-4		nitrosopiperidine, n-
930-55-2		nitrosopyrrolidine, n-
108171-26-2		paraffins, chlorinated (average chain length, c12; approx. 60% cl by weight)
82-68-8	Pentachloronitrobenzene (Quintobenzene)	
201-778-6	Pentachlorophenol	
108-95-2	Phenol	phenol
106-50-3	p-Phenylenediamine	
75-44-5	Phosgene	phosgene
7803-51-2	Phosphine	phosphine
7664-38-2		phosphoric acid
7723-14-0 12185-10-3	Phosphorus	**phosphorus and phosphorus compounds**
85-44-9	Phthalic anhydride	phthalic anhydride
1336-36-3	Polychlorinated biphenyls (Aroclors)	**polychlorinated biphenyls (PCBs)**
32598-13-3		3,3’,4,4’ Tetrachlorobiphenyl
70362-50-4		3,4,4’,5 Tetrachlorobiphenyl
32598-14-4		2,3,3’,4,4’ Pentachlorobiphenyl
74472-37-0		2,3,4,4’,5 Pentachlorobiphenyl
31508-00-6		2,3’,4,4’,5 Pentachlorobiphenyl
65510-44-3		~~2’,3,4,4’,5 pentachlorobiphenyl~~2,3',4,4',5'-Pentachlorobiphenyl
57465-28-8		3,3’,4,4’,5 Pentachlorobiphenyl
38380-08-4		2,3,3’,4,4’,5 Hexachlorobiphenyl
69782-90-7		2,3,3’,4,4’,5’ Hexachlorobiphenyl
52663-72-6		2,3’,4,4’,5.5’ Hexachlorobiphenyl
32774-16-6		3,3’,4,4’,5,5’ Hexachlorobiphenyl
39635-31-9		2,3,3’4,4’,5,5’ Heptachlorobiphenyl
7758-01-2		potassium bromate
1120-71-4	1,3-Propane sultone	propane sultone, 1,3-
57-57-8	beta-Propiolactone	

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
123-38-6	Propionaldehyde	
114-26-1	Propoxur (Baygon)	
78-87-5	Prophylene dichloride (1,2-Dichloropropane)	
115-07-1		propylene
107-98-2		propylene glycol methyl ether
75-56-9	Propylene oxide	propylene oxide (or 1,2-epoxy propane)
75-55-8	1,2-Propylenimine (2-Methylaziridine)	
91-22-5	Quinoline	
106-51-4	Quinone	
1310-73-2		sodium hydroxide
100-42-5	Styrene	tetrachlorodibenzo-p-dioxin, 2,3,7,8-, styrene (or vinyl benzene)
96-09-3	Styrene oxide	
7664-93-9		sulfuric acid (and oleum)
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin	
79-34-5	1,1,2,2-Tetrachloroethane	tetrachloroethane, 1,1,2,2-
127-18-4	Tetrachloroethylene (Perchloroethylene)	perchloroethylene (or tetrachloroethylene)
62-55-5		thioacetamide
7550-45-0	Titanium tetrachloride	diaminotoluene, 2,4-
108-88-3	Toluene	toluene (or methyl benzene)
95-80-7	2,4-Toluene diamine	
584-84-9	2,4-Toluene diisocyanate	toluene-2,4-diisocyanate
91-08-7		toluene-2,6-diisocyanate
95-53-4	o-Toluidine	
8001-35-2	Toxaphene (chlorinated camphene)	
120-82-1	1,2,4-Trichlorobenzene	
79-00-5	1,1,2-Trichloroethane	trichloroethane, 1,1,2-
79-01-6	Trichloroethylene	trichloroethylene
95-95-4	2,4,5-Trichlorophenol	
88-06-2	2,4,6-Trichlorophenol	trichlorophenol, 2,4,6-tetrachlorophenols (TECPH)
121-44-8	Triethylamine	triethylamine
1582-09-8	Trifluralin	
540-84-1	2,2,4-Trimethylpentane	
7440-62-2		vanadium (fume or dust)
1314-62-1		vanadium pentoxide
108-05-4	Vinyl acetate	vinyl acetate
593-60-2	Vinyl bromide	dichloroethylene, 1,1- (see vinylidene chloride)

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
75-01-4	Vinyl chloride	vinyl chloride (or chloroethylene)
75-35-4	Vinylidene chloride (1,1-Dichloroethylene)	vinylidene chloride (dichloroethylene, 1,1-)
1330-20-7 95-47-6 108-38-3 106-42-3	Xylenes (isomers and mixture) o-Xylenes m-Xylenes p-Xylenes	**xylenes (isomers and mixture)** xylene, o- xylene, m- xylene, p-
	Antimony Compounds	
7440-38-2 7784-42-1	Arsenic Compounds (inorganic including arsine)	**arsenic and arsenic compounds (inorganic)** including, but not limited to: arsenic compounds (inorganic) arsine
7440-41-7	Beryllium Compounds	beryllium and beryllium compounds
7440-43-9	Cadmium Compounds	cadmium and cadmium compounds
	Chromium Compounds	
18540-29-9 10294-40-3 13765-19-0 7758-97-6 10588-01-9 7789-06-2 13530-65-9 1333-82-0		**chromium (hexavalent) and chromium compounds** including, but not limited to: barium chromate calcium chromate lead chromate sodium dichromate strontium chromate zinc chromate chromic trioxide
	Cobalt Compounds	
7440-50-8		copper and copper compounds
	Coke Oven Emissions	
	Cyanide Compounds [FN1]	
 107-21-1 111-76-2 110-80-5 111-15-9 109-86-4 110-49-6	Glycol ethers [FN2]	**glycol ethers (and their acetates)** ethylene glycol ethylene glycol butyl ether ethylene glycol ethyl ether ethylene glycol ethyl ether acetate ethylene glycol methyl ether ethylene glycol methyl ether acetate
7439-92-1	Lead Compounds	**lead and lead compounds (inorganic, including elemental lead)** including, but not limited to: lead compounds (inorganic)

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
301-04-2		lead acetate
7758-97-6		lead chromate
7446-27-7		lead phosphate
1335-32-6		lead subacetate
		lead compounds (other than inorganic)
7439-96-5	Manganese Compounds	manganese and manganese compounds
7439-97-6	Mercury Compounds	**mercury and mercury compounds (inorganic)**
		including, but not limited to:
7487-94-7		mercuric chloride
593-74-8		methyl mercury
	Fine mineral fibers [FN3]	
7440-02-0	Nickel Compounds	**nickel and nickel compounds:**
		including, but not limited to:
373-02-4		nickel acetate
3333-67-3		nickel carbonate
13463-39-3		nickel carbonyl
12054-48-7		nickel hydroxide
1313-99-1		nickel oxide
12035-72-2		nickel subsulfide
1271-28-9		nickelocene
		refinery dust from the pyrometallurgical process
		polycyclic aromatic hydrocarbons (PAHs)
56-55-3		benz[a]anthracene
50-32-8		benzo[a]pyrene
205-99-2		benzo[b]fluoranthene
205-82-3		benzo[j]fluoranthene
207-08-9		benzo[k]fluoranthene
218-01-9		chrysene
226-36-8		dibenz[a,h]acridine
224-42-0		dibenz[a,j]acridine
53-70-3		dibenz[a,h]anthracene
192-65-4		dibenzo[a,e]pyrene
189-64-0		dibenzo[a,h]pyrene
189-55-9		dibenzo[a,i]pyrene
191-30-0		dibenzo[a,l]pyrene
194-59-2		dibenzo[c,g]carbazole, 7h-
57-97-6		dimethylbenz[a]anthracene, 7,12-
42397-64-8		dinitropyrene, 1,6-

APPENDIX 1: Applicable Toxic Air Contaminants for Executive Officer Designated Sites

CAS Number	California Code of Regulations 93001[1]	SCAQMD Rule 1401
42397-65-9		dinitropyrene, 1,8-
193-39-5		indeno[1,2,3-cd]pyrene
56-49-5		methylcholanthrene, 3-
3697-24-3		methylchrysene, 5-
91-20-3		naphthalene
602-87-9		nitroacenaphthene, 5-
2043937		nitrochrysene, 6-
607-57-8		nitrofluorene, 2-
5522-43-0		nitropyrene, 1-
57835-92-4		nitropyrene, 4-
1150/1151		polycyclic aromatic hydrocarbons (PAHs), total
	Polycyclic Organic Matter [FN4]	
	Radionuclides (including radon) [FN5]	
7782-49-2	Selenium Compounds	**selenium and selenium compounds**
		other than hydrogen selenide
7440-66-6		**zinc and zinc compounds**
		including, but not limited to:
1314-13-2		zinc oxide

1: For all listing above which contain the word “compounds” and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc) as part of that chemical's infrastructure.

[FN1]

X ><<super>>1 CN where X=HN <<super>>1 or any other group where a formal dissociation may occur. For example KCN or Ca(CN) 2

[FN2]

includes mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol (R(OCH 2 CH 2) n -OR <<super>>1 where

[FNn]

= 1,2 or 3

[FNR]

= alkyl or aryl groups

[FNR]

><<super>>1 = R, H, or groups which, when removed, yield glycol ethers with the structure; R(OCH sub2 CH) subn -OH. Polymers are excluded from the glycol category.

[FN3]

includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.

[FN4]

includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 degrees C

[FN5]

a type of atom which spontaneously undergoes radioactive decay.

APPENDIX 2: COMMENTS AND RESPONSES

Comment Letter #1
Los Angeles Department of Water and Power
October 2, 2017

Los Angeles Department of Water & Power

ERIC GARCETTI
Mayor

Commission
MEL LEVINE, *President*
WILLIAM W. FUNDERBURK JR., *Vice President*
JILL BANKS BARAD
CHRISTINA E. NOONAN
AURA VASQUEZ
BARBARA E. MOSCHOS, *Secretary*

DAVID H. WRIGHT
General Manager

October 2, 2017

Ms. Uyen-Uyen Vo
South Coast Air Quality Management District
PO Box 4830
Diamond Bar, CA 91765-0830

Dear Ms. Uyen-Uyen Vo,

Subject: Los Angeles Department of Water and Power's Comments on Proposed Rule 1466

The Los Angeles Department of Water and Power (LADWP) appreciate the opportunity to review and comment on Proposed Amended Rule 1466. LADWP requests the addition of "power projects" to Section (k)(3). LADWP performs linear trenching for both water and power projects in order to increase system reliability. This would allow LADWP to perform maintenance on underground transmission lines without disrupting service.

The proposed change is indicated in bold and underlined:

"(k) Exemptions (3) Linear trenching for sewer, water, **and power** projects on roadways with soil with applicable toxic air contaminant(s), directly loaded into a truck or bin for transport, shall be exempt from all requirements except: paragraphs (e)(2) through (e)(8), paragraph (e)(11), and subdivisions (f), (h), and (i)."

If you have any questions or would like additional information, please contact me at (213) 367-0409.

Sincerely,

Jodean Giese

Jodean Giese
Manager of Air Quality

JM:vf
c: Joseph Maxey

Putting Our Customers First

111 N. Hope Street, Los Angeles, California 90012-2607 *Mailing Address:* Box 51111, Los Angeles, CA 90051-5700
Telephone (213) 367-4211 www.LADWP.com

Response to Comment Letter #1:

Thank you for the suggestion, staff has clarified the rule language to include an exemption for linear trenching for power projects in paragraph (k)(3).

ATTACHMENT H

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Subsequent Environmental Assessment for Proposed Amended Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants

November 2017

SCAQMD No. 05122017SW/10062017RB
State Clearinghouse No: 2017051046

Executive Officer
Wayne Nastri

Deputy Executive Officer
Planning, Rule Development and Area Sources
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Assistant Deputy Executive Officer
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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
GOVERNING BOARD

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Cities of Los Angeles County/Eastern Region

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EXECUTIVE OFFICER:
WAYNE NASTRI

PREFACE

This document constitutes the Final Subsequent Environmental Assessment (SEA) for Proposed Amended Rule (PAR) 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants. A Draft SEA was released for a 32-day public review and comment period from October 13, 2017 to November 14, 2017. Analysis of PAR 1466 in the Draft SEA did not result in the identification of any environmental topic areas that would be significantly adversely affected. SCAQMD received one comment letter relative to the analysis in the Draft SEA. The comment letter received relative to the Draft SEA and the response is included in Appendix E of this Final SEA.

In addition, subsequent to release of the Draft SEA, modifications were made to PAR 1466. To facilitate identification, modifications to the document are included as <u>underlined text</u> and text removed from the document is indicated by ~~strikethrough~~. To avoid confusion, minor formatting changes are not shown in underline or strikethrough mode.

Staff has reviewed the modifications to PAR 1466 and concluded that none of the revisions constitute: 1) significant new information; 2) a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the draft document. In addition, revisions to the proposed project in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the document pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Therefore, this document now constitutes the Final SEA for PAR 1466.

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CHAPTER 1

PROJECT DESCRIPTION

Introduction

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INTRODUCTION

The California Legislature created the South Coast Air Quality Management District (SCAQMD) in 1977[1] as the agency responsible for developing and enforcing air pollution control rules and regulations in the South Coast Air Basin (Basin) and portions of the Salton Sea Air Basin (SSAB) and Mojave Desert Air Basin. By statute, the SCAQMD is required to adopt an air quality management plan (AQMP) demonstrating compliance with all federal and state ambient air quality standards for the areas under the jurisdiction of the SCAQMD[2]. Furthermore, the SCAQMD must adopt rules and regulations that carry out the AQMP[3]. The AQMP is a regional blueprint for how the SCAQMD will achieve air quality standards and healthful air and the Final 2016 AQMP[4] contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxic air contaminants (TACs). Relative to air toxic emissions, information obtained from the Final 2016 AQMP about soil cleanup sites indicated that more fugitive dust controls are needed to address fugitive toxic particulate emissions, especially metal particulates. Since heavy metals, such as arsenic, cadmium, hexavalent chromium, lead, mercury, and nickel have high cancer and/or non-cancer risks compared to other toxics and can create health problems from ingestion, dermal exposure, and through consumption of breast-milk, the Final 2016 AQMP contains air toxics control strategy TXM-04 - Control of Toxic Metal Particulate Emissions from Contaminated Soil, to specifically address reducing particulate emissions of certain TACs at sites conducting soil cleanup activities.

Rule 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants, was adopted on July 7, 2017. Rule 1466 was developed to implement TXM-04 in the Final 2016 AQMP by establishing dust control measures that can be applied during earth-moving activities at sites where a federal, state, or local oversight agency has identified one or more of the following TACs in the soil: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls (PCBs). Asbestos and PCBs are not metal TACs, but were included in the Rule 1466 TACs list because they are also most commonly found as contaminants of concern in the soils with TACs. Applicable sites are those that conduct earth-moving activities where the soil contains applicable toxic air contaminants as the site is determined and designated by the U.S. Environmental Protection Agency (U.S. EPA), California Department of Toxics Substances Control (DTSC), State Water Resources Control Board (State Water Board), or Regional Water Quality Control Board (Regional Water Board). Additionally, Rule 1466 has a provision for the Executive Officer to identify sites, based on a set of criteria, to be subject to the requirements of the rule. Rule 1466 established a PM10 ambient dust concentration limit and dust control measures. Notification to the Executive Officer is required prior to beginning earth-moving activities as well as when ambient PM10 dust concentration limits are exceeded. Additional requirements include recordkeeping and signage. Rule 1466 allows alternative dust control measures, ambient dust concentration limits, signage, and other alternative provisions upon Executive Officer approval.

At the time Rule 1466 was adopted, the Governing Board adopted a Resolution which directed SCAQMD staff to amend Rule 1466 by expanding the list of applicable toxic air contaminants to

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[1] The Lewis-Presley Air Quality Management Act, 1976 Cal. Stats., Ch. 324 (codified at Health and Safety Code Section 40400-40540).
[2] Health and Safety Code Section 40460(a).
[3] Health and Safety Code Section 40440(a).
[4] SCAQMD, Final 2016 Air Quality Management Plan, March 2017. http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp

include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. As a result, Proposed Amended Rule (PAR) 1466 now proposes to expand the list of applicable toxic air contaminants in accordance with the Governing Board's direction contained in the Resolution. Other amendments are also proposed which include expanding the rule's applicability to other government designated sites and making clarifications to existing provisions. At the time Rule 1466 was adopted, SCAQMD staff prepared a Final Environmental Assessment (EA) with no significant impacts. In the Final EA, the analysis of the potential environmental impacts was based on affected site cleanup actions occurring at a peak of ten locations per year. If PAR 1466 is adopted with the additional TACs, the number of potentially affected sites will increase by an additional two to four sites per year.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) requires that all potential adverse environmental impacts of proposed projects be evaluated and that methods to reduce or avoid identified significant adverse environmental impacts of these projects be implemented, if feasible. The purpose of the CEQA process is to inform the SCAQMD Governing Board, public agencies, and interested parties of potential adverse environmental impacts that could result from implementing the proposed project and to identify feasible mitigation measures or alternatives, when an impact is significant.

Public Resources Code Section 21080.5 allows public agencies with regulatory programs to prepare a plan or other written documents in lieu of a negative declaration or environmental impact report once the secretary of the resources agency has certified the regulatory program. The SCAQMD's regulatory program was certified by the secretary of resources agency on March 1, 1989, and has been adopted as SCAQMD Rule 110 – Rule Adoption Procedures to Assure Protection and Enhancement of the Environment. Pursuant to Rule 110 (the rule which implements the SCAQMD's certified regulatory program), the SCAQMD typically prepares an Environmental Assessment (EA) to evaluate the environmental impacts for rule projects proposed for adoption or amendment.

PAR 1466 is considered a "project" as defined by CEQA. Analysis of PAR 1466 indicates that the additional TACs proposed to be included in the list of applicable toxic air contaminants will not substantially revise the existing requirements included in Rule 1466 as adopted in July 2017. SCAQMD staff has determined that PAR 1466 contains new information of substantial importance which was not known and could not have been known at the time the Final EA was certified for the adoption of Rule 1466 in July 2017 (referred to herein as the July 2017 Final EA). However, PAR 1466 is not expected to create new significant effects that were not discussed in the previous July 2017 Final EA. Thus, analysis of the proposed project indicates that the type of CEQA document appropriate for the proposed project is a Subsequent Environmental Assessment (SEA), in lieu of an EA. The SEA is a substitute CEQA document, prepared in lieu of a Subsequent Negative Declaration with no significant impacts (CEQA Guidelines Section 15162(b)), pursuant to the SCAQMD's Certified Regulatory Program (CEQA Guidelines Section 15251(l); codified in SCAQMD Rule 110). The SEA is also a public disclosure document intended to: 1) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental impacts of the proposed project; and 2) be used as a tool by decision makers to facilitate decision making on the proposed project.

Thus, the SCAQMD, as lead agency for the proposed project, has ~~will be~~ prepared ~~ing~~ a Draft SEA pursuant to its Certified Regulatory Program. Because PAR 1466 was ~~is~~ not expected to have statewide, regional or areawide significance, a CEQA scoping meeting was ~~is~~ not required to be held for the proposed project pursuant to Public Resources Code Section 21083.9(a)(2). Further, since no significant adverse impacts have been identified, an alternatives analysis and mitigation measures are not required (CEQA Guidelines Section 15252(a)(2)(B)).

The Draft SEA was ~~is being~~ released for a 32-day public review and comment period from October 13, 2017 to November 14, 2017. ~~During the comment period,~~ T~~t~~he SCAQMD received one comment letter ~~relative to the Draft SEA. All comments received~~ during the public comment period on the analysis presented in the Draft SEA. The comment letter and the response ~~will be responded to and~~ are included in an appendix to the Final SEA (see Appendix E).

Subsequent to release of the Draft SEA, minor modifications were made to PAR 1466. Staff has reviewed the modifications to PAR 1466 and concluded that none of the modifications constitute: 1) significant new information; 2) a substantial increase in the severity of an environmental impact; or, 3) provide new information of substantial importance relative to the draft document. In addition, revisions to PAR 1466 in response to verbal or written comments would not create new, avoidable significant effects. As a result, these revisions do not require recirculation of the Draft SEA pursuant to CEQA Guidelines Sections 15073.5 and 15088.5. Thus, the Draft SEA has been revised to reflect the aforementioned modifications such that it is now a Final SEA.

The July 2017 Final EA, upon which this SEA relies, is available from the SCAQMD's website at http://www.aqmd.gov/docs/default-source/ceqa/documents/aqmd-projects/2017/fea_1466.pdf; by visiting the Public Information Center at SCAQMD Headquarters located at 21865 Copley Drive, Diamond Bar, CA 91765; or by contacting Fabian Wesson, Public Advisor by phone at (909) 396-2039 or by email at PICrequests@aqmd.gov.

Prior to making a decision on the adoption of PAR 1466, the SCAQMD Governing Board must review and certify the Final SEA, including responses to comments, as providing adequate information on the potential adverse environmental impacts that may occur as a result of adopting PAR 1466.

PROJECT LOCATION

PAR 1466 would affect sites that are conducting earth-moving activities within the SCAQMD's jurisdiction that meet the applicability requirements of the proposed amended rule. The SCAQMD has jurisdiction over an area of approximately 10,743 square miles, consisting of the four-county Basin (Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino counties), and the Riverside County portions of the SSAB and Mojave Desert Air Basin. The Basin, which is a subarea of SCAQMD's jurisdiction, is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto mountains to the north and east. It includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley. A federal nonattainment area (known as the Coachella Valley Planning Area) is a subregion of Riverside County and the SSAB that is bounded by the San Jacinto Mountains to the west and the eastern boundary of the Coachella Valley to the east (see Figure 1-1).

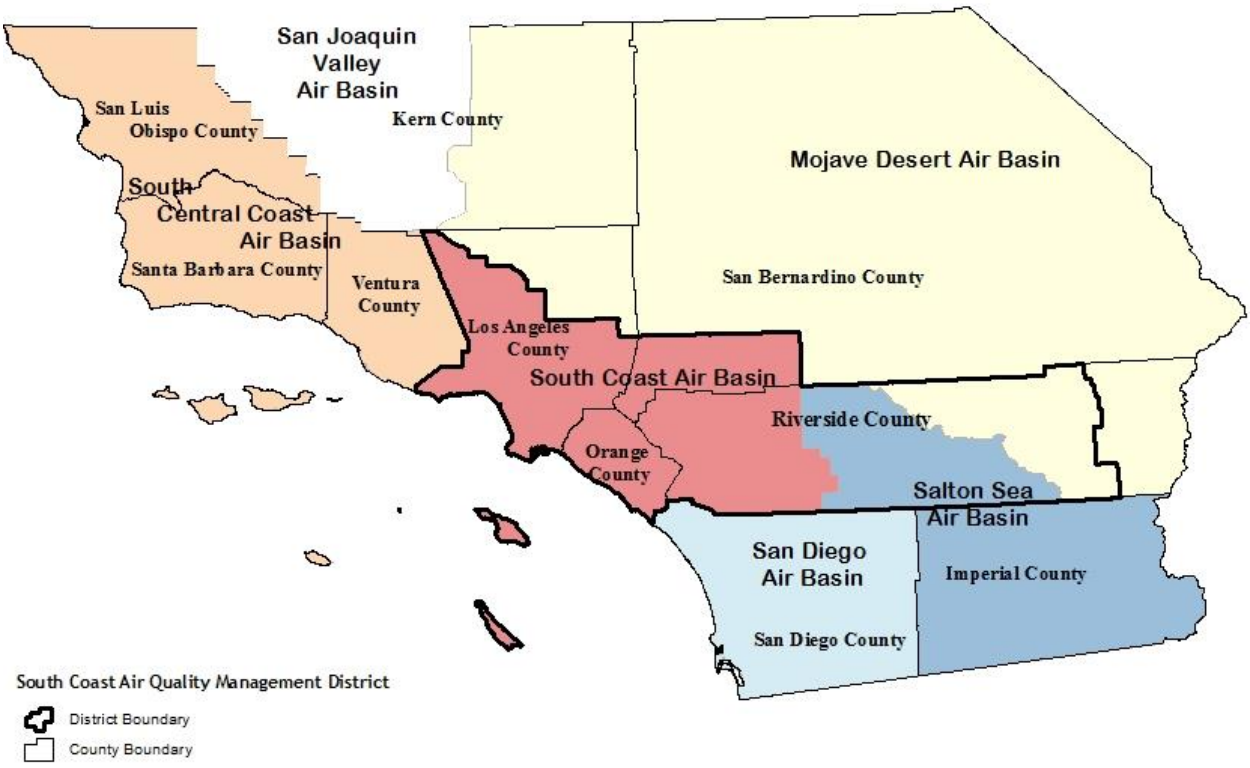


Figure 1-1
Southern California Air Basins

PROJECT BACKGROUND

Rule 1466 was adopted by the SCAQMD Governing Board on July 7, 2017. Rule 1466 estabished controls for particulate emissions from soils with TACs to reduce fugitive non-volatile TAC emissions from sites conducting earth-moving activities. Rule 1466 incorporated dust control approaches from air toxics control strategy TXM-04 - Control of Toxic Metal Particulate Emissions from Contaminated Soil, that can be applied during earth-moving activities at sites where a federal, state, or local oversight agency has identified one or more of the following TACs in the soil: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls (PCBs).Soils containing TACs have the potential to become airborne and create fugitive dust during earth-moving activities, including but not limited to, excavation, grading, stockpiling and trenching. Besides Rule 1466, there are three other existing SCAQMD rules that address contaminated soil and fugitive dust: Rule 1166 – Volatile Organic Compound Emissions from Decontamination of Soil; Rule 1156 – Further Reductions of Particulate Emissions from Cement Manufacturing Facilities; and Rule 403 – Fugitive Dust. Rule 1166 regulates volatile organic compound (VOC) emissions, including toxic VOCs, from contaminated soils and contains requirements for mitigation plans to limit VOC emissions, notification and monitoring activities, and specific measures to minimize VOCs during stockpiling and truck loading activities. Rule 1156 establishes requirements to reduce particulate matter emissions and minimize hexavalent chromium emissions from cement manufacturing operations and properties. Rule 403 regulates coarse particulate matter (PM10) emissions from fugitive dust sources by limiting dust

concentrations, requiring monitoring, and applying best available control measures. Rule 403 contains additional requirements applicable to large operations and other operations where fugitive dust concentrations exceed performance standards. While SCAQMD Rules 403, 1156, and 1166 address VOC emissions, hexavalent chromium emissions from cement manufacturing, and ordinary (non-TAC) dust caused by earth-moving activities, only 1466 addresses exposure to particulates containing metals or other TACs during earth-moving activities.

In addition to SCAQMD Rules 403, 1156, 1166, and 1466 there are federal, state, and local regulatory agencies that have programs which oversee the identification, investigation and cleanup of hazardous waste sites. For example, the Federal Superfund National Priorities List is a federal program administered by the U.S. EPA. At the state level, the DTSC administers the Brownfields and Environmental Restoration Program while the California Environmental Protection Agency's (CalEPA's) State Water Board and Regional Water Board administer Site Cleanup Programs.

Prior to the adoption of Rule 1466 in July 2017, the regulatory structure did not provide sufficient safeguards for sites with non-volatile TACs in the soil. For example, Rule 1166 does not apply to soils that contain only metal TACs and no VOC emissions . Rule 1156 is only applicable to hexavalent chromium at cement manufacturing facilities and does not apply to all earth-moving activities. Additionally, all Rule 403 requirements would not apply to certain sites; in particular, sites that do not meet the applicable size of site requirements and therefore, the additional dust control measures required by Rule 403 for a large site would not have to be implemented. Further, fugitive non-volatile TACs have the potential to settle in the neighborhoods around contaminated sites and continue to expose nearby receptors for months or years afterwards. For these reasons, SCAQMD staff propsoed Rule 1466 to minimize the re-entrainment of toxic particulates into the air from sites that have non-volatile TACs in the soil.

The July 2017 Final EA included an analysis that identifed which sites may require some type of cleanup activity if a site shows the possibility of contamination and a threat to human health and/or the environment. For sites that were shown to require cleanup, the designating agency required a remedial or removal action plan which is typically composed of: an introduction; the cleanup objective; the background describing the site's geology and the contaminants of concern; a risk evaluation; an overview of the actions that will be taken to cleanup the site such as dust mitigation measures as required by SCAQMD Rule 403, Rule 1156, and Rule 1166; and the schedule for activities. Typical dust mitigation measures involve the application of water or chemical stabilizers, limiting earth-moving activities during high-wind conditions, and generally complying with the basic provisions of Rule 403. The July 2017 Final EA, assumed cleanup actions were generally completed within three months, but large sites may take up to one year or longer.

At the time Rule 1466 was adopted, the Governing Board adopted a Resolution which directed SCAQMD staff to return to the Governing Board to amend Rule 1466 to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. As a result, PAR 1466 now proposes to expand the list of applicable toxic air contaminants in accordance with the Governing Board's direction contained in the Resolution. Other amendments are also proposed which include expanding the rule's applicability to other government designated sites and making clarifications to existing provisions.

PROJECT DESCRIPTION

The following is a detailed summary of key elements contained in PAR 1466. A copy of PAR 1466 can be found in Appendix A.

Applicability - Subdivision (b)

Effective January 1, 2018, PAR 1466 expands the applicability of the rule to include the owner or operator conducting earth-moving activities of soil with applicable toxic air contaminants that have been identified as contaminants of concern at a site that has been designated and notified ~~of Hazardous Material Release Sites that have been designated and notified~~ by a county, local, or state regulatory agency~~ies~~ as a Hazardous Material Release site, as defined in California ~~pursuant to~~ Health and Safety Code Section 25260. According to Health and Safety Code Section 25260, "'hazardous materials release site' or 'site' means any area, location, or facility where a hazardous material has been released or threatens to be released into the environment. 'Hazardous materials release site' does not include a site subject to a response and cleanup operation under Chapter 7.4 (commencing with Section 8670.1) of Division 1 of Title 2 of the Government Code or a corrective action under Part 6 (commencing with Section 46000) of Division 30 of the Public Resources Code." Health and Safety Code Sections 25261-25263 and 25265 define 'Site Designation Committee' and authorize the committee, at the request of the responsible party for a hazardous materials release site, to designate an administering agency to oversee the site's investigation and remedial action. County, local, and state regulatory agencies include agencies such as environmental health departments, planning departments, fire departments, and public health offices and have the jurisdiction to supervise, oversee, or approve a site investigation and remedial action at a hazardous materials release site.

Definitions - Subdivision (c)

The definition for Applicable Toxic Air Contaminants is proposed to be deleted and instead to be incorporated into the definition of Soil with Applicable Toxic Air Contaminant(s). Additionally, in order to be consistent with subdivision (b), the definition of Soil with Applicable Toxic Air Contaminant(s) includes soil that has been identified by a county, local, or state regulatory agency as well as U.S. EPA, the DTSC, the State Water Board, and the Regional Water Board. Effective January 1, 2018, the list of applicable toxic air contaminants for sites designated by the Executive Officer has been expanded to include any TAC listed in SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants, Table I, or the California Air Resources Board (CARB) Toxic Air Contaminant Identification List. The list of applicable toxic air contaminants for sites designated by the U.S. EPA, the DTSC, the State Water Board, the Regional Water Board or a county, local or state regulatory agency is also proposed to be identified in Table I of PAR 1466.

Additionaly, since the release of the Draft SEA, the definition for Stabilized Surface has been modified to clarify that stabilization can be demonstrated by an applicable test method contained in Volumes I and II of SCAQMD's Dust Control in Coachella Valley. These stabilization test methods are the same as those found in SCAQMD's Rule 403 Fugitive Dust Implementation Handbook.

Monitoring Requirements - Subdivision (d)

Since the release of the Draft SEA, revisions were proposed to PAR 1466 to add new subparagraph (d)(3)(D) to require all PM10 monitors used at a site to be identical in: make and model; settings; calibration; configuration; and calibration, correction, and correlation factors.

Requirements to Minimize Fugitive Dust Emissions - Subdivision (e)

~~Revisions are proposed to the track-out provision, subparagraph (e)(3)(C), to be consistent with and as stringent as Rule 403. In particular, the proposed changes would prohibit track-out from extending beyond 25 feet in cumulative length from the point of origin from an active operation.~~

~~In addition, m~~Minor clarifications are proposed to subparagraph (e)(5)(D) to replace the term "freeboard" with "between the soil and the top of the truck bed" to maintain at least six inches of space between the soil and the top of the truck while transporting within a site.

Additionally, since the release of the Draft SEA, for consistency with paragraph (c)(16), subparagraph (e)(4)(F) has been revised to include stabilization test methods contained in Volumes I and II of SCAQMD Dust Control in Coachella Valley.

Notification Requirements - Subdivision (f)

For the notification of intent to conduct earth-moving activities, revisions to subparagraph (f)(1)(G) are proposed which would require the estimated volume of soil with applicable toxic air contaminant(s) to be included in the notification.

Additionally, newly proposed paragraph (f)(2) which would require notification updates to be reported to the SCAQMD at least 72 hours before any earth-moving activities begin when there is a change in the start date – either when the start date that results in either an earlier or delayed start date from that which was previously scheduled.

Signage Requirements - Subdivision (g)

Since the release of the Draft SEA, new subparagraph (g)(1)(E) has been added to permit the owner or operator or designating agency to use lettering that is 2.5 inches tall when listing the applicable toxic air contaminants where the size of the sign would exceed 48 inches by 96 inches. All other signage requirements in paragraph (g)(1), including the requirement that the remainder of the warning statement be posted with lettering that is at least 4 inches tall, would remain the same.

Additionally, revisions to paragraph (g)(2) have been added to ensure consistency with the new changes to the specified lettering sizes described in subparagraph (g)(1)(E).

Recordkeeping Requirements - Subdivision (h)

Since the release of the Draft SEA, paragraph (h)(2) has been revised to also require records for: instrument make and model; settings; calibration; configuration; and calibration, correction, and correlation factors.

Executive Officer Designated Sites - Subdivision (i)

Revisions are proposed to subdivision paragraph (i) that would require the Executive Officer to also consult with local, county, or state regulatory agencies and to consider the history of a site when making a determination regarding applicability.

Exemptions - Subdivision (k)

The existing exemption in paragraph (k)(1) allows the designating agency, in consultation with the Executive Officer, to exempt a site from one or more provisions in the rule. To be consistent with subdivision (b), revisions to paragraph (k)(1) are proposed that would include county, local, and state regulatory agencies as a designating agency with this authority.

Revisions to paragraph (k)(2) are proposed that would exclude the notification requirements contained in subdivision (f) from the exemption.

Revisions to paragraph (k)(3) are proposed that would include an exemption for linear trenching of natural gas, power, and water projects on roadways that directly load soil with applicable toxic air contaminant(s) into trucks or bin for transport. Additionally, provisions are included allowing alternatives to direct loading for transport subject to Executive Officer approval.

Table I - Applicable Toxic Air Contaminants

Table I is proposed to be added to PAR 1466 and includes the list of Applicable Toxic Air Contaminants originally identified in paragraph (c)(3) (e.g., arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls), but with the following clarifications:

- Arsenic is now listed as arsenic and arsenic compounds (inorganic), including, but not limited to: arsenic compounds (inorganic) and arsine.
- Cadmium is listed as cadmium and cadmium compounds.
- Hexavalent chromium is listed as chromium (hexavalent) and chromium compounds, including, but not limited to: barium chromate, calcium chromate, lead chromate, sodium dichromate, strontium chromate, and zinc chromate.
- Lead is listed as lead and lead compounds (inorganic, including elemental lead), including, but not limited to: lead compounds (inorganic), lead acetate, lead chromate, lead phosphate, and lead subacetate.
- Mercury is listed as mercury and mercury compounds (inorganic), including, but not limited to: mercuric chloride and methyl mercury.
- Nickel is listed as nickel and nickel compound, including, but not limited to: nickel acetate, nickel carbonate, nickel carbonyl, nickel hydroxide, nickel oxide, nickel subsulfide, nickelocene, and refinery dust from the pyrometallurgical process.
- Polychlorinated biphenyls is now listed as polychlorinated biphenyls (PCBs); 3,3’,4,4’-tetrachlorobiphenyl; 3,4,4’,5-tetrachlorobiphenyl; 2,3,3’,4,4’-pentachlorobiphenyl; 2,3,4,4’,5-pentachlorobiphenyl; 2,3’,4,4’,5-pentachlorobiphenyl; 2,3',4,4',5'-pentachlorobiphenyl; ~~2’,3,4,4’,5- pentachlorobiphenyl;~~ 3,3’,4,4’,5-pentachlorobiphenyl; 2,3,3’,4,4’,5-hexachlorobiphenyl; 2,3,3’,4,4’,5’-hexachlorobiphenyl; 2,3’,4,4’,5,5’-hexachlorobiphenyl; 3,3’,4,4’,5,5’-hexachlorobiphenyl; and 2,3,3’4,4’,5,5’-heptachlorobiphenyl.

Further, the Governing Board Resolution directed staff to expand the list of applicable toxic air contaminants to include pesticides, herbicides, other metals, persistent bioaccumulative toxics, and semi-volatile organic compounds. Staff reviewed these categories and selected the compounds from each category that were commonly found at contaminated sites above background levels. The pesticides and herbicides that staff selected are chlordane and the dichlorodiphenyltrichloroethane (DDT) family of compounds. Staff did not include other metals because the original list of applicable toxic air contaminants covered the commonly found metals. Staff reviewed two years of data regarding cleanup projects and only found one site that would not be applicable to Rule 1466 because the site’s contaminant of concern was zinc. Dioxins were included to cover the category of bioaccumulative toxics. Staff did not include any semi-volatile

organic compounds because those would fall under Rule 1166. As such, new Table I will also include the following substances, which will become effective January 1, 2018:

- Dioxins. These are classified as persistent organic pollutants because they are extremely resistant to environmental degradation. Dioxins are highly toxic and have been linked to cancer, developmental problems in children, reproductive and infertility problems in adults, miscarriages, damage to the immune system, and interference with hormones. For consistency, PAR 1466 lists the same dioxins as in Rule 1401, referring to them as dibenzo-p-dioxins (chlorinated), including: 2,3,7,8-tetrachlorodibenzo-p-dioxin; 1,2,3,7,8-pentachlorodibenzo-p-dioxin; 1,2,3,4,7,8-hexachlorodibenzo-p-dioxin; 1,2,3,6,7,8-hexachlorodibenzo-p-dioxin; 1,2,3,7,8,9-hexachlorodibenzo-p-dioxin; 1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin; 1,2,3,4,6,7,8,9-octachlorodibenzo-p-dioxin; total tetrachlorodibenzo-p-dioxin; total pentachlorodibenzo-p-dioxin; total hexachlorodibenzo-p-dioxin; and total heptachlorodibenzo-p-dioxin.
- Pesticides. Depending on the pesticide, exposure can cause a variety of adverse health effects ranging from irritation of the skin and eyes to more severe effects such as causing cancer, reproductive and developmental problems, and endocrine disruption. PAR 1466 Table I includes the pesticides that are commonly found at contaminated sites above background levels that have negative health effects. The pesticides are: chlordane, dichlorodiphenyltrichloroethane (DDT), dichlorodiphenyldichloroethylene (DDE), and dichlorodiphenyldichloroethane (DDD).
- Polycyclic Aromatic Hydrocarbons (PAHs). Exposure to PAHs is linked to cancer, cardiovascular disease and poor fetal development. The PAHs included in PAR 1466 are the ones with the highest risk factor and include: benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[k]fluoranthene, chrysene, dibenz[a,h]anthracene, and indeno[1,2,3-c,d]pyrene.

Appendix 1 – Executive Officer Approved PM10 Monitors

Since the release of the Draft SEA, the omni-directional heated sampler inlet requirement has been revised to no longer require a water trap to correct for humidity.

Revisions to the performance standard in Item 3 of Appendix 1 are proposed that would change the resolution of PM10 monitors from 0.1 $\mu g/m^3$ to 1.0 $\mu g/m^3$.

CHAPTER 2

ENVIRONMENTAL CHECKLIST

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Environmental Checklist and Discussion

INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's potential adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by the proposed project.

GENERAL INFORMATION

Project Title:	PAR 1466 – Control of Particulate Emissions from Soils with Toxic Air Contaminants
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive Diamond Bar, CA 91765
CEQA Contact Person:	Mr. Ryan Bañuelos (909) 396-3479
PAR 1466 Contact Person	Ms. Uyen-Uyen Vo (909) 396-2238
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:	SCAQMD staff is proposing to amend Rule 1466 to address the Governing Board's consideration to expand the list of applicable toxic air contaminants. If adopted, PAR 1466 would: 1) expand the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bioaccumulative toxics; 2) expand applicability to other government designated sites; and 3) include language to clarify existing provisions. Some sites that may be affected by PAR 1466 have been designated as cleanup sites on lists compiled by the United States Environmental Protection Agency, the California Department of Toxic Substances Control (DTSC), and the California Environmental Protection Agency's State Water Resources Control Board or Regional Water Quality Control Board. In addition, some sites that may be affected by PAR 1466 may also be identified on lists compiled by the DTSC per Government Code Section 65962.5. The Draft Subsequent Environmental Assessment did not result in the identification of any environmental topic areas that would be significantly adversely affected.
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 Resources	☐	Mineral Resources	☐	Transportation and Traffic
☐	Energy	☐	Noise	☐	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 Guideline 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: October 12, 2017 **Signature:** Barbara Radlein

Barbara Radlein
Program Supervisor, CEQA Special Projects
Planning, Rules, and Area Sources

ENVIRONMENTAL CHECKLIST AND DISCUSSION

As mentioned in Chapter 1, at the time Rule 1466 was adopted, the Governing Board also certified the July 2017 Final Environmental Assessment (EA). In Rule 1466, the list of applicable toxic air contaminants was limited to arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and polychlorinated biphenyls (PCBs) and the analysis in the July 2017 Final EA was based on the assumption that Rule 1466 would apply to ten sites conducting soil cleanup activities per year. The July 2017 Final EA concluded that the adoption of Rule 1466 would not create any significant adverse environmental impacts. As also discussed in the July 2017 Final EA, some sites that may be affected by Rule 1466 have been designated as cleanup sites on lists compiled by the U.S. EPA, the DTSC, and the State Water Board or Regional Water Board. Further, some sites that may be affected by Rule 1466 may also be identified on lists compiled by the DTSC per Government Code Section 65962.5.

Amendments to Rule 1466 are now being proposed in response to the Governing Board's Resolution directing staff to consider expanding the list of applicable toxic air contaminants. If adopted, PAR 1466 would: 1) expand the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bioaccumulative toxics; 2) expand applicability to other government designated sites; and 3) include language to clarify existing provisions.

The effects of implementing PAR 1466, outlined above, have been evaluated relative to each of the 17 environmental topics identified in the following environmental checklist. There are several changes in PAR 1466 that would not be expected to cause any physical changes that could have secondary adverse environmental effects. For example, the proposed changes to the track-out provisions and notification requirements and the clarifications to what elements may be exempt for PAR 1466, are administrative or procedural in nature and would not be expected to cause physical changes that would create any secondary adverse environmental effects. In addition, revising and deleting definitions, and revisions made for clarity and consistency throughout the rule are also not expected to cause any physical changes. As such, only the proposed modifications to the applicability and the inclusion of the additional TACs would be expected to cause physical activities to occur at additional sites affected by PAR 1466 and these activities may create secondary adverse environmental impacts. Because the current version of Rule 1466 contains fugitive dust control measures that require monitoring of ambient PM10 emissions at each affected site and these requirements would be expected to continue under PAR 1466, the effect of increasing the applicable toxic air contaminants that would be applicable to PAR 1466 means that the number of potentially affected sites will increase by an additional two to four sites per year if PAR 1466 is adopted. Thus, the analysis in this SEA focuses on potential secondary adverse environmental impacts associated with expanding the list of applicable toxic air contaminants, expanding the applicability to other government entities, and the corresponding implementation of fugitive dust control measures and monitoring that would need to be conducted at additional sites subject to PAR 1466. It is important to note, that some of the fugitive dust control measures may already be required by and implemented pursuant to a remedial or removal action plan or Rule 403 as Rule 403 provides a series of suggested fugitive dust mitigation measures for certain sites. Because PAR 1466 does not contain substantial revisions to the majority of existing requirements adopted in July 2017, the evaluation of PAR 1466 in this SEA applies the same assumptions as used in the July 2017 Final EA unless otherwise noted below. The following assumptions were relied upon in the analysis of the July 2017 Final EA and will be applied in the following analyses for PAR 1466.

- Implementation of the fugitive dust control measures during earth-moving activities at the sites were treated as construction activities because: 1) the cleanup activities are typically short-term (e.g., less than one year) by nature and involve earth-moving activities such as land clearing, excavation, grading, stockpiling, and trenching; and 2) the cleanup activities involve mobile off-road equipment typically associated with construction. As with existing Rule 1466, PAR 1466 is also assumed to not have operational activities because once the cleanup activities are completed, the land will be either left vacant or developed with its own construction of buildings or other structures for some eventual operational use at a future time. These actions after the cleanup will require their own CEQA evaluation and are not analyzed in PAR 1466 since these actions are not foreseeable and are not required by PAR 1466. Therefore, the benefits and impacts from implementing PAR 1466 are expected to occur only during construction with no environmental impacts occurring during operation.

- All trucks are instate construction heavy trucks (T6 trucks) and all vehicles are light duty automobiles (LDA).

- Each LDA, delivery truck, and water truck is assumed to travel up to 40 miles (one round trip), 40 miles (one round trip), and 20 miles (five round trips), respectively.

- The Gross Vehicle Weight (GVW) for each water truck is assumed to be 52,000 pounds and is assumed to have the capacity to carry 4,000 gallons of water.

- Each water truck is assumed to make five round trips and distribute up to 20,000 gallons of water over the site on a peak day.

- SCAQMD staff estimated that up to half of the sites will need new fencing/windscreen and tarps (plastic sheeting) while the remainder were expected to have these features in place due to requirements imposed by other non-SCAQMD rules/regulations.

The addition of applicable toxic air contaminants to PAR 1466 forms the basis for the following additional assumptions, which are used in the following PAR 1466 analysis.

- Based on the list of eight Applicable TACs in existing Rule 1466, the July 2017 Final EA assumed that 10 sites per year and six sites on a peak day would be impacted. By including additional Applicable TACs into PAR 1466, SCAQMD staff estimates that an additional four sites per year and three sites on a peak day will undergo soil cleanup activities that will be subject to PAR 1466. By combining the number of affected sites from Rule 1466 and PAR 1466, the number of potentially affected sites will be 14 sites per year with nine sites undergoing soil cleanup activities on a peak day.

- While there are other rules that may be applicable to affected sites concurrent with implementing PAR 1466, specific to PAR 1466, the analysis assumes that each of the three additional sites will have an additional two water trucks, one compliance supervisor vehicle, and one monitoring vehicle on a peak day. In addition, the analysis includes the assumption that there will be two trucks to deliver fencing/windscreen materials and one truck to deliver tarps (plastic sheeting) for covering stockpiles occurring on the same peak day.

- Data collected for PAR 1466 indicates most sites typically complete their cleanup/earth-moving activities within five months. This analysis assumes cleanup activities will occur over 105 working days for each site. This assumption is greater than the 65 days of cleanup activities used in the analysis for the July 2017 Final EA because the data collected for PAR 1466 between 2015 and 2016 contains a number of sites with greater, on average, acreage than the sites analyzed for the July 2017 Final EA. The larger sites generally correspond to an increased volume of affected soil and thus, a longer period of time is needed to complete the required cleanup activities.

If PAR 1466 is adopted with the additional applicable toxic air contaminants, the number of potentially affected sites will increase by an additional two to four sites per year and three sites on a peak day. By combining the number of affected sites from Rule 1466 and PAR 1466, the number of potentially affected sites will be 14 sites per year with nine sites undergoing soil cleanup activities on a peak day. By applying the same methodology and assumptions as used in the July 2017 Final EA, the inclusion of the additional TACs in the list of applicable toxic air contaminants plus the other proposed revisions would not be expected to cause a significant increase to the impacts that were previously analyzed in the July 2017 Final EA for Rule 1466 as adopted in July 2017. For these reasons, if implemented, PAR 1466 is not expected to create new significant effects that were not discussed in the previous July 2017 Final EA. Thus, PAR 1466 would not result in the identification of any environmental topic areas that would be significantly adversely affected.

		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)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐
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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, local, or state regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

I. a), b) & c) Less Than Significant Impact. In order for sites to become subject to PAR 1466, they must first be designated by a federal, state, county, or local regulatory agency as requiring

soil cleanup for any of the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1446. Thus, cleanup activities required by these agencies will already involve heavy-duty construction equipment such as tractors, loaders, backhoes, excavators, heavy duty and medium duty trucks for hauling, material delivery and spraying water, and worker vehicles and most of the equipment and activities occur within the confines of each affected site with some activities occurring at the entry/exit points. As with implementation of the dust control measures contained in existing Rule 1466, some additional water trucks, delivery trucks, and worker vehicles will also be needed if PAR 1466 is implemented. As such, because each affected site will already have an assortment of construction equipment and vehicles on site and going to and from the site throughout the day, the additional water trucks, delivery trucks, and worker vehicles that may be needed to implement PAR 1466 are not expected to be substantially discernable from any of the other equipment or vehicles that may already be present on-site for cleanup activities. The aesthetics of each site would not be impacted from the construction equipment associated with implementation of PAR 1466. Further, depending on the location of the site undergoing cleanup activities and depending on where the cleanup activities are occurring within each site, the views of scenic highways or corridors and the visual continuity of the area surrounding the site may already be adversely affected as part of the existing setting. For this reason, any additional water trucks, delivery trucks and worker vehicles that will be needed to implement PAR 1466 are not expected to introduce significant visual changes to areas outside each affected site, if at all, depending on the location of the construction activities within the site.

The dust control measures in existing Rule 1466 remain the same under PAR 1466. These measures have several requirements that may temporarily contribute to the overall appearance of each affected site and its perimeter while cleanup activities are occurring. For example, installation of a windscreen and perimeter fencing may be required to surround the area of the earth-moving activities to provide a wind break, act as containment, provide security, and limit access to unauthorized persons. The windscreen must be at least six feet tall and must be as tall as the highest stockpile and must have a porosity of 50 ± 5%. The windscreen will likely obstruct views onto an affected site so that the cleanup activities and equipment on-site may not be visible, or may only be partially visible above the fence, depending on the geography of the site. Further, PAR 1466 would continue to require perimeter fencing to be installed prior to the creation of stockpiles and the heights of stockpiles on-site are also restricted so that they cannot exceed the height of the perimeter fencing and windscreen. The perimeter fencing and windscreen would be temporary installations since once the cleanup activities are completed (typically within five months), the perimeter fencing and windscreen may be removed. Under most City and County construction codes throughout the Basin as well as under SCAQMD's Rule 403 – Fugitive Dust, most of the affected sites already require fencing for both construction and cleanup activities. Further, if the size of the site is small, the installation of fencing with a windbreak at a site may qualify for an exemption from CEQA pursuant to CEQA Guideline Section 15330 - Minor Actions to Prevent, Minimize, Stabilize, Mitigate or Eliminate the Release or Threat of Release of Hazardous Waste or Hazardous Substances. For these reasons, any installation of fencing with windscreens and limitations on the heights of stockpiles required as part of the implementation of the dust control measures are not expected to introduce new permanent significant visual changes to areas outside each site.

In addition, PAR 1466 would continue to require each affected site to have signs posted at all entrances with contact phone numbers and limit vehicle speeds to 15 mph. Again, under most city and county construction codes throughout the Basin, an assortment of other types of signage is required for construction sites. As such, any additional signage installed for any affected sites

subject to PAR 1466 would be expected to comply with city and county ordinances and are not expected to introduce new permanent significant visual changes to areas outside each site.

To prevent bulk materials that are being hauled off of any affected site from creating a visibility problem, prior to leaving the site, PAR 1466 would continue to require truck operators to clean the bulk material from their trucks, trailers, and tires including each vehicle egress from the site to a paved public road and at least one of the following measures to be employed: 1) install a pad consisting of washed gravel (minimum-size: one inch), maintained in a clean condition, to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long; 2) pave the surface extending at least 100 feet from the property line and at least 20 feet wide; 3) utilize a wheel shaker/wheel spreading device consisting of raised dividers (rails, pipes, or grates) at least 24 feet long and 10 feet wide; or 4) install and utilize a wheel washing system to remove soil from tires and vehicle undercarriages. Track-out is require to be removed each day using a vacuum equipped with a filter(s) rated by the manufacturer to achieve a 99.7 percent capture efficiency for 0.3 micron particles. ~~In addition, PAR 1466 contains a clarification that would restrict any track-out extending beyond 25 feet in cumulative length from the point of origin from an active operation.~~ These track-out provisions clarify existing requirements to prevent visible emissions from being generated, therefore no new permanent significant visual changes to areas outside each affected site are expected to occur as a result of implementing PAR 1466.

While existing Rule 1466 and PAR 1466 are both designed to apply to sites that are already conducting earth-moving activities, neither Rule 1466 nor PAR 1466 requires soil cleanup or earth-moving activities to occur. As with existing Rule 1466, the additional equipment needed on site to implement PAR 1466 (e.g., water trucks, delivery trucks and worker vehicles) are in addition to the equipment that is already present for the earth-moving activities as part of the baseline. The construction activities that may occur as a result of PAR 1466 are expected to be temporary in nature and will cease following completion of the cleanup of soils contaminated with applicable toxic air contaminants. Once the cleanup is completed, all construction equipment, including the vehicles needed to implement PAR 1466, will be removed from each site.

Rule 1466 contains limits on ambient PM10 concentration levels and fugitive dust emission control requirements and these limits would not change under PAR 1466. The toxic and PM10 emission reductions achieved through compliance with existing Rule 1466, would continue under PAR 1466, and, thus, improvements in visibility would also be expected to occur as fugitive dust control measures are implemented. Better visibility will be expected to improve the existing visual character or quality of areas in the vicinity of affected sites.

Finally, existing Rule 466 contains provisions that would allow the SCAQMD's Executive Officer to exercise discretion and evaluate any project site on a case-by-case basis to adjust the dust mitigation requirements, including the perimeter fencing and signage requirements ~~and these requirements would not change under PAR 1466~~. Provisions are also included in PAR 1466 allowing smaller lettering for listing the applicable toxic air contaminants on a sign provided that the size of the sign exceeds 48 inches by 96 inches. Because PAR 1466 will continue to contain this flexibility, the SCAQMD is committed to work with the any applicable local, state and federal agencies that may be involved to minimize or prevent blocking views from a scenic highway or corridor and avoid affecting visual continuity of the surrounding area. Therefore, less than significant impacts are anticipated overall from implementing the various dust control measures contained in PAR 1466.

Based on the foregoing analysis, implementing PAR 1466 would not be expected to damage, degrade, or obstruct scenic resources and the existing visual character of any site in the vicinity of affected sites.

I. d) No Impact. There are no components in PAR 1466 that would require construction activities to occur at night. Further, cities and counties typically have their own limitations and prohibitions that restrict construction from occurring during evening hours and weekends. Therefore, no additional temporary construction lighting at the affected sites would be expected or caused by PAR 1466. Therefore, the proposed project is not expected to create a new source of substantial light or glare at any of the affected sites in a manner that would adversely affect day or nighttime views in the surrounding areas.

Conclusion

Based upon these considerations, significant adverse aesthetics impacts are not expected from implementing PAR 1466. 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 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))?	☐	☐	☐	☑
d)	Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

Significance Criteria

Project-related impacts on agriculture and forestry 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 Section 12220(g)), timberland (as defined in Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, local, or state regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

II. a), b), c), & d) No Impact. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, or mixed land use areas within the Basin. The types of TACs found in contaminated soil at any affected site subject to Rule 1466 would continue to apply under PAR 1466 and would be expanded to include additional applicable toxic air contaminants. Thus, as with existing Rule 1466, each affected site is not expected to be located on or near areas zoned for agricultural, forestry or timberland 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 requirements of Rule 1466 that include installation of temporary perimeter fencing, windscreens, and signage would continue to apply under PAR 1466. PAR 1466 would not require the construction of any permanent new buildings or other structures. Thus, implementation of PAR 1466 would not be expected to require the conversion of existing farmland to non-agricultural use, conversion of forest land to non-forest use, conflict with zoning for agricultural use or a Williamson Act contract, or conflict with existing zoning for, or cause rezoning of, forest land or timberland. As with implementation of the compliance activities contained in existing Rule 1466, implementing PAR 1466 would occur within the existing boundaries of each affected site, there are no provisions in PAR 1466 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements relative to agricultural or forestry/timberland resources would be altered by PAR 1466. Therefore, PAR 1466 is not expected to result in converting farmland to non-agricultural use, or conflict with existing zoning for agricultural use, or a Williamson Act contract. Further, PAR 1466 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.

Consequently, PAR 1466 would not create any significant adverse agriculture or forestry resources impacts.

Conclusion

Based upon these considerations, significant adverse agriculture and forestry resources impacts are not expected from implementing PAR 1466. 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) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)?	☐	☐	☑	☐
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑	☐
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
h) 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 PAR 1466 are significant, impacts will be evaluated and compared to the criteria in Table 2-1. PAR 1466 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
SCAQMD 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 SCAQMD 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	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal)
PM_{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	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)
Lead 30-day Average Rolling 3-month average	1.5 μg/m^3 (state) 0.15 μg/m^3 (federal)

[a] Source: SCAQMD CEQA Handbook (SCAQMD, 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 SCAQMD Rule 1303, Table A-2 unless otherwise stated.
[e] Ambient air quality threshold based on SCAQMD 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: March 2015

Discussion

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, local, or state regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

III. a) No Impact. The SCAQMD is required by law to prepare a comprehensive AQMP which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards in areas under the SCAQMD's jurisdiction, 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 SCAQMD 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 SCAQMD will achieve air quality standards and healthful air is outlined the Final 2016 AQMP which contains multiple goals promoting reductions of criteria air pollutants, greenhouse gases, and toxics. Relative to toxic emissions, information obtained from the Final 2016 AQMP about soil cleanup sites indicates that more fugitive dust controls are needed to address fugitive toxic particulate emissions, especially metal particulates. Since heavy metals, such as arsenic, cadmium, hexavalent chromium, lead, mercury, and nickel have high relative risks compared to other toxics and can create health problems from ingestion, dermal exposure, and through consumption of breast-milk, the Final 2016 AQMP contains air toxics control strategy TXM-04 - Control of Toxic Metal Particulate Emissions from Contaminated Soil, to specifically address reducing particulate emissions with certain TACs at sites conducting soil cleanup activities. Rule 1466 was developed to implement TXM-04 by establishing dust control measures that can be applied during earth-moving activities at soil cleanup sites to minimize the re-entrainment of toxic particulates from soil containing any of the following TACs: arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and PCBs. The main focus of PAR 1466 is to expand the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bioaccumulative toxics. Thus, consistent with the goals of the Final 2016 AQMP, PAR 1466, once implemented, is expected to continue to reduce PM and TAC emissions as well as reduce the associated health risks affecting neighboring businesses and residents. Further, because implementing PAR 1466 would be expected to reduce PM and TAC emissions from earth-moving activities at the affected sites, in line with control

strategy TXM-04, PAR 1466 would not be expected to conflict with or obstruct implementation of the Final 2016 AQMP. Since no significant impacts were identified for this issue, no mitigation measures are necessary or required.

III. b) and f) Less Than Significant Impact.

Construction Analysis:
The July 2017 Final EA concluded that the primary source of air quality and greenhouse gas (GHG) impacts that were expected to occur as a result of implementing Rule 1466 would be from implementing the fugitive dust control measures, monitoring the ambient PM10 emissions, and performing daily supervision and inspections during cleanup activities and these effects would be expected to continue if PAR 1466 is implemented. It is important to note that the earth-moving activities at the sites such as land clearing, excavation, grading, stockpiling, and trenching are construction activities. Further, mobile on-road vehicles associated with construction activities and used by the employees and supervisors are already part of the baseline or existing setting because existing Rule 1466 was determined to not cause the earth-moving activities to occur. Thus, implementation of PAR 1466 would also not cause any earth-moving activities to occur.

The analysis in the July 2017 Final EA determined that 10 sites per year and three sites on a peak day would undergo soil cleanup activities that would be subject to Rule 1466. To determine how many additional sites would be affected if PAR 1466 is implemented, SCAQMD staff conducted a review of notifications of hazardous site cleanup actions by federal, state, and local regulatory agencies between 2015 and 2016 within SCAQMD's jurisdiction for the additional applicable toxic air contaminants proposed to be added to PAR 1466 (e.g., pesticides, herbicides, and persistent bioaccumulative toxics) and found that an additional four sites per year would be subject to PAR 1466 if it was in effect during that time period. Thus, if PAR 1466 is implemented, the total number of affected sites overall will increase up to 14 sites per year (e.g., 10 sites per year from existing Rule 1466 plus four sites per year from PAR 1466). Appendix C contains a list of sites that would have been subject to PAR 1466 between 2015 and 2016 which includes the name, type, and acreage of each site. The focus of the analysis herein assumes for the sites evaluated during the 2015 to 2016 period, that three additional sites would undergo simultaneous cleanup activities on a peak day for the purpose of conducting a worst-case CEQA analysis.

The total time needed to complete the cleanup will vary depending on the size of the site and the complexity of the cleanup work. However, based on previous cleanup projects as summarized in Appendix B, the average time needed to complete the cleanup is approximately five months. Because the activities to implement PAR 1466 will need to occur concurrently with the cleanup activities, this analysis assumes that compliance with PAR 1466 will also occur over the same time period. The cleanup period is greater for sites analyzed between 2015 and 2016 for PAR 1466 because the average site acreage is much larger than the average site acreage that was analyzed in the July 2017 Final EA.

Table 2 2 summarizes the baseline/existing setting activities of any affected site and the key requirements in PAR 1466 that may cause new physical actions to occur that have the potential to create secondary adverse air quality and GHG emission impacts.

Table 2-2
Sources of Potential Secondary Adverse Air Quality and GHG Impacts from Implementing PAR 1466

Existing Rule 1466 Requirements	Baseline/Existing Physical Actions Occurring During Cleanup pursuant to Existing Rule 1466 (at 10 sites per year and 6 sites on a peak day)	Physical Actions Anticipated due to PAR 1466 (at 4 additional sites per year and 3 sites on a peak day)	Sources of Potential Secondary Adverse Air Quality and GHG Impacts Resulting from PAR 1466
Fencing, Windscreen, and Plastic Sheeting	1. Fencing and windscreen installation for the affected sites that are not required by other city, county, or SCAQMD rules. 2. Plastic sheeting (tarps) apply to the stockpiles	1. Additional fencing and windscreen installation for the affected sites that are not required by other city, county, or SCAQMD rules; and 2. Additional plastic sheeting (tarps) apply to the stockpiles.	Additional emissions from trucks delivering fencing/windscreen materials and plastic sheeting (tarps) materials to four additional sites per year and three sites on a peak day.
Fugitive Dust Control Measures	Workers use water trucks to ensure the working areas are adequately wet and chemically stabilized during earth-moving activities, such as land clearing, excavation, grading, stockpiling, and trenching.	Additional workers to use additional water trucks to ensure the working areas are adequately wet and chemically stabilized during earth-moving activities.	1. Additional emissions from water trucks working at each additional site; 2. Additional emissions from trucks delivering water to each additional site; and 3. Additional emissions from workers' vehicles commuting to/from each additional site.
Monitoring, Supervision and Inspection	1. Workers to conduct hourly monitoring for PM10 emissions and meteorological monitoring. 2. Workers to implement daily supervision and inspection on vehicle control, earth-moving control, stockpile control and truck loading controls.	1. Additional workers to conduct hourly monitoring for PM10 emissions and meteorological monitoring. 2. Additional workers to implement daily supervision and inspection on vehicle control, earth-moving control, stockpile control and truck loading controls.	1. Additional emissions from vehicles used as part of conducting monitoring and inspection of each additional site. 2. Additional emissions from workers' vehicles commuting to/from each additional site.

The following summarizes the assumptions that have been made to estimate the secondary air quality and GHG impacts from implementing PAR 1466:

- Based on the list of eight applicable toxic air contaminants in existing Rule 1466, the July 2017 Final EA assumed that 10 sites per year and six sites on a peak day would be impacted. By including additional applicable toxic air contaminants into PAR 1466, SCAQMD staff estimates that an additional four sites per year and three sites on a peak day will undergo soil cleanup activities that will be subject to PAR 1466. By combining the number of affected sites from Rule 1466 and PAR 1466, the number of potentially affected sites will be 14 sites per year with nine sites undergoing soil cleanup activities on a peak day.

- While there are other rules that may be applicable to affected sites concurrent with implementing PAR 1466, specific to PAR 1466, the analysis assumes that each of the three additional sites will have an additional two water trucks, one compliance supervisor vehicle, and one monitoring vehicle on a peak day. In addition, the analysis includes the assumption that there will be a total of two trucks to deliver fencing/windscreen materials and one truck to deliver tarps (plastic sheeting) for covering stockpiles occurring on the same peak day.

- All trucks are instate construction heavy trucks (T6 trucks) and all vehicles are light duty automobiles, (LDA).

- Each LDA, delivery truck, and water truck are assumed to travel up to 40 miles (one round trip), 40 miles (one round trip), and 20 miles (five round trips), respectively.

- The Gross Vehicle Weight (GVW) for each water truck is assumed to be 52,000 pounds and is assumed to have the capacity to carry 4,000 gallons of water.

- Each water truck is assumed to make five round trips and distribute up to 20,000 gallons of water over the affected site on a peak day.

- Since most sites will complete their cleanup/earth-moving activities in five months, the analysis assumes that the cleanup activities will occur over 105 working days for each site.

- SCAQMD staff estimates that up to half of the sites will need new fencing/windscreen and tarps (plastic sheeting) while the remainder are expected to have these features in place due to requirements imposed by other non-SCAQMD rules/regulations.

- Emissions from the mobile on-road and off-road vehicles will be compared to the SCAQMD's air quality significance thresholds for construction.

The criteria pollutant emissions were estimated for all on-road vehicles transporting workers, delivery trucks, and water trucks travelling using the data generated from CARB's EMFAC2014, methods from U.S. EPA AP-42, and the assumptions from California Emissions Estimator

Model[5]® version 2016.3.1 (CalEEMod). Appendix B contains the assumptions used and results of this analysis.

Table 2-3 summarizes the peak daily criteria pollutant emissions associated with construction activities occurring at all three additional sites.

Table 2-3
Peak Daily Construction Emissions from the Amendments to PAR 1466

Key Requirements	**VOC** (lb/day)	**NOx** (lb/day)	**CO** (lb/day)	**SOx** (lb/day)	**PM10** (lb/day)	**PM2.5** (lb/day)
Fencing, windscreen, and plastic sheeting[a]	0.06	1.55	0.17	0.003	0.60	0.18
Fugitive Dust Control Measures	0.06	1.61	0.18	0.003	8.55	0.89
Monitoring, Supervision and Inspection	0.02	0.05	0.58	0.002	0.11	1.07
TOTAL[a]	**0.14**	**3.21**	**0.93**	**0.01**	**9.26**	**2.14**
SIGNIFICANCE THRESHOLD DURING CONSTRUCTION	**75**	**100**	**550**	**150**	**150**	**55**
SIGNIFICANT?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Notes:
[a.] Total daily emission calculations are based on the emissions from six diesel water trucks, three diesel delivery trucks, and six gasoline vehicles at all three sites. See Appendix B for the detailed calculations.

Peak construction impacts as shown in Table 2-3 will be added to impacts from existing Rule 1466 below to show total impacts of PAR 1466.

Since the cleanup activities and the associated activities with implementing PAR 1466 only involve equipment fueled by either diesel or gasoline, no electricity consumption is expected to occur from implementing PAR 1466. Thus, there will be no secondary air quality and GHG impacts from electricity generation or consumption during construction.

Toxic Air Contaminants During Construction

The analysis assumes that a relatively small quantity of diesel-fueled on-road vehicles may be utilized on a peak day to implement PAR 1466. Diesel particulate matter (DPM) is considered a carcinogen and has chronic non-cancer effects. Since the use of diesel-fueled vehicles is a small number per affected site (e.g., six water trucks and three delivery trucks) and will only occur over a short-term 105 working days (less than six months), a Health Risk Assessment (HRA) was not conducted. For these reasons, the amount of DPM to be generated on a peak day is expected to be less than significant.

Since the type of contamination at the sites can vary widely from site to site, staff is unable to predict what the speciation of the contamination may be for current and future affected sites or

[5] CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects.

quantify the potential reduction of the applicable toxic air contaminants as presented in existing Rule 1466 (e.g., arsenic, asbestos, cadmium, hexavalent chromium, lead, mercury, nickel, and PCBs), or the additional applicable toxic air contaminants that are proposed to be included in PAR 1466 (e.g., pesticides, herbicides, and persistent bioaccumulative toxics). However, as with implementation of existing Rule 1466, implementation of PAR 1466 is also expected to create an environmental benefit by reducing baseline TAC impacts from contaminated soils at existing sites through implementation of measures to minimize fugitive PM emissions containing pesticides, herbicides, and persistent bioaccumulative toxics during soil cleanup activities. Therefore, PAR 1466 is not expected to generate significant adverse TAC impacts.

Overall Construction Impacts from Existing Rule 1466 and PAR 1466 Combined

As shown in Table 2-4, the peak daily construction impacts for existing Rule 1466 were concluded in the July 2017 Final EA to be less than significant.

Table 2-4
Peak Daily Construction Emissions from Existing Rule 1466[a]

Key Requirements	**VOC** (lb/day)	**NOx** (lb/day)	**CO** (lb/day)	**SOx** (lb/day)	**PM10** (lb/day)	**PM2.5** (lb/day)
Fencing, windscreen, and plastic sheeting[b]	0.06	1.55	0.17	0.003	0.60	0.18
Fugitive Dust Control Measures	0.11	3.21	0.37	0.006	17.11	1.79
Monitoring, Supervision and Inspection	0.03	0.10	1.17	0.004	0.21	2.15
TOTAL[b]	**0.20**	**4.86**	**1.71**	**0.01**	**17.92**	**4.12**
SIGNIFICANCE THRESHOLD DURING CONSTRUCTION	**75**	**100**	**550**	**150**	**150**	**55**
SIGNIFICANT?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Notes:
[a.] This table is a duplicate of Table 2-3 in the July 2017 Final EA.
[b.] Total daily emission calculations are based on the emissions from 12 diesel water trucks, 3 diesel delivery trucks, and 12 gasoline vehicles at all six sites. See Appendix B for the detailed calculations.

To ensure peak daily construction impacts from Rule 1466 and the amendments to PAR 1466 combined are less than significant, Table 2-5 presents the combined peak daily construction emissions from Table 2-3 and Table 2-4 in comparison with SCAQMD significance thresholds for construction. The combined peak daily construction emissions from PAR 1466 and Rule 1466 do not exceed any SCAQMD significance thresholds, and therefore the construction impacts from PAR 1466 are less than significant.

Table 2-5
Grand Total Peak Daily Construction Emissions from Existing Rule 1466 and PAR 1466

	VOC (lb/day)	**NOx** (lb/day)	**CO** (lb/day)	**SOx** (lb/day)	**PM10** (lb/day)	**PM2.5** (lb/day)
Total from Table 2-3 (Existing Rule 1466)	0.14	3.21	0.93	0.01	9.26	2.14
Total from Table 2-4 (PAR 1466)	0.20	4.86	1.71	0.01	17.92	4.12
GRAND TOTAL	**0.34**	**8.07**	**2.64**	**0.02**	**27.18**	**6.26**
SIGNIFICANCE THRESHOLD DURING CONSTRUCTION	**75**	**100**	**550**	**150**	**150**	**55**
SIGNIFICANT?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Operational Analysis:
As with existing Rule 1466, PAR 1466 is assumed to not have operational impacts because once the cleanup activities are completed and the soil is stabilized, the land is either left vacant or developed with its own construction of buildings or other structures for some eventual operational use at a future time. Again, any activities that occur at an affected site after cleanup is completed are not assumed to occur as a result of PAR 1466. Therefore, the benefits and impacts from implementing PAR 1466 are expected to occur only during construction with no environmental impacts occurring during operation.

III. c) Less than Significant Impact.

Cumulative Impacts

Based on the foregoing analysis, since criteria pollutant project-specific air quality impacts from implementing PAR 1466 would not be expected to exceed the air quality significance thresholds during construction in Table 2-1, cumulative air quality impacts are also expected to be less than significant. SCAQMD cumulative significance thresholds are the same as project-specific significance thresholds. Therefore, potential adverse impacts from implementing PAR 1466 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 SCAQMD guidance on addressing cumulative impacts for air quality is as follows: "As Lead Agency, the SCAQMD 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 SCAQMD 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."[6]

[6] SCAQMD 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.

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 SCAQMD'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." *Id.* The court found that, "Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria." *Id.* "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." *Id.* As in *Chula Vista*, here the SCAQMD has demonstrated, using accurate and appropriate data and assumptions, that the project will not exceed the established SCAQMD 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 SCAQMD'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.

III. d) Less than Significant Impact.

Impacts on Sensitive Receptors

The analysis in Section III. b) and f) concluded that the quantity of pollutants that may be generated from implementing the proposed project would be less than significant during construction and would create no impacts during operation. Thus, the quantity of pollutants that may be generated from implementing PAR 1466 would not be considered substantial, irrespective of whether sensitive receptors are located near the affected sites.

Because PAR 1466 is applicable to the sites that are first designated by federal, state or local agencies on a case-by-case basis, SCAQMD staff is unable to predict or forecast whether any affected site would be located near one or more sensitive receptors. Therefore, in accordance with CEQA Guidelines Section 15145, an evaluation of the proximity of each future affected site to sensitive receptors and whether PAR 1466 would adversely affect the sensitive receptors is concluded to be speculative and will not be evaluated further in this analysis.

Implementation of PAR 1466 is expected to create an environmental benefit by reducing baseline TAC impacts from contaminated soils at existing sites through implementation of measures to minimize fugitive PM emissions containing certain TACs during soil cleanup activities. Thus, PAR 1466 is not expected to create significant adverse impacts to sensitive receptors. Since no significant impacts were identified for this issue, no mitigation measures are necessary or required.

III. e) Less than Significant Impact.

Odor Impacts

As previously explained, this analysis assumes that an additional six diesel-fueled water trucks and three delivery trucks will be used intermittently as required for fencing and dust control at

each additional affected site in response to PAR 1466. However, each affected site will already have other diesel-fueled equipment and vehicles operating on-site during the cleanup activities as part of the existing setting. With regard to odors associated with diesel fuel exhaust, diesel fuel is required to have a low sulfur content (e.g., 15 ppm by weight or less) in accordance with SCAQMD Rule 431.2 – Sulfur Content of Liquid Fuels, which already has the effect of minimizing emissions and odors. The operation of six additional water trucks and three additional delivery trucks is not expected to significantly contribute to the overall odor profile at any of the affected sites because: 1) the fencing and watering activities will occur within the confines of the existing sites; and 2) diesel vehicles are typically fitted with air pollution control equipment such as diesel particulate filters, for example, that may be effective at minimizing odors from the exhaust[7]; and 3) sufficient dispersion of diesel emissions over distance generally occurs such that odors associated with diesel emissions may not be discernable to off-site receptors, depending on the location of the trucks and the other diesel-fueled equipment and vehicles operating on-site and their distance relative to the nearest off-site receptor(s). Further, all diesel vehicles, including the water trucks and delivery trucks, that will be operated at each affected site will not be allowed to idle longer than five minutes per any one location in accordance with the CARB idling regulation[8], so odors from all of the diesel vehicles would be minimized. Therefore, the intermittent use of six additional diesel-fueled water trucks and three additional diesel-fueled delivery trucks over approximately a five-month period would not be expected to significantly contribute to diesel exhaust odors at each affected site at a level greater than what is already typically present.

Thus, PAR 1466 is not expected to create significant adverse objectionable odors above the existing odor profile at each affected site. Since no significant impacts were identified for this issue, no mitigation measures for odors are necessary or required.

III. g) and h) Less Than Significant Impact.

Greenhouse Gas (GHG) Impacts

Significant changes in global climate patterns have recently been associated with global warming, an average increase in the temperature of the atmosphere near the Earth's surface, attributed to accumulation of GHG emissions in the atmosphere. GHGs trap heat in the atmosphere, which in turn heats the surface of the Earth. Some GHGs occur naturally and are emitted to the atmosphere through natural processes, while others are created and emitted solely through human activities. The emission of GHGs through the combustion of fossil fuels (i.e., fuels containing carbon) in conjunction with other human activities, appears to be closely associated with global warming. 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.

Traditionally, GHGs and other global warming pollutants are perceived as solely global in their impacts and that increasing emissions anywhere in the world contributes to climate change anywhere in the world. A study conducted on the health impacts of CO2 "domes" that form over

[7] Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles (including Tier 1 through Tier 4 engines) is in Title 13, California Code of Regulation (CCR), Section 2025. https://www.arb.ca.gov/msprog/onrdiesel/documents/tbfinalreg.pdf

[8] Title 13, California Code of Regulation (CCR), section 2485. https://www.arb.ca.gov/msprog/truck-idling/13CCR2485_09022016.pdf

urban areas cause increases in local temperatures and local criteria pollutants, which have adverse health effects[9].

The analysis of GHGs is a different analysis than the analysis of criteria pollutants for the following reasons. For criteria pollutants, the significance thresholds are based on daily emissions because attainment or non-attainment is primarily based on daily exceedances of applicable ambient air quality standards. Further, several ambient air quality standards are based on relatively short-term exposure effects on human health (e.g., one-hour and eight-hour standards). Since the half-life of CO2 is approximately 100 years, for example, the effects of GHGs occur over a longer term which means they affect the global climate over a relatively long time frame. As a result, the SCAQMD's current position is to evaluate the effects of GHGs over a longer timeframe than a single day (i.e., annual emissions). GHG emissions are typically considered to be cumulative impacts because they contribute to global climate effects. GHG emission impacts from implementing PAR 1466 were calculated at the project-specific level. For example, the analysis assumes that six additional diesel-fueled water trucks, three additional diesel-fueled delivery trucks, and six gasoline-fueled vehicles will be needed to implement PAR 1466 and use of these vehicles at the affected sites has the potential to increase the use of fuel (e.g., gasoline and diesel) which will in turn increase CO2 emissions.

The SCAQMD convened a "Greenhouse Gas CEQA Significance Threshold Working Group" to consider a variety of benchmarks and potential significance thresholds to evaluate GHG impacts. On December 5, 2008, the SCAQMD adopted an interim CEQA GHG Significance Threshold for projects where SCAQMD is the lead agency (SCAQMD 2008). This GHG interim threshold is set at 10,000 metric tons of CO2 equivalent emissions (CO2eq) per year (MT/yr). Projects with incremental increases below this threshold will not be cumulatively considerable.

Table 2-6 summarizes the GHG analysis which shows that PAR 1466 may result in the generation of 32 amortized MT/yr of CO2eq emissions[10] from all the additional water trucks, delivery trucks, and other vehicles that may be used at the four sites annually. The detailed calculations of GHG emissions from implementation of PAR 1466 can be found in Appendix B.

Table 2-6
PAR 1466 GHG Emissions

Activity	CO2eq (MT/year[a])
Total Project GHG Emissions	32
SIGNIFICANCE THRESHOLD	**10,000**
SIGNIFICANT?	**NO**

[a.] 1 metric ton = 2,205 pounds

As shown in Table 2-7, the GHG emissions from implementing existing Rule 1466 were concluded in the July 2017 Final EA to be less than significant.

[9] Jacobsen, Mark Z. "Enhancement of Local Air Pollution by Urban CO2 Domes," Environmental Science and Technology, as describe in Stanford University press release on March 16, 2010 available at: http://news.stanford.edu/news/2010/march/urban-carbon-domes-031610.html.

[10] GHGs from short-term construction activities are amortized over 30 years. To amortize GHGs from temporary construction activities over a 30-year period (*est. life of the project/ equipment*), the amount of CO2eq emissions during construction are calculated and then divided by 30. Since the construction activities associated with PAR 1466 are expected to occur every year in the future, the total project annual amortized emissions is equal to the peak annual GHG emissions during construction.

Table 2-7
GHG Emissions from Existing Rule 1466[a]

Activity	CO2eq (MT/year[b])
Total Project GHG Emissions	49
SIGNIFICANCE THRESHOLD	**10,000**
SIGNIFICANT?	**NO**

[a.] This table is a duplicate of Table 2-4 in the July 2017 Final EA
[b.] 1 metric ton = 2,205 pounds

To ensure that the overall GHG emission impacts from Rule 1466 and PAR 1466 combined are less than significant, Table 2-8 presents the combined GHG emissions from Table 2-6 and Table 2-7 in comparison with SCAQMD significance threshold for GHGs. The combined GHG emissions from PAR 1466 and Rule 1466 do not exceed the SCAQMD significance threshold for GHGs, and therefore the GHG emission impacts from the PAR 1466 are less than significant.

Table 2-8
Grand Total GHG Emissions from PAR 1466 and Existing Rule 1466

Activity	CO2eq (MT/year[a])
Total from Table 2-6 (PAR 1466)	32
Total from Table 2-7 (Existing Rule 1466)	49
GRAND TOTAL	**81**
SIGNIFICANCE THRESHOLD	**10,000**
SIGNIFICANT?	**NO**

[a.] 1 metric ton = 2,205 pounds

Thus, as shown in Table 2-8, the SCAQMD's GHG significance threshold will not be exceeded if PAR 1466 is implemented. For this reason, implementing PAR 1466 is not expected to generate significant adverse cumulative GHG air quality impacts. Further, because the GHG emissions produced as a result of implementing PAR 1466 are very small relative to the significance threshold, PAR 1466 is not expected to generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment or conflict with an applicable plan, policy or regulation[11] adopted for the purpose of reducing the emissions of GHG gases.

Conclusion
Based upon these considerations, significant air quality and GHG emissions impacts are not expected from implementing PAR 1466. Since no significant air quality and GHG emissions impacts were identified, no mitigation measures are necessary or required.

[11] Including but not limited to California Assembly Bill (AB) 32, SCAQMD Final 2016 AQMP, Southern California Association of Governments (SCAG) 2016 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS), and etc.

		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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

IV. a), b), c), & d) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. Further, PAR 1466 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. Thus, PAR 1466 would not be expected to cause a specific disturbance of habitat or have a direct or indirect impact on plant or animal species on land or in water. Also, PAR 1466 does not require the development or acquisition of additional land or further conversions of riparian habitats or sensitive natural communities where endangered or sensitive species may be found. Therefore, PAR 1466 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely within the SCAQMD's jurisdiction.

IV. e) & f) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would

require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. Further, PAR 1466 does not require the development or acquisition of additional land. Therefore, PAR 1466 is not envisioned to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans. Land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by implementing PAR 1466. Additionally, as with existing Rule 1466, PAR 1466 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 all activities associated with complying with PAR 1466 would occur at existing sites in previously disturbed areas which are not typically subject to Habitat or Natural Community Conservation Plans.

The SCAQMD, as the Lead Agency, has found that, when considering the record as a whole, there is no evidence that implementing of PAR 1466 would have potential for any new adverse effects on wildlife resources or the habitat upon which wildlife depends. Accordingly, based upon the preceding information, the SCAQMD has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in Title 14 of the California Code of Regulations Section 753.5(d) - Projects Eligible for a No Effect Determination.

Conclusion

Based upon these considerations, significant biological resource impacts are not expected from implementing PAR 1466. 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 RESOURCES.** Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?	☐	☐	☐	☑
b)	Cause a substantial adverse change in the significance of an archaeological resource as defined in Section 15064.5?	☐	☐	☐	☑
c)	Directly or indirectly destroy a unique paleontological resource, site, or feature?	☐	☐	☐	☑
d)	Disturb any human remains, including those interred outside formal cemeteries?	☐	☐	☐	☑
e)	Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074?	☐	☐	☐	☑

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic or cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As

with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

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, the 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 represents 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.

As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. As with the current version of Rule 1466, earth-moving activities would occur in areas where there are no existing buildings or structures present. Therefore, PAR 1466 would not be expected to affect any cultural or historical buildings and has no potential to cause a substantial adverse change to a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside formal cemeteries. Implementation of PAR 1466 is, therefore, not anticipated to result in any activities or promote any programs that could have a significant adverse impact on cultural resources within the SCAQMD's jurisdiction.

V. e) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. For these reasons, PAR 1466 is not expected to cause physical changes to a site, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, PAR 1466 is not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register

of historical resources. Thus, PAR 1466 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 SCAQMD also provided a formal notice of the proposed project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code 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 SCAQMD 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 [see 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 resources impacts are not expected from implementing PAR 1466. Since no significant 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 adopted energy conservation plans?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage

unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

VI. a), b), c), **& e) No Impact.** As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. . There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. As such, PAR 1466 is not expected to conflict with any adopted energy conservation plans or violate any energy conservation standards because any affected sites that are subject to PAR 1466 would be expected to continue implementing any existing energy conservation plans that are currently in place regardless of whether PAR 1466 is implemented. While existing Rule 1466 requires, and implementation of PAR 1466 will continue to require the use of additional fuel to operate the additional water trucks, delivery trucks and worker vehicles (see Section VI. d for the analysis of these impacts), the use of the additional fuel would not be considered wasteful. For these reasons, PAR 1466 would not be expected to conflict with energy conservation plans or existing energy standards, or use non-renewable resources in a wasteful manner. As with existing Rule 1466, no additional electricity or natural gas will be needed when implementing PAR 1466. Therefore, PAR 1466 will not result in the need for new or substantially altered power or natural gas utility systems and will not create any significant effects on local or regional energy supplies and on requirements for additional energy.

VI. d) Less Than Significant Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. Implementation of PAR 1466 at each affected site is expected to cause an increase the use of diesel fuel and gasoline from the use of six additional water trucks, three delivery trucks, and six additional worker vehicles, but no additional electricity or natural gas will be needed. The following sections evaluate the energy sources and consumption that may be affected by the implementation of PAR 1466.

As with existing Rule 1466, the water trucks are expected to be used to implement the fugitive dust control measures. The delivery trucks are expected to be used to deliver the fence, windscreen, and plastic sheeting and the worker vehicles are expected to be used to transport the additional workers required by existing Rule 1466 and PAR 1466 to conduct monitoring. To estimate "worst-case" energy impacts from fuel use associated with these vehicles, the SCAQMD staff used the reference[12] of fuel economy from National Highway Traffic Safety Administration (NHTSA) and U.S. EPA Fuel Economy report and estimate the diesel fuel consumptions for heavy duty trucks and gasoline fuel for light duty worker vehicles are approximately 2 and 20 miles per gallon, respectively. The fuel usage per construction worker commute round trips was calculated based on assuming 40 miles round trip to and from the construction site in one day. It is also assumed each water truck will travel 20 miles per day and each delivery truck will travel 40 miles per day.

[12] National Highway Traffic Safety Administration (NHTSA) vocational vehicle standards. https://www.dieselnet.com/standards/us/fe_hd.php

As explained previously, a peak construction day is based on three additional sites occurring on a given day. Table 2-9 lists the projected energy impacts associated with the construction activities from PAR 1466 affected sites. Appendix B contains the assumptions and calculations for estimating fuel usage associated with these activities.

Table 2-9
Amendments to PAR 1466 Projected Fuel Usage Only

Fuel Type	Year 2015 Estimated Basin Fuel Demand[a] (MMgal/yr)	Fuel Usage[b] (MMgal/yr)	Total % Above Baseline	Exceeds Threshold of Significance?[c]
Gasoline	6,783	0.002	0.00002	No
Diesel	756	0.010	0.0013	No

[a] California Annual Retail Fuel Outlet Report Results in 2015, 2015 California Energy Commission (http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx). [Accessed October 5, 2017.]
[b] Estimated peak fuel usage from additional water trucks, delivery trucks, and worker vehicles.
[c] SCAQMD's energy threshold for both types of fuel used is one percent of fuel supply.

As shown in Table 2-10, the projected fuel usage from implementing existing Rule 1466 was concluded in the July 2017 Final EA to be less than significant.

Table 2-10
Projected Fuel Usage from Existing Rule 1466[a]

Fuel Type	Year 2014 Estimated Basin Fuel Demand[b] (MMgal/yr)	Fuel Usage[c] (MMgal/yr)	Total % Above Baseline	Exceeds Threshold of Significance?[d]
Gasoline	6,783	0.003	0.00004	No
Diesel	756	0.016	0.0021	No

[a] This table is a duplicate of Table 2-5 in the July 2017 Final EA
[b] California Annual Retail Fuel Outlet Report Results in 2015, 2015 California Energy Commission (http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx). [Accessed April 15, 2017.]
[c] Estimated peak fuel usage from additional water trucks, delivery trucks, and worker vehicles.
[d] SCAQMD's energy threshold for both types of fuel used is one percent of fuel supply.

To ensure that the overall fuel usage from Rule 1466 and PAR 1466 combined are less than significant, Table 2-11 presents the combined fuel usage from Table 2-9 and Table 2-10 in comparison with the SCAQMD energy threshold for both types of fuel used. The combined fuel usage from PAR 1466 and Rule 1466 does not exceed the SCAQMD energy threshold for fuel use, and therefore the fuel usage impacts from the project as revised are less than significant.

Table 2-11
Grand Total Projected Fuel Usage from PAR 1466 and Existing Rule 1466

Fuel Type	Year 2014 and 2015 Estimated Basin Fuel Demand (MMgal/yr)[a]	Rule 1466 Fuel Usage[b] (MMgal/yr)	Rule 1466 Total % Above Baseline	PAR 1466 Fuel Usage[b] (MMgal/yr)	PAR 1466 Total % Above Baseline	GRAND TOTAL Fuel Usage[b] (MMgal/yr)	GRAND TOTAL % Above Baseline	Exceeds Threshold of Significance[c]
Gasoline	6,783	0.003	0.00004	0.002	0.00002	**0.005**	**0.00006**	**No**
Diesel	756	0.016	0.0021	0.010	0.0013	**0.026**	**0.0033**	**No**

[a] California Annual Retail Fuel Outlet Report Results in 2015, 2015 California Energy Commission (http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx). [Accessed October 5, 2017.]
[b] Estimated peak fuel usage from additional water trucks, delivery trucks, and worker vehicles.
[c] SCAQMD's energy threshold for both types of fuel used is one percent of fuel supply.

Finally, the 2015 California Annual Retail Fuel Outlet Report Results from the California Energy Commission (CEC) state that 6,783 million gallons of gasoline and 756 million gallons of diesel were consumed in 2015 in the South Coast Air Basin. Thus, for PAR 1466 if an additional 0.002 million gallons of gasoline and 0.010 million gallons of diesel is consumed per year during implementation, less than significant adverse impact on fuel supplies would be expected.

Conclusion

Based upon these considerations, significant adverse energy impacts are not expected from implementing PAR 1466. 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) Expose people or structures to 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?	☐	☐	☐	☑
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 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?	☐	☐	☐	☑

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.

- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.

- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.

- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.

- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

VII. a) & b): No Impact. The dust control measures in existing Rule 1466 would be expected to continue under PAR 1466 and would result in reducing fugitive particulate emissions from soils with applicable toxic air contaminants during earth-moving activities. Thus, PAR 1466 does not cause or require a new facility to be constructed. In addition, compliance with existing Rule 1466 and PAR 1466 would not alter the exposure of people or property to geological hazards such as earthquakes, landslides, mudslides, ground failure, or other natural hazards. As a result, substantial exposure of people or structures to the risk of loss, injury, or death involving the rupture of an earthquake fault, seismic ground shaking, ground failure or landslides is not anticipated.

Further, the fugitive dust emissions from wind erosion are already expected to be minimized under existing Rule 1466 and will continue to be minimized under PAR 1466. In addition, site operators must control fugitive dust through a number of soil stabilizing measures such as watering the site or using chemical soil stabilizers in order to comply with the requirements of existing Rule 1466 and PAR 1466. Therefore, no adverse impacts to the loss of topsoil and soil erosion are expected.

VII. c), d), & e) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. Thus, it is expected that the soil types present at the affected sites will not be made further susceptible to expansion or liquefaction because PAR 1466 does not contain requirements for soil cleanup. As with Rule 1466, subsidence is not anticipated to be a problem since excavation, grading, or filling activities are not expected to occur due to

implementing PAR 1466 at the affected sites. Therefore, because PAR 1466 would not involve locating sites 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, no impacts are anticipated.

Since PAR 1466, as with existing Rule 1466, will reduce fugitive particulate emissions from soils with applicable toxic air contaminants by implementing fugitive dust control measures during earth-moving activities at sites that have been designated by federal, state, and local regulatory agencies, people or property will not be exposed to new impacts related to expansive soils to create substantial risks to life or property or soils incapable of supporting water disposal. As with implementation of existing Rule 1466, PAR 1466 does not require the installation of septic tanks. Therefore, PAR 1466 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 PAR 1466. 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, and disposal of hazardous materials?	☐	☐	☐	☑
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☑
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 Section 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 use airport or a private airstrip, 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)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☑
h)	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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

VIII. a) & b) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. Thus, the cleanup activities that occur at these sites involve the routine transport, use, and disposal of hazardous materials (e.g., contaminated soil) as part of the existing setting and, as such, may create reasonably foreseeable upset conditions involving the release of hazardous materials into the environment as fugitive dust containing applicable toxic air contaminants. As with existing Rule 1466, PAR 1466 is designed to minimize fugitive dust generated during these cleanup activities, thus PAR 1466 would not be expected to cause any increase in the severity of these existing conditions at the sites. It is important to note neither Rule 1466 nor PAR 1466 contains provisions that would require the earth-moving activities to occur. Instead, PAR 1466 continues to impose requirements established by Rule 1466 to minimize and monitor toxic fugitive dust if and when earth-moving activities occur during soil cleanup. In particular, PAR 1466 contains dust control strategies established in Rule 1466 that may employ stabilizing disturbed soils by either applying water or non-toxic chemical stabilizer. PAR 1466 also contains requirements established in Rule 1466 for tarping stockpiles, limiting the

vehicle speed on the sites, and employing measures to prevent soil from leaving the property via drag out or track-out via vehicle wheel shaking or washing and vacuuming entry/exit points. Overall, minimizing the amount of off-site fugitive dust emissions containing TACs during cleanup will, in turn, be health protective over the long term. PAR 1466 will not itself cause any removal of contaminated soils.

Because the cleanup activities are part of the existing setting, they may involve existing hazards impacts to the public or environment through the routine transport, use, and disposal of hazardous materials or create reasonably foreseeable upset conditions involving the release of hazardous materials into the environment. However, as with Rule 1466, implementation of PAR 1466 would not be expected to change these existing conditions. Further, because the type of contamination at the sites can vary widely from site to site, staff is unable to predict what the speciation of the contamination may be for future affected sites or quantify the potential reduction of the applicable toxic air contaminants (listed in PAR 1466, Table I, Appendix A) that may occur as a result of implementing PAR 1466. Therefore, since PAR 1466 itself does not cause any removal of contaminated soils and because cleanup activities are part of the existing setting, PAR 1466 is not expected to create a significant hazard to the public or environment through the routine transport, use, and disposal of hazardous materials or create reasonably foreseeable upset conditions involving the release of hazardous materials into the environment.

VIII. c) No Impact. As with Rule 1466, PAR 1466 is applicable to sites that are designated by federal, state, county, or local regulatory agency on a case-by-case basis. However, SCAQMD staff is unable to predict or forecast whether any designated site will be located at or within a one-quarter mile of a school. Because it is entirely possible that there will be affected sites that are located at or near a school, existing Rule 1466 requires and PAR 1466 would continue to limit cleanup activities at a school, early education center, joint use agreement property, or adjacent athletic area. For example, existing Rule 1466 and PAR 1466 would: 1) prohibit all earth-moving activities between the hours of 7:30AM and 4:30PM on days when the school is in session or if there is a school sponsored activity or youth organized sporting event at the site; and 2) require the contaminated soil to be placed in leak-tight containers, load soil directly into trucks, apply dust suppressant, and cover prior to transportation, or 3) require the contaminated soil to be stockpiled in a fenced and locked area. Therefore, PAR 1466 would not cause hazardous emissions, or result in the handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, but would include measures to reduce the exposure to schools from cleanup activities.

VIII. d) No Impact. Government Code Section 65962.5 refers to hazardous waste handling practices at sites that are subject to the Resources Conservation and Recovery Act (RCRA). As with Rule 1466, the future affected sites that may be subject to PAR 1466 will be sites that have already been designated for cleanup by federal, state or local regulatory agencies and PAR 1466 will not cause a site to be included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. However, as with Rule 1466, compliance with PAR 1466 will minimize the generation of fugitive dust during cleanup activities which may be toxic and hazardous. The less fugitive dust that is generated, the less that it will be emitted directly to the atmosphere. The excavated contaminated soil from the affected sites is required to be managed in accordance with applicable federal, state, and local rules and regulations and compliance with these regulations has continued with Rule 1466 and is expected to continue with implementation of PAR 1466. Therefore, compliance with PAR 1466 would not create a new significant hazard to the public or environment.

VIII. e) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. Existing Rule 1466 and PAR 1466 were created to recognize potential hazards that may arise during cleanup activities and to provide an environmental benefit when compared to the existing setting. Further, SCAQMD staff is unable to predict or forecast whether any affected site would be located within an airport land use plan or within two miles of a public use airport or private airstrip. Therefore, in accordance with CEQA Guidelines Section 15145, an evaluation of the proximity of each future affected site to an airport land use plan or within two miles of a public use airport or private airstrip is concluded to be speculative and will not be evaluated further in this analysis. In any case, PAR 1466 would not be expected to result in a new safety hazard for people residing or working in the area of any affected site, regardless of whether the affected site may be located within an airport land use plan or within two miles of a public use airport or private airstrip.

VIII. f) No Impact. Health and Safety Code Section 25507 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. Some of the existing sites that may be subject to existing Rule 1466 and PAR 1466 may already have emergency response plans in place, as applicable. Further, PAR 1466 contains no requirements that would impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan. PAR 1466 will not itself cause any soil cleanup or earth-moving activities. Thus, PAR 1466 is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

VIII. g) & h) No Impact. As with Rule 1466, PAR 1466 is applicable to sites that are first designated by federal, state, county, or local regulatory agency on a case-by-case basis. However, as with existing Rule 1466, PAR 1466 does not involve the construction of structures or placement of people in urban areas next to wildlands causing those risks. Therefore, PAR 1466 would be not expected to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Further, because the type of contamination at the sites can vary widely from site to site, staff is unable to predict: 1) what the speciation of the contamination may be at future affected sites; 2) whether any of the contaminants found would contain any of the applicable toxic air contaminants (listed in PAR 1466, Table I, Appendix A); and, 3) whether any of these TACs are part of a compound or chemical mixture that is flammable. In any case, the TACs found in the contaminated soil are part of the existing setting of the affected sites. As with existing Rule 1466, PAR 1466 will not be introducing flammable materials to the sites since the soil stabilizer is typically water or water-based mixtures that are not flammable. Thus, since PAR 1466 will only apply to the sites that have found the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1466 in the soil, compliance with PAR 1466 will not create a new fire hazard above the existing setting because PAR 1466 would not change how contaminated soil will be handled, irrespective of whether it contains flammable materials or compounds. Therefore, PAR 1466 would not be expected significantly increase the fire hazard in areas with flammable materials.

Conclusion

Based upon these considerations, no significant adverse hazards and hazardous materials impacts are expected from implementing PAR 1466. 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, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality?	☐	☐	☐	☑
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☑	☐
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?	☐	☐	☐	☑
d)	Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	☑
e)	Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?	☐	☐	☐	☑

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☑
g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	☑
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐
i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☑

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

<u>Water Demand:</u>

- 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.

<u>Water Quality:</u>

- 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and an additional three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, federal, state, county, or local regulatory agency, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will also be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would continue to apply under PAR 1466.

IX. a), g) and i) No Impact. Implementation of Rule 1466 dust control measures would be expected to continue under PAR 1466 during earth-moving activities at affected sites. In addition, the use of water or a chemical stabilizer are options that may be used to minimize fugitive dust. If a person conducting the soil cleanup activities elects to utilize water to stabilize the soil, water used for dust suppression does not have to be of potable quality, but can be recycled water. Due to the limited availability of recycled water, the type of water to be used for dust suppression is predominantly potable water that is either delivered to an affected site via an existing water connection to the local water provider or by truck. Uncontaminated groundwater and/or recycled water may also be used, if available. However, any use of contaminated or potentially contaminated water for this purpose would not only defeat the overall purpose of the soil cleanup activities, but would violate water quality standards and thereby would be prohibited for use. When water is the soil stabilizer of choice, water trucks will spray the water onto the affected area(s) and the soil will absorb the water so there is no surface run-off. Eventually the soil will dry out due to water evaporation off of the soil surface, and the process of spraying water via water truck will need to be repeated, as needed. Therefore, no surface run-off and no wastewater will be generated from conducting watering in an effort to stabilize the soil.

As with Rule 1466, if a person conducting the soil cleanup activities elects to utilize a chemical stabilizer as a dust suppressant, then PAR 1466 requires the user of the chemical stabilizer to verify that the product is: 1) non-toxic; 2) capable of meeting any specifications, criteria, or tests required by any federal, state, or local agency or any applicable law, rule, or regulation, including the Regional Water Quality Control Board; and 3) not prohibited for use by any federal, state, or local agency or any applicable law, rule, or regulation, including the Regional Water Board. As with water, when chemical stabilizer is the dust suppressant of choice and it is spread in liquid form, water trucks will spray the chemical stabilizer onto the affected area(s) and the soil will absorb the chemical stabilizer. Therefore, the application of chemical stabilizer would not be expected to generate wastewater.

As with Rule 1466, no wastewater will be generated as a result of using watering or applying chemical stabilizer to minimize the generation of fugitive dust, thus PAR 1466 would not be expected to cause any affected sites to violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable of the Publicly Owned Treatment Works (POTW) or Regional Water Board, or otherwise substantially degrade water quality that the requirements are meant to protect. Also, since no wastewater will be generated from the application of water or chemical stabilizer, PAR 1466 would not require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities. Finally, since no wastewater will be generated from the application of water or chemical stabilizer, PAR 1466 would not trigger the need for an adequate wastewater capacity determination by any wastewater treatment provider that may be serving each affected site, if any. Therefore, no impacts to either wastewater or wastewater treatment are expected to occur as a result of implementing PAR 1466 at any affected sites.

IX. c), d), e), and f) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, or local regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. Therefore, PAR 1466 is not expected to result in placing new housing or structures in 100-year flood hazard areas that could create new flood hazards or create significant adverse risk impacts from flooding as a result of failure of a levee or dam or inundation by seiches, tsunamis, or mudflows.

As with Rule 1466, PAR 1466 is also not expected to have any significant adverse effects on any existing drainage patterns, or cause an increase rate or amount of surface runoff water that would exceed the capacity of the sites' existing or planned storm water drainage systems because, as explained in Section IX. a), g) and i), PAR 1466 is not expected to generate wastewater or surface run-off and does not contain any requirements that would change existing drainage patterns or the procedures for how surface runoff water is handled. In addition, PAR 1466 would not require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities. PAR 1466 would require 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.

IX. b) and h) Less than Significant Impact. Existing Rule 1466 allows a person conducting soil cleanup to utilize water to suppress the generation of fugitive dust during earth-moving activities. Using water to suppress the generation of fugitive dust would be expected to continue if PAR 1466 is implemented. The type of water to be used for this purpose (e.g., potable, groundwater, or recycled water) is not prescribed. As explained in Section IX. a), g) and i), if a person conducting the soil cleanup activities elects to utilize water to suppress fugitive dust, the type of water to be used for this purpose is typically potable water, which is either delivered to an affected site via an existing water connection to the local water provider or by truck. In some areas within the SCAQMD's jurisdiction, recycled water may also be available via an existing water connection to the local recycled water provider or by truck. The availability of groundwater for dust suppression purposes, however, is a different matter as there are more restricting factors. As with Rule 1466, because PAR 1466 is applicable to sites designated by a federal, state, county, or local regulatory agency on a case-by-case basis, SCAQMD staff is unable to predict or forecast whether any designated site will have access to groundwater and whether the groundwater will be of a sufficient quality or supply to apply to soil for dust suppression purposes. Nonetheless, if a site has a well on its property, groundwater may be used for the purpose of dust suppression provided that the property owner has groundwater pumping rights and sufficient supply, and either the groundwater is not contaminated, or the groundwater is first treated by a groundwater treatment system to remove contaminants prior to application. Of course if groundwater is not available at an affected site, then potable or recycled water will need to be used.

The analysis in the July 2017 Final EA determined that projected water demand on a peak day would be 141,000 gallons per day. In the course of conducting the water analysis for PAR 1466 it was determined that the July 2017 Final EA substantially overestimated the projected water demand on a peak day. The analysis of projected water demand in the July 2017 Final EA assumed a maximum of 88 acres would be watered over a six month period and incorrectly stated 141,000 gallons per day as the peak day projected water demand when it should have been stated as the projected water demand over a period of six months. The July 2017 Final EA analysis also assumed the entire site would be subject to watering. However, this assumption overestimates the affected area(s) where watering should occur for affected soil. For the analysis contained herein, the projected water demand on a peak day for Rule 1466 has been revised and is shown in Appendix B. The revision to Rule 1466 water demand does not change the July 2017 Final EA's determination of less than significant impacts.

The water demand analysis for sites affected by PAR 1466 uses the same assumptions as the July 2017 Final EA. The July 2017 Final EA estimated the current water demand to be approximately 1,000 gallons of water per acre which was derived from the requirements for water usage established by Rule 403 to limit fugitive dust to 50 micrograms per cubic meter. Due to stricter dust control measures that were adopted in Rule 1466 which lowered the fugitive dust limit to 25 micrograms per cubic meter, water usage for dust control was estimated to increase by approximately 1,600 gallons per acre. Thus, the total water demand needed to mitigate fugitive dust on affected sites for both existing Rule 1466 and PAR 1466 was estimated to be approximately 2,600 gallons per acre. To determine the increase in water demand due to the additional applicable toxic air contaminants proposed in PAR 1466, SCAQMD staff estimated the projected water demand on a peak day for three sites. As summarized in Table 2-12, the maximum amount of water that may be needed to conduct watering for dust suppression activities at all three sites for PAR 1466 is estimated to be up to 21,600 gallons per day and this potential increase in water use is less than the SCAQMD's significance thresholds of five million gallons per day of total water (e.g., potable, recycled, and groundwater combined) and 262,820 gallons per day of potable water.

Thus, regardless of whether 100 percent of potable, recycled, or groundwater is used, or any combination thereof, the amount of water that may be needed for dust suppression is at less than significant levels.

Table 2-12
Amendments to PAR 1466 Projected Water Demand Only

PAR 1466 Water Used For Fugitive Dust Control	Additional Water Demand on a Peak Day (gal/day)
PAR 1466 Watering	21,600
Significance Threshold for Potable Water:	262,820
SIGNIFICANT FOR POTABLE WATER?	**NO**
Significance Threshold for Total Water:	5,000,000
SIGNIFICANT FOR TOTAL WATER?	**NO**

Overall peak day projected water demand from both existing Rule 1466 and PAR 1466 combined is analyzed below. As shown in Table 2-13, the peak daily water demand for existing Rule 1466 was revised from the analysis used in the July 2017 Final EA. To determine the projected water demand for Rule 1466 the total peak day acreage undergoing cleanup was revised to the correct assumption of 27 acres across six sites. After the revised analysis, the peak daily water demand for existing Rule 1466 was concluded to be less than significant.

Table 2-13
Projected Water Demand from Existing Rule 1466

Rule1466 Water Used For Fugitive Dust Control	Additional Water Demand on a Peak Day (gal/day)
Rule 1466 Watering	43,200
Significance Threshold for Potable Water:	262,820
SIGNIFICANT FOR POTABLE WATER?	**NO**
Significance Threshold for Total Water:	5,000,000
SIGNIFICANT FOR TOTAL WATER?	**NO**

To ensure peak daily water demand from existing Rule 1466 and PAR 1466 combined are less than significant Table 2-14 presents the combined peak daily water demand from Table 2-12 and Table 2-13 in comparison with SCAQMD significance thresholds for water demand. The combined peak daily projected water demand from PAR 1466 and Rule 1466 also do not exceed any SCAQMD significance thresholds and therefore the water demand impacts from PAR 1466 are less than significant.

Table 2-14
Grand Total Peak Daily Projected Water Demand from Existing Rule 1466 and PAR 1466

Water Used For Fugitive Dust Control	Additional Water Demand on a Peak Day (gal/day)
Total from Table 2-6 (PAR 1466)	21,600
Total from Table 2-7 (Existing Rule 1466)	43,200
GRAND TOTAL	64,800
Significance Threshold for Potable Water:	262,820
SIGNIFICANT FOR POTABLE WATER?	**NO**
Significance Threshold for Total Water:	5,000,000
SIGNIFICANT FOR TOTAL WATER?	**NO**

In addition, as with Rule 1466, due to site-specific factors that tend to limit the use of groundwater and the unlikely possibility that all of the affected sites with have access to groundwater of a suitable quality and amount, implementation of PAR 1466 is not expected to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted. Similarly, if the water demand for dust suppression purposes is entirely supplied by potable water, since the estimated potable water demand and total water demand would be less than significance thresholds for potable and total water, respectively, the water demand impacts that are expected occur from implementing PAR 1466 would be less than significant. Further, existing water supplies are expected to be sufficiently available to serve the affected sites without the need for new or expanded entitlements. Therefore, PAR 1466 is not expected to have significant adverse water demand impacts.

Conclusion

Based upon these considerations, significant adverse hydrology and water quality impacts are not expected from implementing PAR 1466. 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

X. a) and b) Less than Significant Impact. As with Rule 1466, PAR 1466 does not require the construction of new facilities, and any physical effects that will result from PAR 1466, will occur at existing sites and would not be expected to go beyond existing boundaries. However, existing Rule 1466 and PAR 1466 contain dust control measures that may cause physical modifications to an affected site. Of the dust control measures, a windscreen and perimeter fencing is required to surround each affected site to provide a wind break, act as containment, provide security, and limit access to unauthorized persons. The windscreen must be at least six feet tall and must be as tall

as the highest stockpile and must have a porosity of 50 ± 5%. As with Rule 1466, for small to medium-sized sites, the installation of temporary perimeter fencing as part of implementing PAR 1466 would ordinarily not be expected to physically divide an established community. However, for large to extra-large sites (e.g., over 25 acres), the installation of perimeter fencing could be extensive and depending on the location of the site relative to its surroundings, could potentially temporarily divide an established community until the cleanup activities are completed. For this reason, existing Rule 1466 and PAR 1466 contain provisions that would allow the SCAQMD's Executive Officer to exercise discretion and evaluate the project site on a case-by-case basis to adjust the dust mitigation requirements, including the perimeter fencing requirements accordingly. Because existing Rule 1466 and PAR 1466 contain this flexibility, the SCAQMD is committed to work with any applicable local, state and federal agencies that may be involved to minimize or prevent dividing an established community under these circumstances. Therefore, less than significant impacts are anticipated.

Land use and other planning considerations are determined by local governments and no land use or planning requirements are intended to be altered by PAR 1466. Generally, all physical modifications that are expected to occur as a result of complying with the dust control measures already established in Rule 1466 and in PAR 1466 will occur within the confines of the existing sites and would not be expected to affect or conflict with any applicable land use plans, policies, or regulations. Further, no new development or alterations to existing land designations will occur as a result of the implementation of PAR 1466. In addition, the impacts from installation of a perimeter fencing with a windscreen are analyzed in Aesthetics Section. Therefore, present or planned land uses in the region will not be significantly affected as a result of implementing PAR 1466.

Conclusion

Based upon these considerations, significant adverse land use and planning impacts are not expected from implementing PAR 1466. 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XI. a) & b) No Impact. As with Rule 1466, PAR 1466 would require the implementation of fugitive dust control measures during earth-moving activities, monitoring, supervision, and

inspection at affected sites. These activities are already implemented under existing Rule 1466 and thus, as with Rule 1466, PAR 1466 would not require the use of a known mineral resource. Thus, there are no provisions in PAR 1466 that would result in the loss of availability of a known mineral resource of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Conclusion

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementing PAR 1466. 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) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☑	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☑	☐

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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466,

sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XII. a), b), & c) Less than Significant Impact.

As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. Thus, the existing noise environment at an affected site will be typically dominated by noise from existing equipment on-site such as tractor/loader/backhoes, vehicular traffic around the site, and trucks and other vehicles entering and exiting the premises. Thus, the existing noise environment will be expected to have a higher background noise level when compared to other areas when the cleanup activities are occurring. As with existing Rule 1466, PAR 1466 will continue to contribute additional noise at any site that undergoes cleanup activities. PAR 1466 is expected to affect three sites on a peak day due to the use of additional six water trucks, three delivery trucks, and six additional worker vehicles. However, the noise impacts from implementing PAR 1466 will likely be indistinguishable from the background noise levels at the property line. Operation of the construction equipment would be expected to comply with all existing noise control laws and ordinances. Once the cleanup activities are complete and activities to comply with the dust control measures in existing Rule 1466 are no longer needed, the noise levels are expected to be lessened compared to what is generated on-site as part of conducting cleanup activities if PAR 1466 is implemented.

Due to the attenuation rate of noise based on distance from the source, it is unlikely that noise levels exceeding local noise ordinances from operation new air pollution control equipment would occur beyond a facility's boundaries. Furthermore, OSHA and CAL-OSHA have established noise standards to protect worker health. Furthermore, compliance with local noise ordinances limiting the hours of construction will reduce the temporary noise impacts from construction to sensitive receptors. These potential noise increases are expected to be within the allowable noise levels established by the local noise ordinances for industrial areas, and thus are expected to be less than significant.

XII. d) Less than Significant Impact. As with Rule 1466, in order for sites to become subject to PAR 1466, they must first be designated by a federal, state, county, or local regulatory agency as requiring soil cleanup for any of the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1466. Thus, cleanup activities required by these agencies will already involve noise generating heavy-duty construction equipment such as tractors, loaders, backhoes, excavators, heavy duty and medium duty trucks for hauling, material delivery and spraying water, and worker vehicles and most of the equipment and activities occur within the confines of each affected site with some activities also occurring at the entry/exit points. As with existing Rule 1466, all noise producing equipment at all affected sites must comply with

local noise ordinances and applicable OSHA or CAL-OSHA workplace noise reduction requirements. In addition, with implementation of the dust control measures contained in existing Rule 1466, some additional water trucks, delivery trucks, and worker vehicles will also be needed if PAR 1466 is implemented. However, because each affected site will already have an assortment of construction equipment and vehicles on site and going to and from the site throughout the day, the additional water trucks, delivery trucks, and worker vehicles and their associated noise profiles are not expected to be substantially discernable from any of the other noise generating equipment or vehicles that may already be present on-site for cleanup activities. Thus, for any affected site that is located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, compliance with PAR 1466 would not be expected to expose people residing or working in the vicinity of the site to excessive noise levels. Therefore, the impacts for the topic area are expected to be less than significant.

Conclusion

Based upon these considerations, significant adverse noise impacts are not expected from the implementing PAR 1466. 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XIII. a) & b) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by federal, state, county, local or state regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements

established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by a federal, state, county, or local regulatory agency. For these reasons, PAR 1466 is not expected to require the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. On a peak day, the analysis for PAR 1466 assumes an increase of up to six workers may be needed to perform additional inspection, supervision, and monitoring activities to comply with requirements established by existing Rule 1466 at all three sites on a peak day and these workers can be supplied from the existing labor pool in the local Southern California area. The human population within SCAQMD's jurisdiction is anticipated to grow regardless of whether or not PAR 1466 is implemented. As a result, PAR 1466 is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth in the Basin or population distribution. Since PAR 1466 is designed to reduce fugitive particulate emissions from soils at sites that have been designated for cleanup for any of the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1466, PAR 1466 is not expected to result in the creation of any industry that would affect population growth, directly or indirectly or cause the displacement of substantial numbers of people that would induce the construction of replacement housing elsewhere within SCAQMD's jurisdiction.

Conclusion

Based upon these considerations, no significant population and housing impacts are expected from implementing PAR 1466. 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 proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
a) Fire protection?	☐	☐	☐	☑
b) Police protection?	☐	☐	☐	☑
c) Schools?	☐	☐	☐	☑
d) 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XIV. a), b), c), & d) No Impact. As explained in Section XIII. Population and Housing, PAR 1466 is not expected to induce population growth in any way because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate six additional workers to perform any inspection, supervision, and monitoring activities that may be necessary at affected sites. Therefore, with no significant increase in local population, no impacts would be expected on public service and no need for physically altered public services, including fire protection, police protection, schools, and government facilities.

Conclusion

Based upon these considerations, no significant public services impacts are expected from implementing PAR 1466. 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XV. a) & b) No Impact. As explained in Section XIII. Population and Housing, PAR 1466 is not expected to induce population growth in any way because the local labor pool (e.g., workforce) is expected to be sufficient to accommodate an additional six workers to perform any inspection,

supervision, and monitoring activities that may be necessary at affected sites. The human population within the jurisdiction of the District is anticipated to grow regardless of implementing PAR 1466. As a result, PAR 1466 is not anticipated to generate any significant adverse effects, either direct or indirect, on population growth in the Basin or population distribution that would affect or cause an increase in the demand for or use of existing neighborhood and regional parks or other recreational facilities. Further PAR 1466 would not require the construction of new or the expansion of existing recreational facilities that might, in turn, cause adverse physical effects on the environment because PAR 1466 will not directly or indirectly substantively increase or redistribute population.

Conclusion

Based upon these considerations, no significant recreation impacts are expected from implementing PAR 1466. 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

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XVI. a) & b) Less than Significant. Landfills are permitted by the local enforcement agencies with concurrence from the California Department of Resources Recycling and Recovery (CalRecycle). Local agencies establish the maximum amount of solid waste which can be received by a landfill each day and the operational life of a landfill. This analysis of solid waste impacts assumes that safety and disposal procedures required by various agencies in California will provide reasonable precautions against the improper disposal of hazardous wastes in a municipal waste landfill. Because of state and federal requirements, some facilities are attempting to reduce or minimize the generation of solid and hazardous wastes by incorporating source reduction technologies to reduce the volume or toxicity of wastes generated, including improving operating

procedures, using less hazardous or nonhazardous substitute materials, and upgrading or replacing inefficient processes.

PAR 1466 would reduce fugitive particulate emissions from soils with that contain the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1466 by implementing fugitive dust control measures during earth-moving activities at sites that have been designated for cleanup. It is assumed that the site owners or operators currently comply with all applicable local, state, or federal waste disposal regulations. As with existing Rule 1466, PAR 1466 is expected to only generate solid and hazardous waste consisting of plastic sheeting (tarps), which will be used to cover the stockpiles. The fencing and windscreen materials will be recycled and used at other construction sites and so will not be sent to waste disposal sites. SCAQMD staff estimates that a small amount of the 15 cubic yards of plastic sheeting waste will be generated per year from all sites. The plastic sheeting waste is expected to be treated as hazardous waste, along with the contaminated soils, and so its disposal will comply with all local, state, or federal waste disposal regulations. PAR 1466 does not contain any provisions that would alter current practices. Thus, implementation of PAR 1466 is not expected to interfere with any affected site 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 PAR 1466. 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 AND TRAFFIC. Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☐	☐	☑	☐
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☐	☐	☑	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☑	☐
d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e) Result in inadequate emergency access?	☐	☐	☐	☑
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	☐	☐	☐	☑

Significance Criteria

Impacts on transportation and traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees.
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day.
- Increase customer traffic by more than 700 visits per day.

Discussion

The main difference between Rule 1466 and PAR 1466 is that the list of applicable toxic air contaminants proposed in PAR 1466 will increase and this in turn will increase the number of potentially affected sites by an additional two to four sites per year and three sites on a peak day. Thus, as with the current version of Rule 1466, PAR 1466 will continue to reduce particulate emissions from soils with the applicable toxic air contaminants by implementing fugitive dust control measures from earth-moving activities at sites that have been determined to contain the applicable toxic air contaminants by U.S. EPA, DTSC, State Water Board, Regional Water Board, county, or local regulatory agencies, or the SCAQMD's Executive Officer. As with Rule 1466, sites that may be affected by PAR 1466 are located in existing industrial, commercial, residential, other or mixed land use areas. Sites affected by PAR 1466 will also be required to comply with the existing PM10 ambient dust limit and dust control measures, and to provide notification to the Executive Officer when earth-moving activities begin or PM10 emission limits are not met. As with the current version of Rule 1466, the additional sites that may be affected by PAR 1466 will be required to install and maintain signage to inform the community and discourage unauthorized access. The requirements in Rule 1466 that limit cleanup activities for sites at schools and early education centers would also continue to apply under PAR 1466.

XVII. a) & b) Less Than Significant Impact

As previously explained in Section III - Air Quality and Greenhouse Gas Emissions, compliance with Rule 1466 would already require fugitive dust control, inspection, supervision, and monitoring activities at designated sites. For a "worst case" analysis, if PAR 1466 is implemented, it is approximated that an additional two water trucks and two worker vehicles per site are assumed to be needed on a peak construction day. SCAQMD staff assumes that the additional two water trucks per site will obtain water from nearby water hydrants and therefore the water trucks are not considered a transportation impact. Thus, because the water trucks are operating on-site, they are not operating on-road. Therefore, the on-road vehicle trips estimated for existing Rule 1466 and PAR 1466 did not include the on-road vehicle trips from water trucks in the peak day assumption. In addition, a total of three delivery trucks are assumed to be needed on a peak construction day. SCAQMD staff assumed that peak day implementation of PAR 1466 across three sites would generate a maximum of nine new vehicle trips (round trips) which can be attributed to implementation of the fencing and windscreen requirement as well as additional trips needed for workers to conduct inspection, supervision, and monitoring. Since the additional nine vehicle trips that may occur on a peak day are below the significance threshold of 350 round trips, impacts to traffic and transportation are not expected to be significant. Therefore, construction is not expected to affect on-site traffic or parking for each affected site. The estimated vehicle trips from all activities is summarized in Table 2-15.

Table 2-15
Estimation of Vehicle Trips from PAR 1466

Phase	Worker Vehicles	Delivery Trucks	Total
Construction [a,b]	6 per day (6 round trips)	3 per day (3 round trips)	9 per day (9 round trips)

[a] The water trucks (each has five round trips) will be used on-site and the water will be provided by nearby water hydrants. Therefore the trucks are not considered a transportation impact and are not included in this analysis here.

[b] The worst case analysis is based on a maximum of three delivery truck trips (round trips) for installation of fencing, windscreen, and plastic sheeting (tarps) and six worker trips (round-trips) to account for the additional employees to do the inspection, supervision, monitoring activities at three sites together.

Overall peak day vehicle trips from existing Rule 1466 and PAR 1466 combined are analyzed below. As shown in Table 2-16, the peak day vehicle trips for existing Rule 1466 were concluded in the July 2017 Final EA to be less than significant.

Table 2-16
Estimation of Vehicle Trips from Existing Rule 1466

Phase	Worker Vehicles	Delivery Trucks	Total
Construction [a,b, c]	12 per day (12 round trips)	3 per day (3 round trips)	15 per day (15 round trips)

[a] This is a duplicate of Table 2-7 in the July 2017 Final EA.

[b] The water trucks (each has five round trips) will be used on-site and the water will be provided by nearby water hydrants. Therefore the trucks are not considered a transportation impact and are not included in this analysis here.

[c] The worst case analysis is based on a maximum of three delivery truck trips (round trips) for installation of fencing, windscreen, and plastic sheeting (tarps) and twelve worker trips (round-trips) to account for the additional employees to do the inspection, supervision, monitoring activities at six sites together.

To ensure combined peak day vehicle trips from existing Rule 1466 and PAR 1466 are less than significant, Table 2-17 presents the peak day vehicle trips from Table 2-15 and Table 2-16 in comparison with SCAQMD significance thresholds for round trips. The combined peak day vehicle trips from PAR 1466 and Rule 1466 also do not exceed any SCAQMD significance thresholds and therefore the vehicle trips from PAR 1466 are less than significant.

Table 2-17
Grand Total Estimation of Vehicle Trips from Existing Rule 1466 and PAR 1466

Phase	Worker Vehicles	Delivery Trucks	Total
Construction (Total from Table 2-9 PAR 1466)	6 per day (6 round trips)	3 per day (3 round trips)	9 per day (9 round trips)
Construction (Total from Table 2-10 PAR 1466)	12 per day (12 round trips)	3 per day (3 round trips)	15 per day (15 round trips)
CONSTRUCTION GRAND TOTAL	**18 per day (18 round trips)**	**6 per day (6 round trips)**	**24 per day (24 round trips)**

Therefore, while these additional vehicle trips are assumed to overlap on a given day, the nine round trips that may occur as part of PAR 1466 are not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near each of the affected sites. Thus, implementation of PAR 1466 is not expected to cause a significant increase in the number of worker trips at any of the affected sites.

XVII. c) Less than Significant Impact. In order for sites to become subject to PAR 1466, they must first be designated by a federal, state, county, or local regulatory agency as requiring soil cleanup for any of the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1466. Thus, cleanup activities required by these agencies will already involve heavy-duty construction equipment such as tractors, loaders, backhoes, excavators, heavy duty and medium duty trucks for hauling, material delivery and spraying water, and worker vehicles and most of the equipment and activities occur within the confines of each affected site with some activities occurring at the entry/exit points. The height profile of the equipment and vehicles operating at the affected sites would not be at an elevation that would cause or affect existing air traffic patterns. Similarly, for implementing the dust control measures contained in existing Rule 1466, some additional water trucks, delivery trucks, and worker vehicles will also be needed if PAR 1466 is implemented and the height profile of these vehicles will have similar height profiles to the equipment and vehicles already operating at the sites. As such, implementation of PAR 1466 would not be expected to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks. Therefore, the impacts for the topic area are expected to be less than significant.

XVII. d) & e) No Impact. As with Rule 1466, the sites that will become subject to PAR 1466 are previously developed and established sites that must first be designated for cleanup by a federal, state, county, or local regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 would continue to impose requirements established in Rule 1466 to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup as required by federal, state, and local regulatory agencies. To implement PAR 1466, as explained previously in Section XVII. a) and b), for a "worst case" analysis, approximately an additional three delivery trucks plus six worker vehicles are assumed to be needed on a peak construction day for three sites resulting in nine round trips occurring on local roadways. This low quantity of additional trips would not require the construction of new roadways. Thus, implementation of PAR 1466 would not be expected to change to current public roadway designs. As a result, PAR 1466 is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the facilities. Emergency access at each of the affected sites is not expected to be impacted because PAR 1466 does not contain any requirements specific to emergency access points and each affected cleanup is expected to continue to maintain their existing emergency access. As with Rule 1466, PAR 1466 is expected to involve short-term activities that would create new water truck trips, delivery truck trips, and worker vehicle trips that would be expected to cease after cleanup is completed, the proposed project is not expected to alter the existing long-term circulation patterns within the areas of each affected site. Thus, no long-term impacts on the traffic circulation system are expected to occur during implementation of PAR 1466.

XVII. f) No Impact. As with Rule 1466, PAR 1466 does not contain any requirements that would affect or alter adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Further, the affected sites would still be expected to comply with, and not interfere with adopted policies, plans, or programs supporting alternative transportation (e.g., bicycles or buses) that exist in their respective cities. Since all of the requirements and compliance activities associated with implementing PAR 1466 would be expected to occur on-site, PAR 1466 would have no impact on each affected site's ability to comply with any applicable alternative transportation plans or policies.

Conclusion

Based upon these considerations, no significant transportation and traffic impacts are expected from implementing PAR 1466. 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. 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

XVIII. a) No Impact. As explained in Section IV - Biological Resources, the future sites that will be affected by PAR 1466 are previously developed and established sites that will be designated for cleanup by a federal, state, county, or local, regulatory agency. There are no provisions in PAR 1466 that would require earth-moving activities, but rather PAR 1466 imposes requirements to minimize toxic fugitive dust if and when earth-moving activities occur during soil cleanup for any of the applicable toxic air contaminants in existing Rule 1466 or the additional applicable toxic air contaminants in PAR 1466 as required by a federal, state, county, or local regulatory agency. Further, as with existing Rule 1466, PAR 1466 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. Thus, PAR 1466 would not be expected to cause a specific disturbance of habitat or have a direct or indirect impact on plant or animal species on land or in water. Therefore, PAR 1466 would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely within the SCAQMD's jurisdiction and

PAR 1466 is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XVIII. b) Less Than Significant Impact. Based on the foregoing analyses, PAR 1466 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts from implementing PAR 1466 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 cumulative considerable. SCAQMD cumulative significant thresholds are the same as project-specific significance thresholds.

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 SCAQMD'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 nonattainment 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 SCAQMD has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established SCAQMD 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 SCAQMD's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, the implementation of PAR 1466 will not cause a significant unavoidable cumulative impact.

Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by PAR 1466 for any environmental topic.

XVIII. c) Less Than Significant Impact. The objective of PAR 1466 is to expand the list of applicable toxic air contaminants to include pesticides, herbicides, and persistent bioaccumulative toxics. Based on the foregoing analyses, PAR 1466 is not expected to cause adverse effects on human beings for any environmental topic, either directly or indirectly because: 1) the aesthetics impacts were determined to be less than significance as analyzed in Section I - Aesthetics; 2) the air quality and GHG emission impacts were determined to be less than the significance thresholds as analyzed in Section III – Air Quality and Greenhouse Gases; 3) the increased demand for energy and water can be met by utilizing existing services as analyzed in Section VI – Energy and Section IX - Hydrology and Water Quality, respectively; 4) the hazards and hazardous materials impacts were determined to be less than significance as analyzed in Section VIII – Hazards and Hazardous Materials; 5) the land use and planning impacts were determined to be less than significance as analyzed in Section X – Land Use and Planning; 6) the transportation and traffic impacts were determined to be less than the significance thresholds as analyzed in Section XVI – Transportation and Traffic; and 7) the solid and hazardous waste impacts were determined to be less than the

significance as analyzed in Section XVI – Solid and Hazardous Waste. In addition, the analysis concluded that there would be no significant environmental impacts for the remaining environmental impact topic areas: agriculture and forestry resources, biological resources, cultural resources, geology and soils, mineral resources, population and housing, public services, and recreation. Therefore, there will be no effects on the environment that will cause substantial adverse impacts on human beings.

Conclusion

As previously discussed in environmental topics I through XVIII, PAR 1466 has no potential to cause significant adverse environmental effects. Since no significant adverse environmental impacts were identified for any topic area, no mitigation measures are necessary or required.

APPENDICES

Appendix A: **Proposed Amended Rule 1466 - Control of Particulate Emissions from Soils with Toxic Air Contaminants**

Appendix B: **CEQA Impact Evaluations – Assumptions and Calculations**

Appendix C: **List of Cleanup Sites from 2015 to 2016**

Appendix D: **References, Organizations and Persons Consulted**

Appendix E: **Comment Letter Received on the Draft SEA and Response to Comments**

APPENDIX A

PROPOSED AMENDED RULE 1466 - CONTROL OF PARTICULATE EMISSIONS FROM SOILS WITH TOXIC AIR CONTAMINANTS

In order to save space and avoid repetition, please refer to the latest version of Proposed Amended Rule 1466 located elsewhere in the Governing Board Package (meeting date December 1, 2017). The version of Proposed Amended Rule 1466 that was circulated with the Draft SEA and released on Ocobter 13, 2017 for a 32-day public review and comment period ending on November 14, 2017 was identified as "PAR 1466 September 15, 2017." Original hard copies of the Draft SEA, which include the draft version of the proposed amended rule listed above, can be obtained by visiting the Public Information Center at SCAQMD Headquarters located at 21865 Copley Drive, Diamond Bar, CA 91765, by contacting Fabian Wesson, Public Advisor by phone at (909) 396-2039 or by email at PICrequests@aqmd.gov.

APPENDIX B

CEQA IMPACT EVALUATIONS – ASSUMPTIONS AND CALCULATIONS

Appendix B
CEQA Impact Evaluations - Assumptions and Calculations
(10/6/2017)

Emissions Summary

PAR 1466 Requirement	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOX, lb/day
Increased water trucks	0.18	1.61	8.55	0.89	0.06	0.003
Increased delivery trucks	0.17	1.55	0.60	0.18	0.06	0.003
Increased employee vehicles	0.58	0.05	0.11	1.07	0.02	0.002
Total	0.94	3.20	9.26	2.14	0.13	0.01

By Vehicle Class	CO, lb/day	NOx, lb/day	PM10, lb/day	PM2.5, lb/day	VOC, lb/day	SOX, lb/day	CO2, MT/yr	CH4, MT/yr	N2O, MT/yr	CO2e, MT/yr
Diesel Water Trucks (T6 Construction Truck)	0.18	1.61	8.55	0.89	0.06	0.00	19.92	-	-	19.92
Diesel Delivery Trucks (T6 Construction Truck)	0.17	1.55	0.60	0.18	0.06	0.00	0.14	-	-	0.56
Employee Vehicle (LDA)	0.58	0.05	0.11	1.07	0.02	0.00	11.11	-	-	11.11
Total	0.94	3.20	9.26	2.14	0.13	0.01	31.17	-	-	31.59

All sites	
Max. # of vehicles used/day	Max. # of vehicles used/yr
6	840
3	12
6	840

Note:

1. It is conservatively assumed that there will be up to 3 sites doing cleanup in the peak day and 4 sites in a year.
2. It is conservatively assumed in the peak day, there will be an additional 2 water trucks (T6), 1 supervisor vehicles (LDA) and 1 monitoring vehicles (LDA) at each site.
3. It is conservatively assumed in the peak day, there will be a total of 2 T6 trucks to deliver fencing/windscreen and 1 T6 truck to deliver tarps.
4. Each LDA, delivery truck, and water truck are assumed to travel round trip up to 40 miles, 40 miles, and 4 miles, respectively.
5. Assumed the Gross Vehicle Weight for the T6 instate construction heavy truck (4,000 gallon water truck) is 52,000 lbs.
6. Assumed each 4,000 gallon water truck will handle 20,000 gallon water in a peak day (5 round trips).
7. Assumed 105 working days per site.
8. Assumed half of the sites need new fencing/windscreen and tarps (plastic sheeting).

	Site #
Daily	3
Annual	4

Water Truck - T6 Instate Construction Heavy (T6) - Each

	CO	NOx	PM10	PM2.5	VOC	SOX	CO2	CH4	N2O	CO2e	VMT, mile/day
g/mile (RUNEX, PMBW, PMTW, Fugitive)	0.63	5.62	32.36	3.38	0.20	0.01	1,151.66			1,151.66	20.0
g/vehicle (IDLEX)	1.48	9.06	0.06	0.05	0.18	0.01	706.18			706.18	
lb/day, MT/day for GHG	0.03	0.27	1.43	0.15	0.01	0.00	0.02	-	-	0.02	

EF: from EMFAC2014, EPA AP-42

Delivery Truck - T6 Instate Construction Heavy (T6) - Each

	CO	NOx	PM10	PM2.5	VOC	SOX	CO2	CH4	N2O	CO2e	VMT, mile/day
g/mile (RUNEX, PMBW, PMTW, Fugitive)	0.63	5.62	2.27	0.67	0.20	0.01	1,151.66	-	-	1,151.66	40.0
g/vehicle (IDLEX)	1.48	9.06	0.06	0.05	0.18	0.01	706.18	-	-	706.18	
lb/day, MT/day for GHG	0.06	0.52	0.20	0.06	0.02	0.00	0.05	-	-	0.05	

EF: from EMFAC2014, EPA AP-42

Light-Duty Automobiles (LDA) - Each

	CO	NOx	PM10	PM2.5	VOC	SOX	CO2	CH4	N2O	CO2e	VMT, mile/day
g/mile (RUNEX, PMBW, PMTW, Fugitive)	1.10	0.10	0.20	2.03	0.03	0.00	330.83			330.83	40.0
lb/day, MT/day for GHG	0.10	0.01	0.02	0.18	0.00	0.00	0.01	-	-	0.01	

EF: from EMFAC2014, EPA AP-42

ENERGY CALS

Category	EPA/NHTSA Fuel Consumption								
	gal/1,000 ton-mile	ton	1 ton-m/g	mpg	gallon fuel consumed per year due to PAR 1466	Baseline - Year 2015 Estimated Basin Fuel Demand (mmgal/yr)	Total % Above Baseline		
LDA	-	-	-	20.00	1,680	6,783	0.00002%	gasoline	0.002
Medium Heavy Class 6-7	22.1	26	45.25	1.74	9,929	756	0.0013%	diesel	0.010

Reference:

National Highway Traffic Safety Administration (NHTSA) vocational vehicle standards, https://www.dieselnet.com/standards/us/fe_hd.php

EPA Fuel Economy report: https://www.epa.gov/fueleconomy/trends-report

Water Usage

Estimated Additional Water Usage	Total Water Consumption (gal)	Future Peak Daily (gal/day)
July 2017 Final EA[1]	319,176	141,000
Revised Calculation - Rule 1466	-	43,200
PAR 1466[2]	-	21,600
Total Water Usage	319,176	64,800

Note:

1. These values are from the July 2017 Final EA.

2. It is conservatively assumed that three sites will be active on a peak day with an estimated combined total affected cleanup area of 13.5 acres and an increase in water usage of approximately 1,600 gallons per acre.

Water sources: local water hydrants

APPENDIX C

LIST OF CLEANUP SITES FROM 2015 TO 2016

Appendix C
2015-2016 Cleanup Sites
(10/6/2017)

Note:

Estimated current water usage is 968 (gal/acre)

Estimated proposed water usage is 2,580 (gal/acre)

CONTAMINATED SITES

SCAQMD Log	Name	Site Type	Size (acres)	Estimated Acreage Undergoing Watering (acres/(day/ facility))	Estimated Current Water Usage (gal)	Estimated Proposed Water Usage (gal)	Estimated Change in Water Usage (gal)	Current Water Trucks[1]	Estimated Proposed Water Trucks[1]
SITES AFFECTED BY EXISTING RULE 1466 (2015-2016)									
LAC141216-06	Malibu High School	School	1	1	968	2,580	1,612	1	1
LAC150313-05	Jordan Downs	Manufacturing and Trucking	21	4.5	20,328	54,180	33,852	2	3
LAC150602-03	Cal High School	School	3	3	2,904	7,740	4,836	1	1
ORC150609-02	Beverly Hills Civic Center	Railway	2	2	1,936	5,160	3,224	1	1
LAC150707-13	Parks at Monrovia	Manufacturing	3	3	2,904	7,740	4,836	1	1
LAC150707-11	International Light Metals	Metal Melting	12	4.5	11,616	30,960	19,344	1	2
LAC150820-13	Fremont High School	School	1	1	968	2,580	1,612	1	1
ORC151117-01	Delru	Metal Finishing	1	1	968	2,580	1,612	1	1
SBC160322-05	Las Terrezas	Vacant	1	1	968	2,580	1,612	1	1
RVC160929-05	AgPark	Military	62	4.5	60,016	159,960	99,944	4	8
LAC161220-08	Exide	Metal Melting	15	4.5	14,520	38,700	24,180	1	2
		Total (Rule 1466)	122	30	118,096	314,760	196,664	15	29

Note:

1. The 2017 Final EA assumptions used to calculate water demand assumed six sites undergoing watering on a peak day with a total acreage of 27.

SCAQMD Log	Name	Site Type	Size (acres)	Estimated Acreage Undergoing Watering (acres/(day/ facility))	Estimated Current Water Usage (gal)	Estimated Proposed Water Usage (gal)	Estimated Change in Water Usage (gal)	Current Water Trucks[1]	Estimated Proposed Water Trucks[1]
SITES AFFECTED BY PAR 1466 (2015-2016)									
LAC160818-07	Ascon Landfill Site	Landfill	38	4.5	36,784	98,040	61,256	2	5
LAC160630-09	Draft Cleanup Plan for the Former Fred C. Nelles Youth Correction Facility	*Near School	74	4.5	71,632	190,920	119,288	4	10
LAC160407-11	Chatsworth Park South	Park	81	4.5	78,408	208,980	130,572	4	11
ORC150917-01	Former Production Plating Facility Huntington Beach	Metal Finishing	2	2	1,936	5,160	3,224	1	1
LAC150908-02	Butterfield Property	Manufacturing - Paint	3	3	2,594	6,914	4,320	1	1
ORC150908-01	Proposed Removal Action Work Plan Former Nabisco Facility (Parcel 1) Buena Park, California	Petroleum, Agricultural	9	4.5	8,341	22,232	13,891	1	2
RVC150814-02	Stringfellow Superfund Site Project Update	Landfill	17	4.5	16,456	43,860	27,404	1	3
ORC150507-12	Former U.S. Coast Guide Aid-to-Navigation (AtoN) Light Sites, California and Channel Island	Military		4.5			-		
		Total (PAR 1466)	223	32	216,151	576,106	359,955	14	33

Note:

1. The 2017 Final EA assumptions used to calculate water demand assumed six sites would undergo watering on a peak day with a total acreage of 27, for PAR 1466 it is assumed three sites would undergo watering on a peak day, thus by adding an additional three sites water demand would increase for an additional 13.5 acres.

2. It is conservatively assumed that three sites will be active on a peak day with an estimated combined total affected cleanup area of 13.5 acres and an increase in water usage of approximately 1,600 gallons per acre.

Peak Daily Affected Sites	3
Number of PAR 1466 Affected Sites Per Year	4
Total Affected Sites from PAR 1466 and Rule 1466	14

NOTE:

[1] Always round up

APPENDIX D

REFERENCES

REFERENCES

ORGANIZATIONS AND PERSONS CONSULTED

REFERENCES

California Environmental Quality Act (CEQA) Guidelines, codified at Title 14 California Code of Regulations, §15000 et seq.

California Energy Commission, California Annual Retail Fuel Outlet Report Results in 2015, http://www.energy.ca.gov/almanac/transportation_data/gasoline/2015_A15_Results.xlsx

California Code of Regulation (CCR), Title 13, section 2025. https://www.arb.ca.gov/msprog/onrdiesel/documents/tbfinalreg.pdf

CCR, Title 13, section 2485. https://www.arb.ca.gov/msprog/truck-idling/13CCR2485_09022016.pdf

Jacobsen, Mark Z. "Enhancement of Local Air Pollution by Urban CO2 Domes," Environmental Science and Technology, as describe in Stanford University press release on March 16, 2010 available at: http://news.stanford.edu/news/2010/march/urban-carbon-domes-031610.html

Lewis-Presley Air Quality Management Act, The, 1976 Cal. Stats., ch 324 (codified at Health and Safety Code, §§40400-40540).

National Highway Traffic Safety Administration (NHTSA) vocational vehicle standards. https://www.dieselnet.com/standards/us/fe_hd.php

SCAQMD, 2003. SCAQMD 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.

SCAQMD, 2008. CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans. Governing Board Letter, December 5, 2008. http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-%28ghg%29-ceqa-significance-thresholds/ghgboardsynopsis.pdf.

SCAQMD, 2016. Final 2016 Air Quality Management Plan. March 2017. http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan/final-2016-aqmp .

ORGANIZATIONS AND PERSONS CONSULTED

The CEQA Statute and Guidelines require that organizations and persons consulted be provided in the SEA. The following organization has provided input into this document:

California Department of Toxic Substances Control (DTSC)
5796 Corporate Ave.
Cypress, CA 90630
(714) 484-5300

APPENDIX E

COMMENT LETTER RECEIVED ON THE DRAFT SEA AND RESPONSE TO COMMENTS

Comment Letter #1: David R. Doublet, P.E. / San Bernardino Department of Public Works

Comment Letter #1

825 East Third Street, San Bernardino, CA 92415-0835 | Phone: 909.387.8109 Fax: 909.387.7876

www.SBCounty.gov

SAN BERNARDINO COUNTY

Department of Public Works
- Flood Control
- Operations
- Solid Waste Management
- Surveyor
- Transportation

Kevin Blakeslee, P.E.
Director

November 13, 2017

South Coast Air Quality Management District
Attn: Mr. Ryan Banuelos
21865 Copley Drive
Diamond Bar, CA 91765-4178

SUBJECT: NOTICE OF COMPLETION OF DRAFT SUBSEQUENT ENVIORNMENTAL ASSESSMENT – PROPOSED AMENDED RULE 1466 – CONTROL OF PARTICULATE EMISSIONS FROM SOILS WITH TOXIC AIR CONTAMINANTS

Dear Mr. Banuelos:

The County of San Bernardino Department of Public Works (DPW) appreciates the opportunity to comment on the Subsequent Environmental Impact Assessment (SEA) for the proposed amended Rule 1466 (PAR 1466). The addition of herbicides, pesticides and semi-volatile organic compounds (VOCs) has caused some concern within the DPW as to how the addition could affect certain transportation, flood control and solid waste management capital improvement projects and maintenance activities that the Department performs on a regular basis. For example, some sites we manage, such as landfills, could have soil containing an herbicide, a pesticide and VOCs from waste breakdown, and be subject to earth moving activities on a daily basis. In addition, the San Bernardino County Flood Control District routinely maintains facilities with applications of herbicides and rodenticides, and then may also later perform earth moving activities on the same sites. The PAR 1466 is not clear as to whether or not these types of sites/activities would be subject to the regulation. The SEA appears to be written towards sites under EPA Cleanup Enforcement such as Superfund, Corrective Action and Brownfield sites; however, the definition provided in the PAR and subsequently the SEA, as restated below, seems to leave room for additional interpretation. 1-1

Page 1-6

"<u>Applicability - Subdivision (b)</u>

Effective January 1, 2018, PAR 466 expands the applicability of the rule to include the owner or operator of Hazardous Material Release Sites that have been designated and notified by county, local, or state regulatory agencies pursuant to Health and Safety Code Section 25260. According to Health and Safety Code Section 25260, "'hazardous materials release site' or 'site' means any area, location, or facility where a hazardous material has been released or threatens to be released into the environment. 'Hazardous materials release site' does not include a site subject to a response and cleanup operation under Chapter 7.4 (commencing with Section 8670.1) of Division 1 of Title 2 of the Government Code or a corrective action under Part 6 (commencing with Section 46000) of Division 30 of the Public Resources Code." Health and Safety Code Sections

BOARD OF SUPERVISORS
ROBERT A. LOVINGOOD Chairman, First District | JANICE RUTHERFORD Second District | JAMES RAMOS Third District | CURT HAGMAN Vice Chairman, Fourth District | JOSIE GONZALES Fifth District
DENA M. SMITH Interim Chief Executive Officer

R. Banuelos, SCAQMD
SEA 1466 Response
November 9, 2017
Page 2 of 2

25261- 25263 and 25265 defines 'Site Designation Committee' and authorizes the committee, at the request of the responsible party for a hazardous materials release site, to designate an administering agency to oversee the site's investigation and remedial action. County, local, and state regulatory agencies include agencies such as environmental health departments, planning departments, fire departments, and public health offices and have the jurisdiction to supervise, oversee, or approve a site investigation and remedial action at a hazardous materials release site."

The Department requests further clarification on the applicability of the rule. Based on the above, it is difficult to determine if only listed hazardous waste sites, or any sites where herbicides, pesticides and VOCs reside could be subject to the protocols mandated by PAR 1466. If our routine activities are determined to be subject to PAR 1466, significant additional time and cost to Departmental functions and activities of the Flood Control District would result, and the ability to implement the public health and safety projects that DPW is responsible for would be severely impeded. This would require additional analysis in the SEA. 1-1 Con't

Once the Department has further clarification on the applicability of PAR 1466, more detailed comments, if necessary, can be provided on the SEA and PAR 1466.

Sincerely,

DAVID R. DOUBLET, P.E.
Deputy Director – Flood Control

DRD:MRP:sr

Response to Comment Letter #1

Response 1-1:

PAR 1466 expands the applicability of the rule to include the owner or operator of Hazardous Material Release Sites, as defined in Health and Safety Code Section 25260, that have been designated and notified by county, local, or state regulatory agencies. Additionally, the list of applicable toxic air contaminants for sites designated by the U.S. EPA, the DTSC, the State Water Board, the Regional Water Board or a county, local or state regulatory agency has been expanded to include Rule 1401 dioxins, four pesticides, and seven PAHs. If these amendments are adopted, Rule 1466 will be applicable to any owner or operator conducting earth-moving activities at cleanup sites designated and notified by the aforementioned agencies to contain one or more of the toxic air contaminants listed in Table I of the proposed amended rule as a contaminant of concern.

Sites may also be designated by the Executive Officer based on a set of criteria, pursuant to subdivision (i) of the rule. PAR 1466 expands the list of applicable toxic air contaminants for sites designated by the Executive Officer to include any toxic air contaminant listed in SCAQMD Rule 1401 – New Source Review of Toxic Air Contaminants, Table I or the California Code of Regulations, Section 93001. The criteria for designation by the Executive Officer includes consulting with other regulatory agencies, and taking into consideration the site history, the concentration and volume of contaminants, the proximity to nearby residences, parks, and schools, meteorological data, any health risk, ambient monitoring data, or other data, if available. Prior to making a determination of applicability, the Executive Officer will notify the owner or operator. The owner or operator has up to 14 days from the date the Executive Officer notifies the owner or operator that it is potentially subject to Rule 1466 to provide additional data to demonstrate that the site should not be applicable to the rule. The Executive Officer will notify the owner or operator in writing of the final determination.

It is important to note that while PAR 1466 expands the applicability to also include sites designated by county, local, and state agencies and expands the list of applicable toxic air contaminants, in order to be subject to Rule 1466, sites will need to have been designated and notified by either the U.S. EPA, the DTSC, the State Water Board, the Regional Water Board, a county, local, state regulatory agency, or the Executive Officer, and must contain an applicable toxic air contaminant as a contaminant of concern. Thus, as long as the routine activities conducted by the Flood Control District are not conducted on a designated site, PAR 1466 would not apply. As a result, as long as these routine activities occur on non-designated sites, they would not be subject to PAR 1466. Therefore, no additional analysis in the Final SEA is needed.

ATTACHMENT I

Proposed Amended Rule 1466
Control of Particulate Emissions from Soils with Toxic Air Contaminants

GOVERNING BOARD MEETING
DECEMBER 1, 2017

Background

- Rule 1466 is designed to minimize fugitive dust from earth-moving activities at sites that contain soils with certain toxic air contaminants
- Rule 1466 was adopted July 7, 2017
  - Adoption Resolution directed staff to expand the list of toxic air contaminants as early as practicable

Applicability

US EPA, DTSC, Water Board, and Other Agency* Designated Sites

Arsenic, Asbestos, Cadmium, Hexavalent Chromium, Lead, Mercury, Nickel, PCBs

+

Dioxins**, Pesticides, and PAHs

SCAQMD Designated Sites

Arsenic, Asbestos, Cadmium, Hexavalent Chromium, Lead, Mercury, Nickel, PCBs

+

Dioxins**, Pesticides, and PAHs

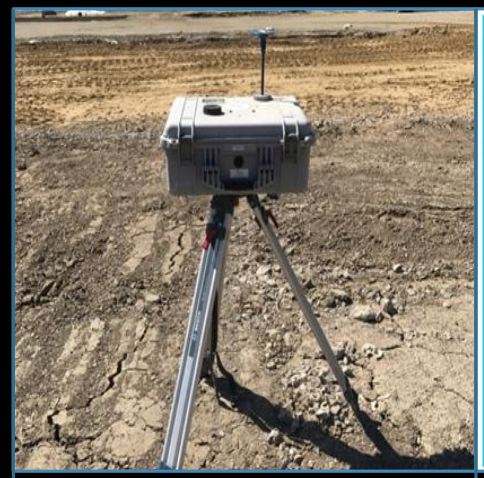
+

Rule 1401 or California Code of Regulations Toxic Air Contaminant

* Sites designated as Hazardous Material Release Sites, under California Health and Safety Code Section 25260

** Dioxins listed in Rule 1401, Table 1

Clarifications and Other Provisions



Clarification on Requirements for Monitoring Equipment

Additional Information Required for Notification Requirements

Added alternative compliance option for direct loading into a truck or bin for transport

Expanded exemption for additional types of linear trenching projects on roadways

Alternative font size on signs with multiple toxic air contaminants

Recommended Actions

- Adopt the Resolution:
  - Certifying the Final Subsequent Environmental Assessment
  - Amending Rule 1466

Back to Agenda

BOARD MEETING DATE: December 1, 2017 AGENDA NO. 34

PROPOSAL: Amend Governing Board Meeting Procedures

SYNOPSIS: This action is to amend the Governing Board Meeting Procedures, primarily to add provisions to address public decorum and meeting disruptions. In addition, the amendments will clarify the time limits for public comment and address recent changes in the law applicable when members of the public use translators to assist with providing public comment. In addition, the amendments will, in certain areas, conform the procedures to long-standing Board practice.

COMMITTEE: Administrative, September 8 and November 9, 2017; Recommended for Approval

RECOMMENDED ACTION:
Adopt the attached Resolution approving amendments to the SCAQMD Governing Board Meeting Procedures as shown in Attachment B.

Wayne Nastri
Executive Officer

KRW:vmr

Background
At the July 2017 meeting of the Governing Board, staff presented the Board with proposed changes to the Board's Meeting Procedures to streamline Board processes, promote public safety, and address disruptions at Board meetings. Before staff presented the item to the Board, the Chairman directed staff to conduct a public workshop with stakeholders and report back to the Board in September with further recommendations.

As directed by the Chairman, staff met with stakeholders in Diamond Bar on August 10, 2017. Notice for the meeting was provided to stakeholders by email, to approximately 5,835 addresses. Approximately 20 people attended the public consultation meeting,

and many spoke to the proposed changes. In addition, written comments were provided by members of the public.

As the result of stakeholder comments, staff recommended changes to the proposal it had presented to the Governing Board in July. Staff presented the proposed changes to the Board at the September 2017 meeting of the Governing Board. At that meeting, Board Members requested further changes to the Meeting Procedures, and the Chair directed that staff present the revised Procedures to the Administrative Committee at its September 2017 meeting.

At the September 2017 meeting of the Administrative Committee, committee members focused on three areas. First, there was discussion about the timing of speaker cards, a topic that is addressed in section 30.5(2) of the Procedures, on page 2 of Exhibit B. The Committee discussed whether the Procedures should require speakers to submit cards before the Governing Board takes up an item or whether the Procedures should require cards before public testimony is concluded. The proposal provided here recommends that the Procedures include a provision requiring that speakers submit cards before the Board takes up an item. The provision further provides that the Chair has discretion to allow speakers to submit cards later if good cause exists. The second topic that the Administrative Committee focused on was a provision to allow groups to select a spokesperson to provide public comment for the group. This topic is addressed in section 30.5(2), on page 3 of Exhibit B. The committee directed that the Procedures be worded to make it clear that a spokesperson will be granted extra speaking time in lieu of speaker time being reduced for members of the group, should they choose to testify separately. The Committee also asked that groups be defined based on their size. The Procedures propose that groups comprise at least five members. Third, Committee members requested that in the section of the Procedures addressing disruptions that a provision he added clarifying that disobeying a lawful direction from the Chair constitutes a disruption. This topic is addressed in section 30.15 on page 8 of Exhibit B.

Proposal
Amend Governing Board Procedures section 30.5 of the SCAQMD Administrative Code and add sections 30.12, 30.13, 30.14 and 30.15 as shown in Attachment B.

Resource Impacts
None.

Attachments
A. Resolution
B. Governing Board Meeting Procedures (section 30 of the SCAQMD Administrative Code)

ATTACHMENT A

RESOLUTION NO. 17-___

A Resolution of the South Coast Air Quality Management District Board amending procedures for meetings of the SCAQMD Board.

WHEREAS, the SCAQMD Board has adopted procedures ensuring that meetings of the Board are orderly, fair, and lawfully consider agenda items;

WHEREAS, the SCAQMD Board finds that fairness and orderly conduct of the Board meeting will be promoted by amending the meeting procedures, as set forth in Attachment B hereto;

NOW, THEREFORE BE IT RESOLVED that the SCAQMD Board hereby amends the SCAQMD Governing Board Meeting Procedures, as shown in Attachment B, and incorporates these changes into section 30 of the SCAQMD Administrative Code.

DATED:_____ _____

DENISE GARZARO
Clerk of the Boards

ATTACHMENT B

Section 30 ─ SCAQMD's Governing Board Meeting Procedures

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30.2 ─ General

These rules shall apply to meetings of SCAQMD's Governing Board. Except as otherwise required by law, these rules may be suspended by order of the Board. Failure to follow these rules shall not invalidate any action taken.

Section 30.3 ─ Placement of Items on the Board Agenda

1. Placement. Any Board Member may place an item on the agenda for the next regular Board meeting, provided that the request for such placement is made prior to or at the Administrative Committee meeting which reviews the agenda for that Board meeting. The Chair may authorize the addition of items to the agenda after the Administrative Committee meeting if there is an urgent need for Board action.

2. Removal. A Board Member may remove an agenda item that he or she placed on the agenda if such a request is made prior to public distribution of the agenda.

3. Reconsideration. The Board may reconsider any agenda item that previously received official action (i.e., approval or disapproval by the required majority vote of the Board), provided that the request for reconsideration is made by a Board Member who voted with the prevailing side. If there was no prevailing side, i.e., no side received the number of votes required for action under applicable statutes, any member may request reconsideration.

ATTACHMENT B

Section 30.4 ─ Authorities and Duties of Chair

The Chair shall preside over meetings of the Board and shall possess the authorities and perform the duties specified in this subdivision, subject to the right of appeal to the Board pursuant to subparagraph (e)(2)(D). In the absence of the Chair, the Vice Chair shall exercise the authorities and duties of the Chair. The authorities and duties of the Chair are as follows:

(1) call the meeting to order;

(2) preserve order and decorum;

(3) consistent with paragraph (d)(2), limit the amount of time that a person may address the Board during public testimony in order to accommodate those persons desiring to speak and to facilitate the business of the Board;

(4) recognize members who are entitled to the floor;

(5) state and put to vote all motions that are properly made, or, if a motion is not in order, to rule it out of order;

(6) decide all questions of order;

(7) schedule recesses and take other actions to endeavor to assure the presence of a quorum in the Board room at all times during a meeting;

(8) declare the meeting adjourned; ~~when the Board so votes, or if less than a quorum is present, on the Chair's own initiative; and~~

(9) take items on the agenda out of order; and

~~(9)~~(10) designate an acting Chair to preside at the Board meeting in the absence of the Chair and Vice Chair.

Section 30.5 ─ Receipt of Testimony

(1) Public's Right to Testify. The Board will allow testimony by the public on any agenda item before or during the Board's consideration of the item. The Board need not allow public testimony on any item that has already been considered by the Board or a Board committee at a public meeting where all interested members of the public were afforded the opportunity to testify on the item, unless the item has been substantially changed since the Board or committee considered the item.

(2) Time Allotted for Testimony. Each member of the public wishing to testify shall file a Request to Speak card with the Clerk of the Board. To facilitate an orderly proceeding, the card ~~should~~ must be filed prior to commencement of consideration of the item~~, .and must be filed prior to the close of the public testimony regarding the item.~~ The Chair may accept cards filed later if good cause exists. Each member of the public, timely filing a Request to Speak card, shall be afforded ~~at least~~no more than three minutes to testify. The Chair may increase this allotment for an individual speaker if the issues addressed are complex

or if the speaker represents other persons. The Chair retains the authority to reduce the time allotted for each speaker to less than three minutes if the number of persons wishing to address the Board would prevent the Board from accomplishing its business in a reasonably efficient manner. For any established group of five or more members, in lieu of reducing speaker's time for each member of the group, the group may choose one or more spokespersons to represent the group. A group spokesperson shall be granted additional comment time as determined by the Chair, taking into consideration relevant circumstances, including, but not limited to, the number of group members, the total number of persons commenting on the item, and the time available for Board members to consider the item. A member of the public using the services of a translator shall be allocated twice the amount of time to speak as other individual public speakers to ensure that non-English speakers receive an equal opportunity to address the Governing Board.

(3) Written Submittals. The Clerk of the Board shall not be required to accept written testimony or comments unless 25 copies of such testimony or comments are provided.

(4) Public Hearings. Agenda items requiring a public hearing shall be subject to this paragraph.

(A) Closing Public Testimony. The Chair shall close the public testimony portion of a public hearing after all persons timely filing Request to Speak cards have testified. The Board may thereafter deliberate and vote on the item.

(B) Reopening Public Testimony.

(i) Reopening During Hearing. Public testimony may be reopened by the Chair or Board at any time prior to the conclusion of the Board's consideration of the item. The Chair or Board may restrict testimony to a limited number of persons specified by the Chair or Board, if such testimony is solely to summarize or clarify information already in the record.

(ii) Reopening After Continuance. If, after closing public testimony, the Board continues the item to a later time or date for deliberations and voting, public testimony may not be reopened at the continued hearing unless (1) public notice required for a hearing on the matter has been given, or (2) prior to continuing the item, the Board announced its intention to reopen public testimony at the continued hearing.

(C) Receipt of Information Outside of Record Regarding Proposed Rules. If a Board Member receives information which is not in the record and which is material to the member's vote on a proposed rule, the member shall disclose that information on the record either verbally or in writing. If the information disclosed by a Board Member could substantially influence the decision of the Board and was not available to the public prior to the close of public testimony, the hearing shall be reopened to allow public comment on the new information.

(D) Testimony and Action on Proposed Rules Modified After Public Notice

(i) If, subsequent to issuance of the 30-day public notice of hearing to adopt or amend a rule, changes are made in the text of the proposed rule which

significantly affect its meaning, the Board may consider and hear public comment regarding the proposed rule at the noticed hearing but shall not take action on the changed text. The Board shall publicly release or summarize the text changes and shall continue the hearing to no earlier than its next regular meeting. At the subsequent meeting, the Board shall allow testimony regarding the changed text prior to taking final action. In determining whether or not a proposed change significantly affects the meaning of a rule, the following factors shall be considered:

(a) impact of the change on emission reductions,

(b) impact of the change on sources regulated by the rule,

(c) the contents of the public notice, and

(d) the range of project alternatives described in the CEQA document.

Section 30.6 ─ Changes to Text of Proposed Items

It is the Board's policy that no changes may be made to the text of any item after the Friday of the week prior to the Board meeting unless the change responds to an emergency. The determination of whether an emergency exists will be made by the Chairman in consultation with the Executive Officer. The Board retains the discretion to change the text of proposed rule or rule amendment at a public hearing on the item consistent with the provisions in 4.D. above.

Section 30.7 ─ Motions

(1) Procedure, General. The following procedure shall be utilized in making and ruling upon motions:

(A) Making Motion. A member who has been recognized by the Chair as having the floor may make a motion.

(B) Seconding. A motion may be seconded without receiving the floor.

(C) Stating by Chair. The Chair shall state the question on the motion. Alternatively, the Chair may request the Clerk or the member making the motion to state the motion. The Chair shall ensure that the question is put into clear and suitable form--preserving the content to the satisfaction of the mover--before the question is stated. The Chair shall require that lengthy or complex motions be in writing before stating.

(D) Modification. Until the question on the motion is stated by the Chair, it may be modified by its maker and, if so, the second may be withdrawn. After stating by the Chair, a motion may only be modified by the Board through a motion to amend.

(E) Debate. The Chair shall assign the floor for debate on the motion first to the maker of the motion and then to each member wishing to speak to the motion.

Unless a motion calling for the question is adopted by the Board (see subparagraph (e)(2)(C)), the Chair shall not close debate so long as any member has not had the opportunity to speak twice on the question.

(F) Vote. The Chair shall put the question to a vote.

(G) Announcement, Change of Vote. The Chair shall announce the result of the vote, either verbally or by electronic display. A member has the right to change his or her vote up to the time the result is announced. Thereafter the member can change a vote only by permission of the Board.

(2) Types of Motion. The following types of motions shall be handled in the manner specified:

(A) Main Motion. A main motion must be seconded, is debatable, and may only be made when no other motion is pending.

(B) Amend a Pending Motion. A motion to amend must be seconded, is debatable if the motion to be amended is debatable, and takes precedence over (i.e., must be voted upon prior to) the main motion. A motion to amend may be amended (i.e., a "second degree" motion to amend). A motion to amend a second degree motion is not allowed. An amendment must be germane to the subject of the motion amended, but may be hostile to the original motion. An amendment is improper if it merely makes adoption of the amended question equivalent to a rejection of the original motion. A "substitute" is a type of amendment striking all or part of a main motion and inserting new provisions. The Chair may first accept only amendments to the motion proposed to be struck, and then only amendments to the proposed substitute, so that the Board will understand the final form of the main motion and proposed substitute prior to voting on the substitute.

(C) Call for the Question ("Previous question"). Adoption of a motion calling for the question immediately closes debate and subsidiary motions and puts the matter to a vote. The motion must be seconded, and is not debatable. In order to minimize restriction of a member's right to debate, the motion must be adopted by the affirmative votes of two-thirds of the members present, or by a majority of the members of the full Board, whichever is greater.

(D) Appeal. An appeal allows the Board to decide whether or not to overrule a procedural ruling of the Chair. An appeal must be made immediately upon the Chair's ruling, must be seconded, and is debatable. A majority vote is required to reverse the Chair's decision. The appeal takes precedence over any question pending at the time the Chair makes a ruling from which the appeal is made.

(E) Point of Order. A point of order questions the appropriateness of procedure. A point of order need not be seconded, is not debatable, may be made by a member who does not have the floor, and is ruled upon by the Chair. It takes precedence over any pending question out of which it may arise.

(F) Amend Something Previously Adopted.[1] This motion must be seconded and is debatable.

(G) Reconsider.[1] A motion to reconsider brings back for further consideration a motion which has already been voted on. In order to protect against dilatory use, the motion can be made only by a member who voted with the prevailing side. If there was no prevailing side, i.e., no side received the number of votes required for action under applicable statutes, any member may move to reconsider. The motion must be seconded (by any member) and is debatable. Unless otherwise specified in the motion, the effect of adoption of the motion is to suspend all action that depends on the vote to be reconsidered.

~~(H) Depart From Agenda[1] (e.g., immediately take up an item out of order). This motion must be seconded and is not debatable.~~

Section 30.8 ─ Voting

(1) Majority Vote Requirement. Notwithstanding any contrary principles of parliamentary procedure, adoption of any motion by the Board shall require the affirmative votes of a majority of the members of the Board, unless otherwise required by law. Calif. Health & Saf. Code §40424 ("no official action shall be taken by the Board except in the presence of a quorum and upon the affirmative votes of a majority of the members of the Board").

(2) Procedure. Voting on the adoption of all items on the Board agenda shall be by roll call or by electronic display of the vote of each member. Unless any Board Member objects, a unanimous voice vote may be utilized to adopt any motion, including adoption of an agenda item. A unanimous voice vote shall be recorded by the Clerk as an "aye" vote for each member present. For purposes of this subdivision, the consent calendar may be considered a single item.

Section 30.9 ─ Reconsideration or Amendment of Completed Agenda Items

(1) Requirement. In the case of an agenda item requiring a public hearing, the Board shall not reopen the agenda item for reconsideration or amendment if the Board completed its consideration of the item earlier during the same meeting and (1) such completion was publicly announced by the Chair, (2) the Board proceeded to consider another item, or (3) the Board subsequently recessed.

(2) Exceptions. Paragraph (1) shall not apply if:

(A) prior to completing consideration of the agenda item, the Chair announced its intention to further consider the item at a later time during the meeting;

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[1] See subdivision (g) for restrictions on reconsidering or amending an agenda item after the Board completes consideration of the item.

(B) the Board is reopening an item for the sole purpose of determining whether or not to schedule a motion to reconsider or amend the item for a subsequent meeting which will be publicly noticed pursuant to law; or

(C) placement of a new agenda item for the purpose of reconsidering or amending an agenda item would be authorized by Government Code Section 54954.2(b)(1) (emergencies involving threatened disruption of public facilities) or Government Code Section 54954.2(b)(2) (authorizing addition of new agenda items at regular meetings after 72 hour agenda posting if Board, by two-thirds vote, determines that there is a need to take immediate action and that the need for action came to the attention of the agency subsequent to the agenda being posted).

(3) The agenda for each meeting of the Board shall include a notice to the public that the Board may reconsider or amend any item not requiring a public hearing at any time during the meeting.

Section 30.10 ─ Continuance Upon Lack of Action

Unless otherwise specified by the Board, any agenda item which is not acted upon by the Board shall by operation of this provision be continued to the next regular meeting of the Board. The Clerk shall provide notice of such continuance as set forth in Government Code Section 54955.1. As used in this subdivision, the term "acted upon" shall mean adoption or defeat of a main motion by the votes of a majority of the Board.

Section 30.11 ─ Prohibition of Megaphones, Large Signs, and Sticks

No megaphones, bullhorns, or placards, signs, or posters which are higher or wider than 18 inches, or which have protruding sticks or handles, shall be brought into the Board room during a Board meeting or prior to a Board meeting on the day of the meeting. Upon prior authorization of the Chairman, charts, graphs, or other graphic devices to be used in conjunction with testimony may be brought into the Board room.

Section 30.12 – Approaching the Dais

Subject to the direction of the Chair, no persons other than the Board Members~~,~~ and SCAQMD staff shall be admitted inside the area separating the dais from the seating area of the auditorium. Other persons may be admitted to this area by consent of the Chair.

Section 30.13 – Credentialed Press

Only credentialed press recording Governing Board meetings shall be admitted to the “Press Area” located at the front of the auditorium, on the left side.

ATTACHMENT B

Section 30.14 – Congregating in Aisles and Walkways

No persons shall stand or sit in the auditorium's aisles or walkways or block any doorway.

Section 30.15 – Disruptive Conduct; Removal from the Meeting

The Chair may order the removal of any person from the Auditorium willfully interrupting the meeting so as to render the conduct of the meeting infeasible. ~~Such w~~Willful interruption ~~shall~~ includes shouting and other boisterous conduct~~,~~ and failing to obey a lawful directive of the Chair, including, but not limited to, addressing the Board without being recognized, ~~willfully speaking on a subject not before the Board,willfully~~ continuing to speak during an agenda item on a subject that is not relevant to the item after being warned by the Chair, failing to relinquish the podium when requested to do so by the Chair, or otherwise preventing the Board from conducting its meeting in an orderly manner. Any person removed from a meeting may return to the meeting only if permission is granted upon motion adopted by a majority vote of the Board.